Abstract

Using Trade Books to Enhance Content Areas: Literacy across the Curriculum

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Teachers in today’s classrooms are confronted with pedagogical challenges. One of the challenges is the emphasis on the basics, namely reading and math skills, which results in less instructional time spent on other subjects including science and social studies. Subsequently, teachers need to search for ways to improve their time management skills. One way to do this is to capitalize the excellent resource of utilizing trade books to enhance content areas across the curriculum.

Picture books have been used as a social studies resource since the last century and the number of children’s literature with direct curriculum applications has increased in today’s classroom. There are several reasons why children’s literature is selected over the content area
One of the prohibitive disadvantages of using textbooks in content areas is that they are written for one specific reading level. In addition, sometimes textbooks are just not appealing to students, particularly struggling readers. Between grades 3 and 5, where students are in the beginning stages of reading to learn, the students’ reading ability gap widens. Nevertheless, using trade books makes it possible to have books at different readability levels available in the same classroom. The teacher may select more difficult ones for a read-aloud, and students are given a choice. Struggling readers often find informational trade books more appealing because not only are there colorful pictures, but also the content is mature with an easier reading level.

In this workshop, the presenter will suggest ways of how trade books can facilitate skill instruction in various content areas. The presenter will use a fictional book to demonstrate how to use children’s literature to integrate English Language Arts and Social Studies by conducting a series of hands-on learning activities. Moreover, inter-disciplinary activities will be presented. Further, each participant will also receive an information packet pertaining how to use trade books to enhance content areas in elementary grades.
Leadership Characteristics to Turn Around Underperforming Schools

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Abstract- Poster Session

The objectives of this poster session are to indicate the challenges and solutions that principals of underperforming or failing schools face in attempting to turn them around into positive, safe and productive places for children. Increasing external pressure via legislation and regulatory shifts on school leaders and school systems to create productive places for children not historically well served in America has resulted in an increasing number of schools being identified as “underperforming” or “failing.” The yardstick for making this determination largely rests on test scores. The latest effort is the Obama Administration’s Race to the Top which continues a long line of federal attempts to reform schools.

Objectives for this session include:

- Selecting Change Models: What Works
- Standards “Yes”: Standardization “No”
- School Leaders Can’t Do It Alone: School System Leadership Matters
- It Takes Activist Leaders to Turn Around Schools
- It Does Take a Village: Bridges to Larger Communities and Social Networks

This session is built on the data base from Leadership on Purpose: Promising Practices for African American and Hispanic Students (Papa-Lewis & Fortune, 2002, Corwin Press). The poster session will present current data from the original schools in that study who were over 50% African American and Hispanic students while performing at the top tiers of California’s academic index.

Traditional models of leadership using outdated ideas of management will not turn around underperforming or failing schools. Leaders who turn schools around have to be “complete” principals, ones who are moved by data and by matters of the heart. Social justice requires an activist leader. This study will sketch out a portrait of such a leader and indicate how prospective leaders can assess their own readiness to undertake the challenge of turning around an underperforming or failing school.
Participants will understand the context of educational policy and practice issues which confront principals in turning underperforming and/or failing schools into viable educational entities:

- examine the preponderance of the dimensions of schooling as found in current demographics, school problems and failure, including common characteristics of turn-around schools
- emphasize the dimensions commonly found in Race-To-The-Top legislation and the Reauthorization of the Elementary and Secondary Education Act (ESEA)
- review the extant turn around models which exist: technical, political, economically based, social justice models including economics and cultural capital,
- delineate the common best practices from the multitude of models, including those from professional organizations and accreditation bodies; and finally,
- discuss the role of social justice as currently being developed to create compassionate and caring leaders who can successfully work across racial, gender, ethnic, special needs and religious boundaries
Inspirational Technology Leadership for School Improvement

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Abstract- Poster Session

Global education and technology have altered the landscape of what learners know and how they learn, and it is critical for K–12 and university faculty to understand the new educational terrain. The focus of this poster session is for school and university personnel to envision and facilitate the use of technology in the digital world that is ubiquitous to our students.

Much of what we see happening in schools and universities focuses on the management of technology. Principal and teacher preparation programs often cover technology (and technology leadership) lightly, if at all, and rarely extend beyond the most basic skills (i.e., word processing, spreadsheets, and database use). The theme of this session is that effective technology leadership has more to do with teaching pedagogy and human relations and much less to do with technology itself.

The mission must now include designing and implementing new strategies to help teachers and students recognize, understand, and integrate technology with teaching and learning in the classroom. The mere presence of hardware and software in the classroom does not ensure meaningful learning for students. We are beyond the point of deciding whether or not we will accept technology in our schools. The crucial task at hand is to decide how to implement this technology effectively into instruction.

Specifically:
- Participants will examine model teaching and inspirational learner centered leadership characteristics
- Participants will examine the social, cultural, legal aspects of technology
- Presenters will provide examples from student to program evaluation perspectives of digital leadership
- Presenter and participants will discuss the implications of policy and practices intended to develop technology leadership

The presenters will focus on information that is critical for K-12 leaders and university faculty to understand the ever evolving educational terrain. The poster presentation will attend, in the broadest sense, to technology standards, data-driven decision making, and visionary, courageous, and creative leadership in this digital environment. As well, attention will be focused on what technology leaders should know as they expect their classroom teachers to teach.
Secondary Agricultural Education Teachers Competencies Regarding the IEP Process

A paper proposal submitted to the 9th Hawaii International Conference on Education
January 4-7, Honolulu Hawaii

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ABSTRACT

Agricultural teachers have been involved in the individual education plan (IEP) process at their prospective schools. The initial review process, annual review and implementation of the IEP require the agricultural teachers’ knowledge and involvement. Although agricultural teachers have been involved in all aspects of the IEP process, the implementation of the IEP requires extensive knowledge and understanding of the impact of the IEP on the student with learning disabilities. Although special education is provided for agricultural education teachers in some states, not all states provide special education. The increase of students with IEP’s over the years has resulted in an increase in students enrolled in agricultural programs. As a result, the knowledge possessed by the agricultural education teacher to implement the IEP to ensure that adequate services are provided to the student has become more important. All agricultural education teachers are legally responsible for the implementation of the IEP for students enrolled in their program; therefore, it is necessary to determine if all agricultural
teachers should receive training to adequately provide the necessary service to the student with special needs.

This descriptive correlational study will determine if differences exists in the agricultural education teachers’ competencies toward the IEP process based upon the specialized education received in special education classes and/or workshops. The purpose of the study is to determine and compare the competency levels of secondary agricultural education teachers in Pennsylvania and North Carolina toward the IEP process. The research questions that will guide the study are: 1) Is there is a difference in the competency of secondary agricultural education teachers who receive special education coursework or workshops and secondary agricultural education teachers’ who do not receive specialized training in special education? 2) What is the impact of special education coursework and workshops on the competency level of the secondary agricultural educators toward the IEP process? 3) Would special education coursework and workshops benefit all secondary agricultural education teachers?

The findings from this study will be useful to those involved in planning and implementing special education training as well as teacher preparation programs. This study will include a sample of secondary agricultural education teachers employed during the 2010-2011 academic year in the Commonwealth of Pennsylvania and the state of North Carolina. Participants will be asked to respond to a mailed questionnaire in the areas of professional role and development competencies, instructional role competencies, knowledge related competencies, and student leadership and organization competencies. The expected outcome of the study is the definitive answer in the attitude of secondary agricultural education teachers toward the IEP process who receive special education coursework and workshops and the secondary agricultural education teachers who do not receive special education coursework and workshops.
Professor to Chair and Beyond- Academic Higher Education Leadership

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Abstract- Poster Session

Objectives

There is very little written that really deals with the daily challenges of someone in higher education administration. What typically happens is that it is someone’s turn to be chair. If that person is reasonably successful (often with only minimal training), they may get meaningful assignments or an opportunity to be a unit Director or Associate Dean. Some fortunate few get an internship or fellowship under the tutelage of a practicing administrator. Again, if fortunate, the mentor is good. Otherwise, the individual learns administration the way someone else does it, good or bad. As well, turnover and movement in academic administration is rampant with more and more individuals given administrative responsibilities with little or no idea of the expectations or pitfalls.

The life of any academic administrative officer of a university is extremely complex. Many enter administration having been a good faculty member, a good department chair, or having led a university project. Often the transition from faculty to administrator is difficult with many not succeeding (leaving) or worse staying and performing poorly. This presentation is intended to give some practical guidance to those contemplating such a job.

While following the tenets of organizational theory (the individual and the sociological aspects), this poster session is intended to be a hands-on approach to the challenges of university academic administration. The session objectives include:

- the knowledge base of higher education leadership;
- respond to popular ideas such as leader vs. manager; and,
- a practical discussion of key topics faced by university administrators from department chair to positions of Director, Associate Dean, Dean and beyond

Over the years, faculty moving to the ranks of administration were somewhat facetiously seen as moving from the light that is faculty to the dark that is administration. The accusation usually stemmed from observation of administrators who were poorly prepared for the rigors of leadership or the skills required of good managers.
The poster session will be led by two seasoned administrators who served as faculty then moved to positions including program coordinator, Assistant Vice Chancellor, Graduate Dean and Provost/Vice President for Academic Affairs.

Topics include:

Avoid Crossing to the Dark Side
Being a Chair: It’s More Than Just Your Turn
Deans: The Face of the College
Ethical Decision Making: Who are You When No One is Looking

Being a chair of a department often sets the stage for the future administrator from two perspectives. First, is it right for you? Are you a good leader, a good manager? Are you cut out to be an administrator? As well, are your leadership//management skills visible to others; faculty, Dean, VPs? Will they be able to support you if you decide to go on?

The complexities of leadership and management skills of a Dean are as varied as they are numerous. Advocacy for a college must be weighed against the goals of the University as a whole. Collegial relationships with individual faculty members cannot collide with strong assessment of curriculum or quality of faculty teaching, scholarship and service.

Ethical standards need not be a casualty of the decision making process. Politics, power and privilege are value-based issues that the leader must consider in their sense of self. The central core of leadership is ethics.
Empowering care in the inner-city classroom: Teacher high expectation and student high achievement measured by the district-wide tests

Soung Hwa Walker, Ramona High School Riverside, CA.
Deron Walker, Ph.D. California Baptist University

This paper provides a narrative account that describes how a first-year teacher’s empowering care in her mathematics classes in an inner-city high school, located in Southern California, contributed to better student learning and helped raise district-wide test scores. The purpose of the article, chronicled from a practitioner’s point of view, examines how teacher beliefs that “all students are capable of learning,” operationalized concretely in terms of empowering care, enabled students to achieve impressive academic performances as measured by the district standardized tests during the 2009-2010 school year. Most of all, the authors argue that empowering care with high expectation can positively influence students’ academic success not only in math but in other subject areas as well. The authors further contend that especially among inner-city or at-risk students (e.g. low achieving, ELL, socio-economically disadvantaged, or special education students, etc.), teacher high expectation coupled with empowering care can be the key element to maximize student learning. Finally, through applying the research methodologies of narrative inquiry and conversation analysis to interpret the data recording the astonishing academic performances of students during one first-year teacher’s experience, this study focuses on how students from impoverished neighborhoods started to believe in themselves. As a result, these students demonstrated that they could improve their learning in Algebra I and consistently perform better on district tests, outperforming other classes at their school and other schools within the district.

Ramona High School’s 2009-2010 annual theme, “Through new eyes you are more than you imagine,” emblazoned on the new faculty shirts, brought a smile to new teacher Soung Hwa Walker’s face and suggested to her that maybe she was starting her math teaching career in the United States at the right place and time. In addition to the catchy new slogan, S. Walker felt a positive connection with her new principal from her hiring interview, where the latter expressed a firm desire to the former to reach out to low achieving students. The principal’s vision for reaching low achieving students resonated well with S. Walker’s prior experience of teaching English in South Korea. It also provided an encouraging sign of institutional support to her as a new faculty member who was interested in implementing “enabling [empowering] care,” a concept she had become acquainted with the year before during her combined master’s degree / teacher credential program at the University of California, Riverside.

During her master’s degree / teacher credential study, S. Walker explored research specifically focused on preparing teachers to meet the rather stringent challenges of state-level test-based accountability resulting from the No Child Left Behind (NCLB) Act. One of S. Walker’s mentoring professors John Wills and his colleague Judith Haymore Sandholtz (2009) defined the basic tension that California public school teachers often face in the era of test-based accountability that may have a constraining impact upon their classrooms: namely, the tension between teacher professionalism and centralized standardization of curriculum and instruction.
According to Wills and Sandholtz (2009), even in the most ideal educational settings, teachers must negotiate this tension between professionalism and standardization as school administrations increasingly believe that “uniformity [of goals, curriculum, teaching methods, and assessment] offers the most straightforward way of providing equality of educational opportunity” (p. 1069). As opposed to systems where teachers make decisions at the classroom level, a standardized approach seeks to centralize efforts to reform curriculum and instruction with pacing guides and collaborative efforts at departmental meetings to unify content. The overall goal would be to ensure that content taught in all classes matches the substance of state and local tests and that students who move from one school to another would be taught the same content.

Meanwhile, teachers are trying to employ an individualized pedagogical approach based on professionalism that emphasizes their own expertise and judgment to make decisions at the classroom level that are relevant to their own diverse and unique classroom environments. Wills and Sandholtz (2009) reported that this professionalism has defining characteristics “based on theory, mastery of knowledge base through extended specialized training, a high degree of autonomy in performing tasks, and a code of ethics that guides behavior” (p. 1067). It is important for teachers to be able to apply their own theoretical knowledge in classroom practice in an autonomous manner because of the rich diversity in their classrooms and uniqueness of each environment and the challenges it presents that “preclude formulaic solutions” (National Board for Professional Teaching Standards [NBPTS], 1996; Wills & Sandholtz, 2009). Essentially, teachers must be somewhat freely permitted to draw upon their own specialized knowledge and use their professional judgment to determine how to meet the rich diversity of their students’ needs concerning what and how to teach because research has identified teacher expertise as the most important factor in determining student achievement (Darling-Hammond, 2000; NCTAF, 1996; Wills & Sandholtz, 2009). Teachers impact student performance more powerfully than program variables (Hawley & Rosenholtz, 1985; Wills & Sandholtz, 2009).

In a similar vein, an overly centralized or standardized approach tends to “emphasize transmission of information,” where “knowledge is considered to be a fixed body of information that is transferred from teacher or text to the student” (Good & Brophy, 1994). The teacher, then, becomes more manager than facilitator while classroom instruction grows more teacher-centered as opposed to student-centered and increasingly didactic rather than interactive. Thus, Wills and Sandholtz recommended a new type of professionalism which they called “constrained professionalism” that attempts to balance the needs of implementing a standards-based curriculum without reducing teacher effectiveness and demoralizing teachers by undermining their professionalism and encroaching upon their autonomy with an overly hierarchical and centralized standardization (one-size-fits-all approach) to curriculum and instruction. For the purposes of this paper, while pressures toward standardization were present, S. Walker enjoyed a reasonable amount of opportunity to cultivate her professionalism and exercise a sound degree of autonomy in her classroom. This room that her principal graciously provided her within the curriculum, even as a new teacher, to exercise autonomy within constrained professionalism by applying the standards and receiving collaborative departmental support combined with freedom to make alterations to materials and methods to make them her own allowed S. Walker to implement empowering care with her students and enjoy remarkable success as a first year teacher in the American public school system.

Building upon the work of Annette Hemmings (2006), enabling care may be defined as the ideals associated with a “communitarian moral order” (p. 139) that fosters a sense of community and the type of individual character that encourages school actors to „respect one another, treat
each other as equals, but never stray too far from the idea that they are first and foremost a class, a community of learning’” (Rosario, 2000, p 30). Hemmings (2006) contrasted the concepts of “enabling” and “disenabling care” at the urban Central High School whose students were 81% Black with most living in poverty (p. 139). Some acts of enabling care included a “huge dose of TLC” --- tender loving care ---- put in concrete forms such as calling parents, tracking down absent students, counseling troubled kids, and even providing clothes, transportation and other physical needs as well. As one staffer told the author, “We hug ’em, not slug ’em” (p. 141).

Ironically, the same school staff that provided such enabling care also provided disenabling care simultaneously in many cases by watering down classroom standards for achievement and proper behavior that suggested to students that the school “did not care about the students as capable learners” (Hemmings, 2006, p. 141). Most teachers at the high school greatly reduced the sources of knowledge for students, just taught from the textbook, even then eliminating massive portions of content, and resorted to mundane methods such as fill-in-the-blanks worksheets, rote memorization and answering questions from the back of the book. Moreover, such teachers often held minimal standards for their students and allowed students to socialize, laugh out loud or put their heads down during class time. One teacher explained her “loose standards” were needed to make the classroom “as pleasant as possible” so students would not drop out of school. In her own words, “

I used to feel guilty about the loose standards but then I came to the realization that these kids, you know, the kids in the neighborhood won’t come unless you make things as pleasant as possible. Parents don’t push them so if kids come it’s because they want to (p. 142).

It is somewhat understandable that this faculty member tried hard to keep the students happy and in school given the high dropout among minorities, especially when they feel discriminated against ----- as many of these students clearly did. Nevertheless, loosening up standards was not an appropriate approach in this context to say the least. Even students themselves complained about it. As student advocate Amber explained,

They try to be cool with the kids so that classes are comfortable. They get buddy, buddy and lower the standards so that classes are a joke. Even advanced placement classes are a joke. They have pretty much written kids off even though they’ll tell you they haven’t. Kids know what is going on and it really bothers them. They don’t like being treated like that. (p. 142)

Amber even went so far as to try and petition the school insisting that lax teachers do a more professional job. Thus, the students themselves wanted a high degree of professionalism from teachers, student-centered instruction and a rigorous curriculum that would make them proud.

A long line of educational research, in fact, has delineated how structural forces, school-level practices and students’ responses to the aforementioned have all contributed to systematic passdown of privilege to white and wealthy children and disadvantage to impoverished children, especially those of color (Bordieu and Passeron, 1990; Bowles & Gints, 1976; Fordham, 1996; Fordham & Ogbu, 1986; MacLeod, 1995; Oakes, 1985; Ogbu, 1978; Rist, 1970; Roscigno, 1998; Rosenthal & Jacobsen, 1968; Solomon, 1992; Willis, 1977). Nevertheless, much of the prior work on institutionalized patterns of perpetuating disadvantage for minorities and poor students has centered on lower teacher expectations that have contributed to a tragic “self-fulfilling
prophecy” where student self-esteem and self-efficacy have been damaged, contributing to reduced motivation. In response, teachers have often given less challenging school work (Farkas, 1996; Farkas et al, 1990) as was true at Central High in Hemmings” study (2006). Diamond, Randolph, and Spillane (2004) reported that this leveling of school-based expectations for certain minority or low income students is rooted in institutional hierarchy and can become “embedded” in schools. These authors also argued that these low expectations could be mediated if school leaders engaged in practices designed to increase student responsibility for student learning.

Method

For the purposes of this paper, Soung Hwa Walker (S. Walker), math teacher at Ramona High School, and her husband Deron Walker (D. Walker), associate professor and teacher-trainer in Modern Languages and Literature at California Baptist University, both in Riverside, California, employed a qualitative, case study approach, utilizing the method of narrative inquiry, to analyze S. Walker’s success in raising student achievement, as measured by test scores, in her first year of American school teaching at Ramona High School in Riverside, California. Connelly and Clandinin (2006) described the use of narrative inquiry succinctly:

Arguments for the development and use of narrative inquiry come out of a view of human experiences in which humans, individually and socially, lead storied lives. People shape their daily lives by stories of who they and others are and they interpret their past in terms of their stories. Story, in the current idiom is a portal through which a person enters the world and by which their experience of the world is interpreted and made personally meaningful. Viewed this way, narrative is the phenomenon studied in inquiry. Narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience. Narrative inquiry as a methodology entails a view of the phenomenon. To use narrative inquiry methodology is to adapt a particular narrative view of experience as phenomena under study. (p. 47)

Connelly and Clandinin (1990, p. 4) further say of stories and people: "People by nature lead storied lives and tell stories of those lives, whereas narrative researchers describe such lives, collect and tell stories of them and write narratives of experience." Through the transaction of learning from each other, the researcher and participant can begin to understand specific experiences within the context of stories told and retold in community. New understandings about the content and context of a situation can begin to open up possible new imaginings for future stories to be lived.

The teacher S. Walker and the educational researcher and teacher-trainer D. Walker continued their fourteen year marriage-long conversation on professionalism in education and simply extended the ongoing narrative to regular, almost daily discussions of S. Walker’s new experiences as an experienced English teacher from South Korea making the transition to her first year of teaching math in America at an inner-city school in Riverside, California. In combination with narrative inquiry and systematic conversational analysis regarding the teaching situation, the teacher / researchers employed the Riverside Unified School District’s first and second semester Benchmark Assessments for Algebra I for 2009-2010. It is through the lens of this narrative inquiry and discourse analysis that the raw data of the Benchmark Assessments for Algebra I are examined in this paper.
Building upon prior research on teacher expectations and enabling (empowering) care and a year of professional academic discussions on the issues surrounding the experience, S. Walker and D. Walker will argue that within the context of a mostly supportive professional environment, S. Walker’s (enabling) empowering care made the difference in raising her students’ test scores to a surprisingly significant degree, among the leading scores in the district in Algebra I. The term empowering care will be used in place of enabling care because the authors feel that enabling care can be too easily confused with the type of loose standard care provided in Hemmings’ (2006) discussion of disenabling care.

With encouragement from her principal and edification from a solid teacher-training program, S. Walker set out to implement empowering (enabling) care at Ramona High School in Riverside, California in the fall of 2009. In the following sections of the paper, S. Walker and D. Walker will summarize the data results of the standardized tests and the conclusions drawn from the authors’ attributions for the success S. Walker encountered in her teaching. These attributions came from an analysis of the raw test data, interpretation of the data using narrative inquiry and discourse analysis and comparison of the results of the data analysis with source support from prior literature review in the field.

**Results**

In the tables below comparisons are made between S. Walker’s students’ average (mean) scores for Algebra I versus those of both Ramona High School and the Riverside Unified School District (RUSD). The first table presents comparisons between S. Walker’s students’ mean scores (Semesters 1 & 2) and those of her school and district. The second and third tables present comparisons between S. Walker’s students’ performance levels compared to RUSD for semesters one (Table 2) and two (Table 3), respectively. Finally, Table 4 illustrates the comparison between S. Walker’s students’ performance levels and those of other Ramona High School Math Department teachers.

### Table 1. RUSD Algebra I Average (Mean) Scores 2009 - 2010

<table>
<thead>
<tr>
<th></th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSD</td>
<td>44.07%</td>
<td>39.43%</td>
</tr>
<tr>
<td></td>
<td>(N = 3708)</td>
<td>(N = 3186)</td>
</tr>
<tr>
<td>Ramona H.S.</td>
<td>45.97%</td>
<td>40.45%</td>
</tr>
<tr>
<td></td>
<td>(N = 544)</td>
<td>(N = 470)</td>
</tr>
<tr>
<td>Soung Hwa Walker</td>
<td>52.89%</td>
<td>46.01%</td>
</tr>
<tr>
<td></td>
<td>(N = 96)</td>
<td>(N = 83)</td>
</tr>
</tbody>
</table>

In Table 1, the data clearly shows that S. Walker’s Algebra I students on average scored significantly higher than both their peers at Ramona High School and the Riverside Unified School District (RUSD) on the district’s first and second semester Benchmark Assessments for Algebra I for 2009-2010. In the first semester, S. Walker’s students averaged 52.89% compared to 45.97% for Ramona High School and 44.07% RUSD overall, respectively, on the standardized assessment. While S. Walker’s students scored lower in Semester 2 on average on the Benchmark Assessment for Algebra I, that trend carried throughout the district. In Semester 2, S. Walker’s students once again scored significantly higher (46.01%) on the average when compared to students at Ramona High School (40.45%) and RUSD (39.43%) on the standardized exams.
Table 2. Comparison of Student Performance Levels for RUSD Semester 1 2009 Algebra I

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>District</th>
<th>S. Walker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>2% (N = 58)</td>
<td>6% (N = 6)</td>
</tr>
<tr>
<td>Proficient</td>
<td>15% (N = 541)</td>
<td>27% (N = 26)</td>
</tr>
<tr>
<td>Basic</td>
<td>37% (N = 1368)</td>
<td>45% (N = 43)</td>
</tr>
<tr>
<td>Below Basic</td>
<td>41% (N = 1523)</td>
<td>22% (N = 21)</td>
</tr>
<tr>
<td>Far Below Basic</td>
<td>6% (N = 218)</td>
<td>0% (N = 0)</td>
</tr>
<tr>
<td>Total</td>
<td>100% (N = 3708)</td>
<td>100% (N = 96)</td>
</tr>
</tbody>
</table>

In Table 2 a comparison is made between S. Walker’s student performance levels and those for RUSD, based on the RUSD Benchmark Assessment for Semester 1 2009 Algebra I. Succinctly stated, a significantly greater proportion of S. Walker’s students were classified as Advanced or Proficient, based on the standardized assessment, than the proportion of students qualifying in those categories for the entire district. In fact, S. Walker had three times the percentage of Advanced students (6% - 2%) and nearly double the proportion of Proficient students (27% - 15%), compared to those found throughout the district. Equally important, on the other side of the spectrum, the data reveals that S. Walker had only around half the proportion (22% - 41%) of students whose standardized scores classified their performance as Below Basic, again, according to district results. Moreover, S. Walker did not have any students scoring in the performance range deemed Far Below Basic in Semester 1 while 6% of RUSD students performed at the Far Below Basic level in the same term.

Table 3. Comparison of Student Performance Levels for RUSD Semester 2 2010 Algebra I

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>District</th>
<th>S. Walker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>0% (N = 10)</td>
<td>0% (N = 0)</td>
</tr>
<tr>
<td>Proficient</td>
<td>8% (N = 245)</td>
<td>28% (N = 23)</td>
</tr>
<tr>
<td>Basic</td>
<td>34% (N = 1076)</td>
<td>33% (N = 27)</td>
</tr>
<tr>
<td>Below Basic</td>
<td>45% (N = 1430)</td>
<td>28% (N = 23)</td>
</tr>
<tr>
<td>Far Below Basic</td>
<td>13% (N = 425)</td>
<td>12% (N = 10)</td>
</tr>
<tr>
<td>Total</td>
<td>100% (N = 3186)</td>
<td>100% (N = 83)</td>
</tr>
</tbody>
</table>

In Table 3 a comparison is made between S. Walker’s student performance levels and those for RUSD, based on the RUSD Benchmark Assessment for Semester 2 2010 Algebra I. Once again, performance levels fell throughout the district in the second semester during spring 2010. In Semester 2, neither S. Walker nor RUSD recorded any students performing at the Advanced level. Nevertheless, once more S. Walker witnessed a significantly higher proportion of students (more than three times the percentage) scoring well in the Proficient (28% - 8%) performance range. Meanwhile, S. Walker also had a significantly lower proportion of students scoring at the other end of the spectrum in the Below Basic (28% - 45%) category and a slightly lower proportion of student performances falling into the Far Below Basic (12 – 13%) range compared to the entire RUSD on the Benchmark Assessments.
Table 4. Ramona High School Math Department Performance Levels: Between Teachers Comparison Semester 2 2010 Algebra I

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Total N</th>
<th>Advanced %</th>
<th>Proficient %</th>
<th>Basic %</th>
<th>Below Basic %</th>
<th>Far Below Basic %</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Walker</td>
<td>80</td>
<td>0</td>
<td>29</td>
<td>33</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>Teacher A</td>
<td>57</td>
<td>0</td>
<td>14</td>
<td>51</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Teacher B</td>
<td>32</td>
<td>0</td>
<td>13</td>
<td>34</td>
<td>34</td>
<td>19</td>
</tr>
<tr>
<td>Teacher C</td>
<td>78</td>
<td>1</td>
<td>8</td>
<td>35</td>
<td>53</td>
<td>4</td>
</tr>
<tr>
<td>Teacher D</td>
<td>85</td>
<td>0</td>
<td>5</td>
<td>26</td>
<td>54</td>
<td>15</td>
</tr>
<tr>
<td>Teacher E</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>32</td>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td>Teacher F</td>
<td>87</td>
<td>0</td>
<td>2</td>
<td>32</td>
<td>56</td>
<td>9</td>
</tr>
<tr>
<td>Overall</td>
<td>469</td>
<td>0</td>
<td>10</td>
<td>34</td>
<td>46</td>
<td>10</td>
</tr>
</tbody>
</table>

In Table 4, a comparison is made between S. Walker’s student performance levels and those for other Ramona High School math teachers, based on the RUSD Benchmark Assessment for Semester 2 2010 Algebra I. Unfortunately, data for between teacher comparisons was not available for Semester 1, but as demonstrated at the district level, the authors believe the results would prove similar to Semester 2. In the Advanced performance category, only one teacher at Ramona High School recorded 1% of students attained this level. No other teacher had any students in the Advanced range on the Algebra I Benchmark Assessment. However, S. Walker had 29% of her students to achieve standardized test scores that classified their performance as Proficient. This proportion of Proficient performances was more than double the level of all other math teachers at Ramona High School in math. In fact, the percentage of S. Walker’s students that reached Proficiency more than tripled the level of 4 of 6 of the other teachers in the department and exceeded the overall percentage 29% - 10% on the Benchmark Assessment.

On the other end of the spectrum, S. Walker’s percentage of students who were Below Basic was only 28%, which was the best performance in that category (lowest level) in the department. S. Walker’s 11% of students that were Far Below Basic was nearly identical to the department’s overall 10%. More poignantly, when the worst two categories of Below Basic and Far Below Basic were combined, one can see that 39% of S. Walker’s students fell into one of those two categories, or nearly two of every five students. While that rate may be far from ideal, it compares rather favorably to the rest of the department. For instance, only one other teacher of seven had a lower percentage (15%) falling into those two bottom categories of performance. Conversely, two of the seven teachers witnessed more than half of their students falling into the two bottom categories (53% and 57%) while three others had at least two of every three (67%, 68% and 69%) students reach these depths of performance lows. In fact, the whole department saw 56% of students score Below Basic or Far Below Basic on this assessment.

**Discussion**

The data clearly demonstrates that S. Walker by all standardized test measures had a very successful first year experience of teaching math at Ramona High School in Riverside, California. Succinctly stated, S. Walker’s students, on the average, scored significantly higher than the school or district average. Moreover, S. Walker had significantly more students classified as either Advanced or especially Proficient than most other teachers in her district,
many with far more experience than her in teaching math in California. Equally impressive, S. Walker had significantly fewer students fall into the lower categories of performance known as *Below Basic* and *Far Below Basic*.

Frankly speaking, D. Walker the researcher and teacher-trainer and S. Walker the practitioner were quite surprised by both the Benchmark Assessment standardized test results and by the way S. Walker’s students responded to her as a first year teacher at Ramona High School. While S. Walker had previously taught English in South Korea for about five years and was not new to teaching, she had never previously taught in the United States before 2009 nor had she taught math anywhere. Thus, it was believed by both authors that S. Walker would have a steep learning curve in adjusting to American public schools, especially in an inner-city environment like Ramona High School in Riverside.

It was out of this concern for S. Walker’s professional development that prompted D. Walker as a researcher and teacher-trainer and S. Walker to embark upon this journey of narrative inquiry and conversation analysis as both working spouses and professional educators. Throughout the 2009 – 2010 school year, S. Walker and D. Walker regularly discussed what the former was experiencing in the classroom in terms of adjusting to teaching load (5 classes of 35+ students each), bonding with faculty in her department, approaching her classroom in a student-centered fashion, and handling the challenges of disciplinary issues. Despite her prior teaching experience, S. Walker seemed overwhelmed at first; there were many challenges to overcome. Although S. Walker had received encouragement from her principal upon hiring and had bonded with peer faculty well, many challenges remained: how to care for exceptional and struggling students with such large class sizes, how to make cultural adjustments to not only American public schools but also an inner city environment like Riverside, and how to handle students that frequently seemed resistant to new teachers at the school. In fact, several of S. Walker’s colleagues had expressed the concern that a significant number of students at the school took pride in hazing new teachers and even occasionally trying to get rid of them.

Despite the many formidable challenges that lie ahead, S. Walker felt genuinely privileged to have the opportunity to build into the lives of young Americans and impart to them a difficult but important subject, math. While there were, of course, many teaching strategies and math methods that S. Walker could not wait to try out on her students, what both D. Walker and she agreed upon at a fundamental level was that ultimately teaching is relational. Thus, the challenge as both S. Walker and D. Walker saw it was for her to connect with students on a personal level. As the old cliché goes, “people won’t care what you know until they know you care.” Therefore, no matter the classroom strategies, techniques, and materials employed, S. Walker decided to embark upon a course of imparting empowering care (based on “enabling care”) as discussed in the beginning of this paper. Through many conversations in the personal narrative over the course of the school year and even the summer, S. Walker and D. Walker regularly discussed how this empowering care was being implemented and what the results were. Upon reflecting on the success of S. Walker in making a valuable contribution toward boosting test scores at her school and in her district, both S. Walker and D. Walker firmly concluded that implementing empowering care made the biggest difference in her teaching effectiveness. Some of the keys or the main principles of the empowering care (See Table 5) employed and recommended by S. Walker will be explained further in this section of the paper.
Table 5. Keys to Empowering Care

<table>
<thead>
<tr>
<th>Personalized Instruction</th>
<th>e.g. Calling names early &amp; showing interest in their lives &amp; families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Purpose</td>
<td>e.g. Connecting math success to personal goals &amp; providing an inspirational print rich environment</td>
</tr>
<tr>
<td>Positive Feedback</td>
<td>e.g. Using stickers, holding pizza parties &amp; providing fortune brownies</td>
</tr>
</tbody>
</table>

**Personalized Instruction**

Personalized instruction is the cornerstone to empowering care: everything else comes from there. Despite having inhibitingly large classes, S. Walker took many proactive measures to personalize class instruction. She learned all student names within the first two weeks of class and made it a point to call on students by name when asking questions. S. Walker not only used student names in asking questions but did not easily give up on struggling students who were reluctant to answer questions, “Saying, I don’t know.” Even when other students would say, “Mrs. Walker, she said she didn’t know,” this teacher would hang in there and encourage the student with “You can do it” and wait for the student to respond who needed extra time. While some students struggled and initially showed frustration, over time, they began to appreciate that S. Walker did not give up on them but kept high expectations for them, believing in them when they sometimes did not believe in themselves.

In addition, S. Walker took an interest in students’ personal lives and their families. Even as an educational researcher and teacher-trainer believing in personalized instruction, D. Walker was often surprised during the conversations he had with S. Walker to the extent that S. Walker asked students about their families and personal lives. Often, when a student would be struggling or misbehaving in class, usually a result of difficulty with the subject and feeling disconnected, S. Walker would ask the student, “How is your mother doing?” Maybe she would ask, “How’s your daddy?” Students would often be surprised, sometimes perplexed. Not many teachers had ever asked them such questions before. However, once they got over their initial shock, students might respond, “I haven’t seen my dad in a while” or perhaps indicate some other problem at home. S. Walker would then try to comfort the student by saying something encouraging to them. More importantly, S. Walker could now comprehend her student’s academic struggles or behavioral acting out a little more, and students came to understand that she genuinely cared about them as well.

One more example of personalized instruction in the interest of empowering care concerns S. Walker’s approach to grading. Typically, most math teachers use Scantron sheets to grade quizzes and tests due to the time and energy-saving convenience involved. While it is perfectly reasonable for math teachers to use the easier approach, S. Walker insisted in grading all of her quizzes and exams by hand, not even using teaching assistants which may have been provided to her. More as her husband than as a researcher, D. Walker wondered why she did this. According to S. Walker, she felt it was necessary for her to use the exam results not only as an objective measure of progress but also as a means for understanding each student’s process. Exam errors enabled her to identify areas where she could intervene in their process and help her students improve. In other words, if S. Walker did not personally grade the tests, she would feel
less able to render the personalized process-based instruction and empowering care she felt would be necessary to optimize instruction and provide each student with the best learning context.

Practical Purpose

S. Walker tried to build upon personalized instruction by providing purpose to students as a means for delivering empowering care. One can certainly not assume that in an inner-city school such as Ramona High School in Riverside, California, where many students come from poor and broken homes, that motivation and purpose in math learning are automatic. Neither is it easy for teachers to provide purpose for all students, especially with an abstract subject. Nevertheless, S. Walker found it helpful to build upon her efforts to get to know each student and provide personalized instruction. S. Walker’s knowledge of students could help her to inspire them to use success in Algebra I as a step towards reaching their goals. One student who struggled, for instance, was interested in becoming a nurse. S. Walker motivated him with purpose by pointing out that not only was Algebra I necessary to advance through the high school curriculum and go to college but also to nurse training as well. Students, who may not necessarily enjoy math as a subject or even understand the purpose for taking it, can be more inspired to do well if they can see how success in the class will help them to achieve their personal goals.

Practical purpose can be provided in pragmatic terms as the aforementioned examples illustrates. However, it can also be inspired in a more idealistic sense in clearly and explicitly communicating to students that teacher expectations for them will remain high. Frequently, S. Walker would provide inspirational message through video clips from motivational speakers such as former NCAA and NFL football coach Lou Holtz. In a similar vein, she would also post inspiring print messages around the classroom, again, to keep expectations high and show students her belief in them.

Positive Feedback

Providing positive feedback is an essential part of delivering empowering care to students. It all starts with providing purposeful praise. S. Walker made it a point to lavish praise on students for giving correct answer or for trying their best. Her verbal praise and encouragement empowered students to speak out in class more frequently and engage in the learning environment in a more personalized fashion. In addition to verbal praise, S. Walker also encouraged students with affixing stickers to their quizzes and tests: one sticker if they scored 85% and two stickers for 90% or higher. She often heard students enthusiastically asking each other, “Man, how many stickers did you get?”

Another mode of positive feedback in S. Walker’s class was food. She fed her students both intellectually and physically. Students received pizza parties as an incentive not simply for doing well on tests but for making a lot of effort in class. In addition to the pizza parties, S. Walker gave her students “fortune brownies.” Similar to a fortune cookie, S. Walker put small pieces of paper with inspiring messages into a foil which she used to wrap the brownies. The messages were not really fortunes but positive messages to students such as “You are smarter than you think!” S. Walker gave students these “fortunes” soon after starting the term (without the brownies) and just before taking exams with the brownies. S. Walker observed that her students often kept these simple, complimentary messages of inspiration in their folders for many weeks after receiving them. In fact, S. Walker often provided food to hungry students who
frequently came to school without having eaten properly at home. She commonly gave hungry
students some healthy snacks. Students came to realize that the pizza, brownies, and other
snacks were being provided by their teacher at her own expense of time and energy, her
expression of empowering care to them.

**Implications**

Teacher such as S. Walker realize that teaching is above all things relational in nature. Thus,
while teaching standards-based curriculum is important, it is of even greater importance to
connect with students through the demonstration of empowering care towards them. S. Walker
was able to provide such empowering care to students because she drew upon past teaching
experiences and pedagogical research. Furthermore, she was fortunate enough to have a
principal who encouraged her to develop her professionalism by showing empowering care to
the students. Such institutional support can be important if not vital for teachers in their efforts
to provide their students with empowering care.

According to Wills and Sandholtz (2009), state-level test-based accountability can
negatively impact classrooms and degrade teacher professionalism when the positive effort to
teach a standards-based curriculum increasingly becomes confused with a misguided effort to
implement an overly simplistic “one-size-fits-all” standardization of centralized curriculum.
Classrooms can be negatively impacted and teacher professionalism degraded because teachers
may not be allowed to make their own decisions concerning curriculum, teaching methods, and
authentic assessments---including portfolios. The resulting highly rigid instructional approaches
can limit students” participation in their learning process, which also inhibits the quality of a
argued that the high school juniors in her article were not promoted to cultivate high level
thinking in history classes: “the students sat in classes passively, very rarely voicing an opinion
or asking a question, no research required” (p. 318). She further pointed out that “all information
in the course was reduced to lists of facts, brief descriptions, chronologies of presidents, laws and
court decisions” (p. 317). When centralized curriculum becomes required, class lectures tend to
be tightly controlled by not encouraging students in “questioning their institutions” (p.317).
Often, the teachers” primary concern may deviate toward covering the materials without
students” interruption.

While one might argue that centralized curriculum and uniformity of instructional strategies
help provide equal learning opportunities for students, scholars have found that teachers need to
differentiate classroom teaching to support all students” best learning (Katz,1999; Ladson-
Billings, 1997). Although teachers want to engage in more “student-centered instruction”
(Cuban, 1993, p. 6) in their daily classroom teaching, rigid standardization of curriculum and
instruction often drives teachers to mainly focus on student test performance. Teachers working
within such a professionally confined and rigid system may over-emphasize practicing test-
taking strategies, including “how to properly bubble in test answers, or how to eliminate wrong
answers” (Wills & Sandholtz, 2009, p.1078).

As strong focus on accountability through high-stakes testing often creates teaching
dilemmas through over-centralized emphasis on standardization of curriculum, teachers often
become too limited in exercising academic freedom, an important part of the teaching profession.
Primarily due to the obligation of following the centralized curriculum, teaches can lose the
autonomy necessary for creating instructional strategies to meet different students” educational
needs. It is vital for teachers to value all different students” educational needs and provide for
them accordingly. Showing respect for the various cultures in class is a sign of teachers” care, recognizing all students “as worthwhile individuals” (Phelan, Davidson, and Cao, 1992, p. 698).

In a more nurturing classroom environment, where empowering care is provided, students tend to engage more in class discussions and finish their class work more consistently because they feel that their teachers care about them. However, overly-standardized test-driven instructional approaches often prohibit the opportunity for teachers to adequately consider diverse students” educational needs simply because they feel obligated to use the canned-materials from the departments following the pacing guides. According to Phelan et al (1992), students want to be acknowledged as valuable individuals by their teachers. Students want their teachers “to recognize who they are, to listen to what they have to say, and to respect their efforts” (p. 696). One student quoted in Phelan et al. (1992) elaborated,

The class I’m getting an F in, he seems like he doesn’t really actually pay attention to anybody in particular in class, it’s just a whole class, and this is math..... So I don’t know what he really actually means. He doesn’t look at me.... (p. 696)

Thus, it is easy to see how perceived teacher indifference to individual student needs can result in disconnected relationships between students and teachers, which may be harmful to individual students. In teacher-centered classrooms where teachers are pressured to get results on standardized tests, such disconnected relationships can easily form. When educators feel constrained and find difficulty being creative with their teaching practices because of the pressure to immediately raise test scores, students may be treated more like numbers than properly valued individual learners.

While understanding that state-level testing may be an important part of the assessment process, over-emphasis on centralization of a standardized curriculum for uniformity in test preparation in schools can create a negative impact on teacher practice and student learning. Consequently, students may be drilled to perform well on their standardized testing. Without recognizing an individual’s special circumstances such as lack of English proficiency and disciplinary behaviors, a hostile classroom atmosphere may be created between teachers and students. The underlying tension between teachers” agendas and students” needs often may inhibit teacher efforts to cultivate the kind of healthy relationships with students that can come from application of empowering care. As administrators and policy makers try to reform schools by ensuring that standards are met, providing centralized curricula to promote students” immediate learning outcomes with accountability in the form standardized tests represents an overreaction to problems in education. In short, this type of „test-driven‟ classroom instructions often does not serve the best interests of all students” learning needs (Wills & Sandholtz, 2009). Rather, a system that encourages teacher professionalism and enables teacher to employ empowering care with their students does.
References


Journaling and Journeying Toward Academic Excellence in Intercultural Rhetoric

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electronic journaling has already been established as a helpful tool in facilitating successful contrastive rhetoric-oriented writing instruction for second language learners. It has been used to provide English as a Foreign Language (EFL) Chinese students with models of English academic essays written by native English speakers and a forum for discussing salient features of English academic writing and how these features may differ from the conventions of expository writing used in their Chinese first language (Xing, Wang, and Spencer, 2008). In addition, whether electronic or in the form of in-class freewrites, journaling has also been known to build fluency among writers, reduce anxiety concerning the writing process, provide much needed opportunities for stress-free writing practice, and allow writers the unique opportunity to explore and develop their own voices as writers. Thus, it would seem that journal writing would be a useful pedagogical tool to employ in second language writing classrooms to facilitate the second language learner’s acquisition of the writing conventions of the target language and culture. Therefore, this paper seeks to combine synthesize the research on journaling with existing pedagogically-oriented research on the journey toward facilitating intercultural rhetoric-oriented writing instruction for the express purpose of empowering second language writers to compose better English academic essays.

This paper synthesizes recent pedagogically promising findings in intercultural rhetoric and travels further down the instructional road to more fully explore what journaling can add to the didactic journey. After years of controversy and hypercriticism from expressivists and postmodernists, contrastive rhetoric has redefined itself as intercultural rhetoric with refined methods and a more clearly defined pedagogical mission (Walker, 2008, 2010). While this redefinition of contrastive rhetoric to intercultural rhetoric remains a work in progress, certain principles of intercultural rhetoric have emerged to help reconfigure the field so it can move forward or reorient itself in a decidedly pedagogical direction (Walker, 2010), which was the field’s original purpose (Grabe & Kaplan, 1996; Kaplan, 1988). Some of the features that help redefine contrastive rhetoric as intercultural rhetoric, especially in East-Asia, would include: less text-focus and more experimental design in research, ethnography as a salient feature and a more inclusive dialogue between English scholars in the West and East–Asia (Connor, 2008; Walker, 2010). Succinctly stated, the redefining of the field and continued interest in improving second language writing research and practice has led to a recent resurgence in intercultural rhetorical research, especially true in East-Asia (China, Japan, and Korea). In the last decade several pedagogically promising research studies in teaching intercultural rhetoric have been successfully performed (Walker, 2006; Xing, Wang & Spencer, 2008; Yoshimura, 2002).


**Journaling Benefits to L1 and L2 Writing**

Briefly, it should be noted that journaling began as a way to help native English speakers, especially struggling writers, with some of their writing issues such as creativity, fluency, anxiety, higher order thinking skills, and inability to fully express themselves. In fact, two of the major writing problems that have been identified in rhetoric and composition research in the last generation have been "writer-based prose" (Flower, 1979) and the need to "invent the university" for freshman native English speaking writers (Bartholomae, 1985). These are truly developmental writing issues. Concisely stated, Flower coined the term "writer-based prose" to refer to the inexperienced writer’s egocentric tendency to leave out important details when writing an essay because s/he often falsely assumes that the readers will understand what s/he means without further elaboration. The second problem is similar in scope. In Bartholomae’s article, teachers / professors need to "invent the university” for students because the types of academic, expository writing that they are typically asked to do in college and the standards to which they are held prove somewhat foreign to them, as from another culture, the culture of academia. In a nutshell, journaling can help students with the invention process of coming up with ideas in prewriting, exploring themselves more and understanding their own writing processes on a deeper level, thereby reducing anxieties which may help them overcome writer's block. These same benefits for L1 writers can be even greater for L2 writers who struggle with vocabulary, grammar, and rhetorical awareness of the expository style of the L2.

In fact, the word “journal” has origins in the French word *jour*, meaning “day.” One meaning for the word “journey” can equal the amount of traveling that a person can do in one day. Thus, the word journaling may literally represent a “daily writing about one’s journey” (Schiwy, 1996). In this way, journal writing can serve as a means for recording thoughts, experiences and insights as one reflects upon them. As Janet Emig (2008) suggested, writing can be a mode of learning, a voyage of self-discovery. Journal writing can play an important role in that reflective process of self-discovery in helping students to reflect and generate ideas. Journal writing comes in many forms but we will discuss two examples here: freewriting and dialogue journals.

In order to help students relax, build fluency, express themselves better and find their own voices as writers, Elbow (1998) recommended freewriting as a “teacherless classroom” where students would write the message in the bottle without fear of heavy-handed error correction. This expressivist approach to writing often empowers students by emphasizing and promoting the flow of ideas and meaning of text rather than focusing on form. Therefore, many students find freewriting to be “liberating,” a chance to pour out their hearts and bare their souls without fear of criticism. Elbow even suggested keeping a freewriting diary (journal) as a regular practice to facilitate writing production and skill growth. Freewriting can be implemented in many ways in a writing class to foster personality growth, writing skill development and in a more guided way to facilitate thought on given topics of class discussion.

Journal writing has been used in many writing classrooms in American public schools and colleges and universities with both native English speakers (NES) and English as a Second Language (ESL) students. It has been demonstrated to promote authentic learning, reflective practice and interactive engagement (English & Gillen, 2001 Peyton, 1993, 2000; Peyton & Reed, 1990; Peyton & Staton, 1993; Reed, 1993). English and Gillen (2001) viewed journal writing as a reflective practice which allows an individual to think through what happens in life. This reflective process is how many people make sense of their experiences.
Furthermore, research has suggested that journal writing can provide an opportunity for developing second language literacy by engaging in language in meaningful and authentic contexts (Orem, 2001). In addition to freewriting, another useful type of journal is the dialogue journal where teacher and student both write responsive journals to each other and maintain an informal and friendly dialogue that often carries many of the same benefits of freewriting but also helps to build rapport and mutual understanding between teacher and student. Peyton (2000) identified three specific benefits of dialogue journals: extending contact time teachers have with learners, facilitating language learning and assessing a learner’s needs and progress. Orem (2001) indicated that dialogue journaling stresses communication rather than correctness. Therefore, the pressure on students to write is often somewhat alleviated. While this is good for the first language writer, it is even better news for the second language writer who may struggle with more anxiety in attempting to negotiate the many pitfalls present in writing in a second language and culture. This paper will specifically discuss the potential benefits of journal writing in combination with other research-based techniques of second language writing instruction to enhance East-Asian second language writers’ writing fluency, comprehension of intercultural rhetoric and multi-cultural identity reconstruction.

Journaling & Writing Fluency

Lack of writing fluency is one of the major problems second language (L2) writers face in academic writing. To know how to help L2 writers improve their writing fluency, it is important to know what defines the criteria of fluency and the many factors that cause this problem. Writing fluency is usually described as a temporal phenomenon and defined as the number of words and structures accessed in a given time period (Wolf-Quintero, Inagaki, and Kim, 1998). It has been widely studied in the past from various perspectives such as linguistic and cognitive perspectives. Therefore, the criteria used to determine writing fluency varies among different study groups.

Similar to speaking fluency, the rate of production is one of the most frequently used criteria to determine fluency. Schmidt (1992), distinguished language proficiency from fluency while discussing second language (L2) speaking fluency. He pointed that proficiency deals more with the language accuracy, grammatical complexity, and context appropriateness while fluency focuses on the rate of text production under a temporal condition. Therefore, fluent writers can produce a greater amount of words than struggling writers under the same time limit. Fluency in this paper, as mentioned in the beginning, is defined as the number of words and structures accessed in a given time span. That means the criteria to determine writing fluency is the rate of language production. This was also the criteria Yoshimura (2002) used in a study on intercultural rhetoric in Japan.

After establishing a working definition of fluency as rate of language production, one may wish to find the causes for the fluency difference between fluent writers and struggling writers. Studies have been conducted from three main perspectives: linguistic perspective, cognitive perspective, and second language perspective. Typically, the results show that increased writing experience indicates the improvement of writing quality. Likewise, faster writing rates often indicate a higher writing quality. Van Houten et al. (1988) found a correlation between increased writing rate and the increased rate of story quality by independent judges. The author also recommended freewriting to assist writing fluency because it can provide a safe mode where
students do not receive the imposed interruptions and pressure to meet all writing functions concurrently. Peter Elbow strongly advocates freewriting to increase student writing fluency:

When you write quickly...as in freewriting, your syntactic units hang together. Even if you change your mind in mid-sentence...you produce a clear break. You do not try to plaster over two or three syntactic coherence and verbal energy which gradually transfer to your more careful writing. (pp.16-17)

Freewriting was recommended by Elbow as "the easiest way to get words on paper and the best all-around practice in writing that I know"(p.13). Elbow also believes a person will improve his/her writing more through freewriting and sharing than through any other activities described in his book. Elbow suggested experiencing "fast writing without worrying about organization, language, correctness, or precision"(p. 26) before revising, so the writer would maintain their own voice.

When using the increase in fluency as an indicator, one should keep in mind the distinction between calculating the rate at which students are actually writing and the rate of writing during a designated time period. For example, Parker, Tindal, and Hasbrouk (1991) had middle school students with learning disabilities write for 6 minutes on four different occasions in a 6 month course. As a result, students showed a steady increase in the quantity of word production. However, 90% of the students finished writing before the time was up. While some teachers might worry that increased rate would come at the cost of writing quality, improvements resulted both in writing fluency and quality.

Hillocks (1987) stressed that "the research on the composing process indicates that writing is an enormously complex task"(p.710). He organized his review around six writing teaching methods, which are broad categories: grammar; models; sentence combining; scales; inquiry; free writing. Hillocks found that all these approaches except the grammar method were associated with improvements in writing quality. In addition, "a heavy emphasis on mechanics and usage (marking every error) results in significant losses in overall quality"(p.74). An exclusive and limiting focus on any one method seems problematic. Obviously, writing is not merely about the quantity. Writing quality is the final purpose of writing to learn. Teachers can then apply as many effective strategies as possible to help students improve L2 writing skills.

Other obstacles might stand in way of second language writers' improvement such as the transition from first language (L1) to second/target language (L2). Writing in one's mother tongue can already be quite a demanding task that requires both language abilities and general (metacognitive) abilities, all of which are in a constant interplay. Writing in a second language (L2) is even more demanding because some of these constant abilities may possibly be less well developed than in one's first language (L1). For instance, linguistic knowledge of the L2 may be limited, and the accessibility of this knowledge may be less rapid or automatic.

To better understand the many challenges L2 writers might face in their writing, it is important to first comprehend the process of writing. Writers need to have certain resources available when writing. Chenoweth and Hayes (2001) distinguish three levels in their description of the writing process: a resource level, a process level, and a control level. Linguistic and general knowledge compose the resource level. These resources are called upon for process at the process level, such as translating and revising. The control level contains a task schema consisting of the task goal and a set of productions "that govern the interactions among the
processes" (Chenoweth & Hayes, 2001, p.84). At the control level, other kinds of knowledge resources such as writing strategies might be summoned.

The importance of linguistic knowledge is that it helps establish fluent access to words, phrases, and grammatical structures can lower the cognitive processing load for a writer. This access can thus enhance the writing process and possibly the quality of written text (Chenoweth & Hayes, 2001). Given the situation of L2 writers, this is even more relevant for their writing. Differences in the degree of fluency among L2 writers can be larger due to the differences in L2 exposure, instruction, and language learning aptitude. Difficulties in fluent access to words or grammatical structures in L2 writing will burden the working memory and thus hinder the writing process as well. These difficulties can greatly affect students’ writing fluency and quality of the text. Assumingly, the contribution of these fluency variables to overall writing proficiency will be even larger for L2 writing than for L1 writing. The L2 writer may spend too much time on retrieving the vocabulary or sentence structures to attend to text development or writing strategies, such as organizing the text.

In the context of writing, linguistic fluency is defined as the efficient access to a rich linguistic knowledge base and retrieval of (provisional or transcribable) utterances (Van Gelderen & Oostdam, 2002). Thus, the ability to perform varied linguistic operations – producing a variety of word combinations and sentence structures – is an essential characteristic of writing fluency. This definition implies that internal mental processes determine fluency. This means that linguistic fluency facilitates not only the attention writers spend on meaning making but also the reviewing process at large, since they are able to access necessary linguistic tools for repair. From this perspective, writing and linguistic fluencies differ from each other while the linguistic fluency can enhance writing fluency.

Concluding from the research on writing fluency, teachers of L2 writers, in particular, need to give students as many opportunities as possible to practice writing. This way, processes such as lexical retrieval can become more automatic. Secondly, studies also shows that for the less experienced writers, the writing process was frequently interrupted by revision. This suggests that teachers should guide students to practice effective writing strategies, such as the strategy of "write it down, even if flawed, and revise it later."

Lay (1982) found through her study that the Chinese students relied on L1 when having trouble retrieving a word in English for writing. They would first write that word in Chinese, and then switch back to English to finish writing and complete their thought. Afterwards, those students went back to those words and looked them up in their dictionaries. One student in Hall's (1990) study, when stuck searching for the best word, would write down a close approximation of the word she wanted and underline it, thus flagging it so that she could easily come back later to substitute a word she considered more appropriate. This way, writing fluency can be promoted among second language writers as they allow the ideas to be generated and transcribed with fewer interruptions from the revising. Journaling, either in the form of freewriting or dialogue journaling can play an important role in motivating students to practice writing in a very non-threatening and often interesting manner.
Journaling & Intercultural Rhetoric

Ethnography

Almost twenty years before Connor (2004) suggested using ethnography as a way to employ more sophisticated methodology in contrastive rhetoric research, Liebman (1988) turned two freshman writing classes, one native English Speaking (NES) and one English as a Second Language (ESL), into ethnographers in training. Liebman’s classes explored “whether different communities have different rhetorics, and if so, how they differed” (1988, p 7) by doing five formal writing assignments on intercultural communication that included a summary of Kaplan’s (1966) article and a second paper either supporting or critiquing his views. Liebman’s study provided contrastive rhetoric its most succinct definition as “the study of how rhetorical expectations and conventions differ among cultures” (p. 6).

Interestingly, Liebman commenced her study with a healthy dose of skepticism about the field of contrastive rhetoric stating that she began the ethnography with a “negative view toward contrastive rhetoric” (p.16). Although Liebman apparently set out to disprove the tenets of contrastive rhetoric, her views seem to have transformed as the student-ethnographers discussed Kaplan’s ideas and their own on culturally-driven rhetorical differences in academic expository essay writing in their essay papers, class discussions and teacher-conferences with Liebman. By the end of the semester, Liebman concluded the study with the ability to see contrastive rhetoric as “a powerful and informative concept” (p. 16).

The student ethnographers in this study reached mixed conclusions that neither confirmed nor denied the tenets of contrastive rhetoric conclusively, but seemed to enlarge all participants’ vision of it, as it had Liebman’s. Many students, however, were supportive of Kaplan’s (1966) ideas. Most notably, it is interesting that all three Japanese students in Liebman’s (1988) study confirmed the indirectness of Japanese rhetoric. All three students indicated that indirectness was taught in Japanese, attaching it to Japanese notions of politeness. One student, Junko Tanaka, elaborated, “[The Japanese] prefer to be modest and polite, what we call the old-fashioned way” (Liebman, 1988, p. 10). These cultural and historical explanations of Japanese academic writing conventions were consistent with what researchers have said about Japanese (Hinds, 1983, 1987, 1990; Yoshimura, 2002), Chinese (Matalene, 1985; Shen, 1989), and Korean (Eggington, 1987, Walker, 2006, 2008) compared to American English conventions of academic rhetoric.

Nevertheless, students did not unequivocally support Kaplan’s work (1966) but expressed some feelings of ambivalence about Kaplan’s conclusions. One student, Kazumi Mase, summed up the complexity of the topic well:

My first idea [when reading about Kaplan] about linguistics was that a person that doesn’t speak a language can never understand the structure of that language. However, as I’ve done my research I understand that my idea about the language was wrong. Although I’ve been speaking Japanese more than twenty years, I had never noticed that Japanese was such an indirect language until I researched it by myself. (Liebman, 1988, p. 11)

This is the type of response that I have often heard over the years whenever discussing the topic of intercultural rhetoric and speaks to why it is important to allow students to become
ethnographers and study the principles of contrastive rhetoric research and the artifacts of writing for themselves. Students or educators often become angry if they believe their languages or cultures are criticized or stereotyped, especially by “outsiders” who may not speak their languages. Notwithstanding, if engaged in lengthy, thought-provoking student-centered examination and discussion, many students will acknowledge, even appreciate that important differences do exist between the different rhetorical communities (Walker, 2005, 2006). These rhetorical differences not only hold implications for our audience preferences for writing styles but the differences in audience rhetorical expectation often lead to interference in reading comprehension as well (Chu, Swaffar, and Charnay, 2002; Eggington, 1987). Interestingly, many Arabic students agreed with Kaplan that their rhetoric was full of parallel structure as Kaplan (1966) had suggested of the Middle East, using the Biblical proverb as an example. One of Liebman’s (1988) Arabic students attributed this parallelism and coordination of ideas to the influence of the Quran on his writing.

Conversely, many students voiced at least some disagreement with Kaplan (1966) in some way: half of the ESL students and two-thirds of NES students dissented to some extent. Liebman (1988) indicated that many of these students basically agreed with Kaplan but took exception to some of his methods and ideas. Largely, the students’ criticisms are similar to those voiced by Kaplan’s (1966) scholarly critics contending that his original ideas concerning contrastive rhetoric were over-generalized, too simplistic, product-centered, and more indicative of ideal rather than student writing.

It also seems noteworthy that significantly more NES students were critical of Kaplan (1966) than ESL students. This is often the case among educators, too. It is often the ESL teachers who are most skeptical and critical of contrastive rhetoric theory (Walker, 2005, 2006; Yoshimura, 2002). ESL teacher skepticism and the NES student skepticism in Liebman’s (1988) study may derive from being exposed to many different language and culture backgrounds in the same class so that L1 rhetorical patterns are difficult to identify and even harder to try to comprehend. Such skepticism may also be attributable to American ethnocentric thinking in that Americans have been described as overestimating individualism in themselves and others (Kohls, 1995). Furthermore, criticism of contrastive rhetoric has also been recently attributed to a heavy influence of postmodernist thinking (Atkinson 2004; Connor, 2004; Walker, 2008) that treats generalizations of culture with great suspicion.

At last, although the results are mixed, Liebman (1988) stated that even though she began the ethnography with a “negative view toward contrastive rhetoric” (p.16) that she concluded the study with the ability to see contrastive rhetoric as a “powerful and informative concept.” (p. 16) Despite allowing her own perspective to creep in, for so many of the papers do reflect her opinion” (p. 16) Liebman (1988) concluded that the students in her classes had benefited substantially from this ethnographic approach to their writing classes and the further sharing of their ideas in teacher conferences. Liebman’s method of employing ethnography and teacher conferencing would significantly influence my own quasi-experimental classroom study of contrastive rhetoric-oriented writing instruction many years later (Walker, 2004, 2005, 2006).

The potential for journaling to be combined with ethnography should be obvious to even the casual server. Students in Liebman’s study could have used freewrites to reflect on their observations of rhetoric in their writings and those of peers, record their thoughts on Kaplan’s research, or express intercultural insights gained as a result of their study. Electronic discussion board-type journaling could be used to generate interactive discussions of intercultural rhetoric in model essays, responses to intercultural rhetorical theorists, or again to compare intercultural
ideas of good writing. Finally, dialogue journaling could be used for teachers and students to have an interactive discussion on issues of intercultural rhetoric.

**Teacher Conferencing and Peer Response**

Sixteen years after Liebman (1988), I conducted a quantitative study of 65 university level students in six English Grammar and Composition courses at Handong Global University in South Korea (Walker, 2004, 2006). This study reinforced the ethnographic approach—not by studying artifacts—but by holding interactive, contrastive rhetoric-oriented discussions in teacher conferences and peer response sessions. This study found that contrastive rhetoric-oriented writing instruction rendered in teacher conferences and peer response groups helped lower-level Korean university writers make significantly better improvements in their essay writing when compared to their control group peers, who only received contrastive rhetoric-oriented writing instruction through classroom lectures, discussions, and written feedback on essays. My study of contrastive rhetoric teaching methods for EFL university students established that 1) contrastive rhetoric instruction, taught even through the traditional composition methods of lecture and written feedback on essays (control group), can help students write better English academic essays; 2) contrastive rhetoric-oriented use of specific composition techniques such as teacher conferencing and peer response activities in tandem can significantly increase the improvement in students’ English academic essay writing, especially for lower level English composition students (Walker, 2004, 2005, 2006).

This study’s main contribution is the finding that contrastive rhetoric-oriented writing instruction can be an integral part of a writing curriculum, especially when traditional lecture and written feedback are reinforced with innovative teaching techniques such as teacher conferencing and peer response. It is important to note that this effect bears great significance since it was the low level students, those needing improvement the most, who received the greatest benefit from the teaching treatment. The implication of this finding is even more noteworthy because a vast majority of ESL/EFL university level writing students may indeed enter their undergraduate writing courses as low level writers, as was true in this study (41 of 65 subjects). Succinctly stated, contrastive rhetoric-oriented writing instruction reinforced by teacher conferencing and peer response activities could be helpful to a majority of second language writing students in many contexts (Walker, 2004, 2006).

Research on teacher conferencing informs us that teacher conferences make great forums for facilitating student higher order thinking, building struggling students’ confidence, and reinforcing principles of English rhetoric taught in the classroom (Carnicelli, 1980; Jacobs & Karliner, 1977; Oye, 1993; Patthey-Chavez & Ferris, 1997; Walker, 2004, 2005, 2006). Whether it is the native English speaking (NES) college freshman (Bartholomae, 1985) or the second language writer who has difficulty adjusting to the culture of American-style college education, one-on-one, “non-direct” discussions (Rogers, 1994) with students about their writing in teacher conferences can help students to internalize writing principles and apply them to their own writing through social interaction (Newkirk, 1995; Patthey-Chavez & Ferris, 1997; Vygotsky, 1978). Thus, the forum of teacher conferencing is an ideal place for students to receive sound, individualized attention and advice about their papers and also learn to make their own rhetorical decisions regarding what would be the best way to present their ideas to a given audience.
The potential for journal writing to facilitate intercultural rhetorical study of writing are clear: they can be used to either plan an interactive conference employing non-direct instruction or as a reflective assignment. Journaling could take the form of a dialogue format, to let the teacher know what the most helpful and unhelpful elements of the conference were. Journaling plus teacher conferencing could also be used in combination with peer response and ethnography to increase the effect.

Peer Response

A substantial portion of existing research in contrastive rhetoric (Kaplan, 1966; Lieberman, 1988; Ramírez, 1991; Walker, 2004, 2005, 2006) multiculturalism (Dunn, 1997; Ladson-Billings, 1994; Ravitch, 1990), and cooperative learning (Kagan, 1992; Ladson-Billings, 1994; Slavin, 1987) suggests that the types of small group discussions found in peer response activities may increase audience awareness of and sensitivity toward cross-cultural issues. It stands to reason, then, that such increased awareness of and sensitivity toward cross-cultural issues would enhance students' understanding of audience and their proficiency in making sound rhetorical choices. Better rhetorical decision-making would then lead to improved academic writing, perhaps both in the first and second language. Notwithstanding, while there is a wide consensus in the field of composition among researchers and practitioners concerning the merits of teacher conferencing, the issue of peer response, especially in ESL/EFL writing, seems much more complicated and controversial.

Some scholars have been quite positive about the potential advantages of peer response (Mendonca & Johnson, 1994; Mittan, 1989); others have been more cautionary (Carson & Nelson, 1994, 1996; Connor & Asenavage, 1994). The Mendonca and Johnson study (1994), however, involved graduate students, not the typical undergraduate composition students that are of the greatest concern in this study. Connor and Asenavage (1994) noted in their own study that peer response had minimal impact on the revisions of the essays of the college freshmen they examined. Of even greater concern to ESL/EFL writing instructors, especially those working with East-Asian students, is the finding that student responses to peer response activities in collectivist cultures such as Chinese, Japanese and Korean has, in many cases, ranged from lukewarm to hostile (Carson & Nelson, 1994, 1996).

Notwithstanding, the incorporation of peer response activities into the writing curriculum has become increasingly more common and popular in recent years, even in East-Asia. The underlying theoretical justification for this growing trend seems to be based on the Vygotskian concept that social interaction helps the student to internalize knowledge. In composition, for instance, this Vygotskian notion has found manifestation in Bruffee’s (1986, p. 774) assertion that “new ideas are constructs generated by like-minded peers.” In other words, the Vygotskian idea that social interaction helps students to internalize knowledge fits well with the composition instructor's goal to increase audience awareness among student-writers through the creation of authentic discourse communities discussing and internalizing appropriate standards of academic writing.

When peer response activities work well they offer students more opportunities to explore ideas and exercise higher order thinking skills, take a more active role in their learning, and become more adept at negotiating and expressing their ideas (Mendonca & Johnson, 1994). Peer response activities may also enable students to gain a greater sense of audience through peer feedback, hone critical thinking skills needed to analyze and revise writing, and gain greater
confidence in their own work by observing, first-hand, the difficulties that other students are having with their own writing.

On the other hand, Carson and Nelson (1994, 1996) have found that students from collectivist cultures may respond differently, seeing peer response activities as either unhelpful or even intimidating. In collectivist cultures, it has been often observed that students may tend to give only positive feedback in order to keep harmony in the group and avoid embarrassing a group member, especially one senior in status. Another limitation found in peer response activities is that students who are unsure of what they are doing tend to make only surface corrections to the papers they review and offer few, if any, helpful suggestions regarding rhetoric or content (Leki, 1990). This conclusion concurs with Connor and Asenavage’s (1994) disappointing finding that little revision came from peer comments (5%) in their study.

In my own experience, peer response sometimes works well, and at other times it does not (Walker, 2004, 2005, 2006). I have found in my own classes that peer response works much better when a lot of time and energy is taken to set it up. Students respond better when instructors thoroughly explain the expectations of the peer response activity; inform students of the benefits of doing peer response; outline the role of students as friendly coaches giving advice (not as overbearing teachers); explain why both positive and corrective comments are helpful to their peers; admonish peer reviewers to go beyond making surface corrections; help students be immersed into the activity by teaching them to prioritize feedback; and provide students checklists that explicitly state clear criteria for good writing. It also helps to allow students to be introduced to peer response by initially working on neutral papers, ones that do not come from their peers. This allows students to gradually adjust to the idea of critiquing more easily.

Journal writing could be used to enhance the effects of peer response. First, peer response must be carefully introduced to students so that they know why they are reviewing the papers of their peers, what benefits they should receive from the activity, and how they should proceed with it. They could write a reflective journal such as a freewrite or a dialogue journal to get them to reflect upon the purpose of peer response. Also, students could be asked to write a reflection on their experiences with peer response as to whether they thought they were being helped with the activity as well as why or why not. As a dialogue journal this could become part of an ongoing discussion between teaches and students as to how class activities could be improved.

**E-Learning: The Cutting Edge**

These days everyone wants to incorporate technology into the classrooms to facilitate better classroom instruction. Not surprisingly, technology has great potential to raise cultural awareness as it brings people together. Xing, Wang, and Spencer (2008) investigated the potential impact of e-learning on raising overseas students’ cultural awareness and creating an interactive learning environment to improve the rhetorical composition of Chinese English as a Foreign Language (EFL) students. The researchers defined five features of “contrastive” rhetoric. These five areas included (with East-Asian style appearing first in the pairings)

1. **Inductive v. Deductive (Delayed Thesis)**
2. “Start-Sustain-Turn-Sum” v. “Introduction-Body-Conclusion”
3. **Circular v. Linear (Topic Sentences and Changes)**
5. **Explicit Discourse Markers (Transitions)**
Simply stated, the researchers contend that East-Asian when compared to American-English style academic writing 1) features a delayed thesis statement; 2) turns more to unrelated subjects or other angles than proceeding in a linear fashion; 3) contains fewer topic sentences but incorporates more topic changes; 4) employs more metaphor and 5) uses fewer transition markers. Xing, Wang and Spencer (2008) studied 90 Chinese students with 15 English university lecturers including 60 doctoral of philosophy students (Ph.D.) at Harbin Institute of Technology (HIT) in China. Thirty students were put into an experimental group and thirty into a control group. Thirty remaining students were undergraduate Chinese language studies students who provided a baseline for identifying rhetorical features in Chinese. Students in both experimental and control groups received four hours of English language instruction per week. In addition, the experimental group students used the e-course for supplementary writing instruction. Primarily, students in the e-course could gain awareness of and proficiency in the various rhetorical styles by viewing models of essays using Chinese and English rhetorical patterns and obtaining advice from tutors and other students on their writing via electronic chat rooms and bulletin boards.

The results of the study demonstrated that significant differences existed in the rhetorical styles between the Chinese and UK writers (instructors). The Chinese doctoral students in both experimental and control groups improved their rhetorical proficiency on essays significantly in the study. The control group with conventional writing instruction improved in two of four areas (number of paragraphs and position of thesis paragraph) while the experimental group improved in three of four areas (two aforementioned plus number of discourse markers) although there were limitations in the e-learning course in availability of materials and limited opportunities to be online with native speakers. Thus, intercultural rhetorical instruction applied through the e-learning environment appeared to facilitate higher rhetorical proficiency in the target language of English for the Chinese doctoral students.

This study reflected the power of journaling better than any other for intercultural rhetorical studies. This study used a type of journaling in electronic discussion boards where students compared and reflected upon model essays, critiqued each other’s writing rhetorically and frequently discussed the differences between rhetorics, interculturally. Moreover, students benefitted by this application of e-journaling. The power of this effect might be multiplied if combined with other effective composition techniques such as teacher conferencing and peer review, maybe even more so if journaling was employed with those activities as well. Needless to say, such journaling does not need to be exclusively electronic. Similar journals could be given as in-class activities as well.

**Journaling and Multicultural Identity Reconstruction**

The last stop on the journey for a second language writer would be to form a mature and enlarged sense of self with a reconstructed identity that fully comprehended the thinking and writing processes of both cultures. Speaking of intercultural rhetoric, the writer would be able to fluently make well reasoned choices concerning rhetorical style to suit the purpose of the writing and needs of the given audience as well as satisfy the desire for self-expression. Building upon ideas from intercultural rhetorical studies, this section explores the final frontier, the relationship between writing and identity among ESL students. An old Chinese says goes, “Wen xiang shi ren,” which means one might know a person so well that without even looking they could
recognize them by their fragrance. Figuratively speaking, this is a good description of the relationship between writing and a person, more precisely the individual’s identity. Being transplanted in a completely new environment, second language writers almost inevitably encounter challenges in many aspects of their life and study. Ullman (1997) states that immigrating to a new country affects a person’s social identity and requires a readjustment in various areas of individuals’ life.

Thus, to better adjust to the new circumstances, it is a necessity for ESL students to construct a new, more enhanced, self-identity through their communication, negotiation, reflection, and emergence in the community. English teachers of international students are obviously one of the influential people that can make an impact on those students. Creating a community of writing practice, where students feel safe and free to express themselves, communicate with, negotiate, cooperate, and even challenge each other, can help students construct a new self-identity to better assimilate into the culture. Naturally journal writing can provide that safe place and help empower students to negotiate the new environment in which they write more effectively and comfortably.

To further explore the relationship between identity and writing, it is important to look at how identity has been defined. From a sociolinguistic perspective, Norton (2000) described the word ‘identity’ as ‘how a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future’ (Norton, 2000, p. 5). Ivanic (1998) proposed that identity emerged as a result of social interaction and affiliation to a particular community (Ivanic, 1998, p. 12). Further, she discussed that identity development involved the conflict and confrontation of individuals with the powerful impact of dominant ideologies and discourses.

Norton (2000) portrays the relationship between language and a learner’s identity as reciprocal. Language helps construct an individual’s identity; in return, the learner’s identity constitutes his/her language. According to Norton, an individual’s identity development is a continuous process to which language contributes. Shen (1989) supported these views on how her own identity had changed through her own writing experiences. She stated that she had a mixed self identity when first starting writing for her ESL class in the United States. The concept of indirectness and conservativeness she was taught in China when expressing oneself was very much in conflict with what was expected by his ESL teacher in the United States. In America, she was supposed to speak up concerning her own opinions and be more direct and explicit. Thus, Shen was confused in the beginning, and she even felt an initial sense of loss of her identity. Shen’s case clearly illustrates how her old self-identity composed of her writing and how that writing was confronted by the expectation required from a different identity.

Sandra Lee McKay and Sau-Ling Cynthia Wong (1996) proposed that L2 writers establish their changing identities within specific conversations and multiples discourses. Ivanic confirmed this point of view by stating, “Self should not be conceived of as something to be studied in isolation, but as something which manifests itself in discourse” (Ivanic, 1998, p.18). Gee (1990) argued that identities are tied to language and correlated with particular discourses. Sarup (1996) also proposed that identity is constructed “in and through language” (p.47). This statement again conveyed the message that identity should be studied within one’s discourse. In other words, a piece of writing is not merely a text, but rather partly contains who the person is.

The identity construction process begins from communication, negotiation, and editing to revision, when the writer finally remakes the self. As time passed by, Shen (1989) initially went through a process of denying herself by completely accepting the new, enhanced, hybrid identity,
reconstructed in combination of the old Chinese self and a new Westernized self obtained through writing (Shen, 1989, p.466). This example perfectly demonstrated how writing can reflect, penetrate, and help shape a person’s self-identity.

Beebe (1984) argued that ESL’s language learning is not only a sociolinguistic process but also a psycholinguistic process; this learning process involves the transformation and assertion of the learners’ cultural identity. That means, the learners may choose to accommodate to the speech of their audiences, conform to norms, negotiate identity via linguistic choices to express him- or herself. Recent empirical studies has documented more about the interrelatedness of second language (L2) acquisition and identity formation (Kanno & Applebaum, 1995; Norton, 1997, 2000, 2001; Norton & Toohey, 2001; Pierce, 1995). Research in these studies all agreed that the experience of learning a new language is also the experience of identity construction, transformation, and negotiation.

To achieve a full participation of ESL students in writing and constructing their coherent identities, teachers can choose to utilize journal writing both in class and through online discussion. An online community can be created for students to communicate and write, given some students are more conservative and shy. On-line discussions can help relive students from the pressure of face-to-face interactions (Cooper & Selfe, 1990; Harasim, Hiltz, Teles, & Turoff, 1995; Herring, 1999; Jonassen, Davidson, Collins, Campbell, & Haag, 1995).

In essence, identity construction and negotiation among ESLs is a complex and layered process. ESLs cannot merely acquire a new language and its writing rhetoric through rigid memorization, but rather practice to learn and build themselves a coherent identity in a new environment. Wenger proposed that working together toward a common goal is an ideal environment for learning. Goals could be achieved, had learners had a sense of community and respect particular opinions (Wenger, 1998, p. 214).

It is important for students to practice and learn together as a community; teachers should create such a writing environment for them to grow and excel in their potential. Communities enable their members to enhance the understanding of learning both now and in the long run. Studies show that imagined communities enable their members to connect their current actions and identities to their future visions, which provides a legitimate reason and motivation for their tasks and activities. Journal writing can be an essential part of that practice opportunity forming a discourse community to build writing fluency, cross-cultural rhetorical awareness and a reconstructed multicultural identity. When combined with other techniques in intercultural rhetorically-oriented writing studies, such as ethnography, teacher conferencing, peer response, and electronic discussion boards, the old traditional journal can become an even more formidable tool for empowering second language writers.
References


Title: STARS: Students and Teachers Achieving Reading Success: 
A School District-university Partnership

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Abstract:

STARS: Students and Teachers Achieving Reading Success
A school district-university partnership

The purpose of this poster session is to demonstrate how the S.T.A.R.S. program (Students and Teachers Achieving Reading Success) was created to meet the guidelines from IRA for reading specialist candidates. This collaborative project between the university and the local school district was designed and implemented to provide field experiences for graduate students, while providing instruction for struggling elementary-aged readers. This initiative provided a model for other university and school districts to provide low-cost instruction for elementary students during the summer months.

In collaboration with the local school district and the nearby university, STARS was created. Elementary students had instructional experiences with informational text; graduate students would provide the resources, strategies, and instructional methods during the program to meet their requirements in their coursework. Both the school district and the university benefitted from this collaborative, however, the elementary students made the greatest gains in literacy development and performance.
Title
Andragogical-Pedagogical Orientation and its Implication for Law Enforcement Training

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Abstract
The training academy of any law enforcement agency serves as the educational platform for personal, professional and academic development of law enforcement officers. It is imperative that the training provided is reflective of best practices to enhance learning, curriculum design, educational policies and instructional techniques compatible with the educational orientation of their learners. This study utilized the Student Orientation Questionnaire (SOQ) to analyze the educational orientation of law enforcement officers and its relationship to rank, years of service, academic background, age, gender and its implication for training. Activities would include identifying learners’ educational orientation.
Case Studies of Teachers’ Implementation of Formative Assessment in a Networked Classroom

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**Introduction**

In this paper, we report on the implementation of formative assessment in a networked classroom by two seventh grade teachers. The two teachers participated in a research study of implementing formative assessment in a networked classroom using the TI-Navigator System and graphing calculators. They participated for two years of implementation as part of Project FANC\(^1\), a three-year research study funded by the National Science Foundation. The goal of the research study was to investigate the use of formative assessment in a networked classroom as it affects middle grades student learning of algebra concepts. In particular, to study the effects of teachers using formative assessment with the TI-Navigator System\(^2\) for two years and compare them to the effects of teachers using formative assessment for one year after receiving professional development in formative assessment the first year.

Black & Wiliam (1998a) defined “formative assessment” as “all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged” (p. 7). When using formative assessment, the teacher provides specific feedback rather than only grades to students. The feedback can be oral or written comments addressing what students have done well or have not done well with suggestions for how to improve. Moreover, self and peer assessments are highly recommended formative assessment strategies because they can help students to develop the habit of reflection and to become more aware of the learning goal, learning gap, and how to close the gap (Black et al., 2004). Evidence has shown that formative assessments, if appropriately implemented in teaching, can produce substantial learning gains for students at different ages and across different subjects (Black, Harrison, Lee, Marshall, & Wiliam, 2004; Black & Wiliam, 1998a; 1998b; Wiliam, Lee, Harrison, & Black, 2004). As straightforward as it may sound, in reality, formative student assessment has proven difficult to implement (Ruiz-Primo & Furtak, 2006; Shavelson et al., 2006; Yin, 2005). One of the challenges is that

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\(^2\) TI-Navigator™ is a networking system developed by Texas Instruments that wirelessly connects each student’s graphing calculator to a classroom computer.
many formative assessment strategies take too much time to be used practically (Black & Wiliam, 1998b). For example, it is time-consuming for teachers to create lessons with planned formative assessments, and it is almost impossible for teachers to provide specific feedback on each student’s work, especially with a typical teaching load of four to six classes daily, with 20 to 30 students in each class.

In *How People Learn* (National Research Council, 1999), classroom networks were suggested as one of the most promising technology-based education innovations for transforming the classroom environment. Some early findings demonstrate its potential to overcome one of the greatest hurdles to improving classroom assessment: the collection, management and analysis of data (Roschelle, Penuel, & Abrahamson, 2004). While feedback loops in the regular classroom are very slow, classroom networked technology has the capability to provide rapid cycles of feedback to improve ongoing activity in real time. Using the TI-Navigator System, what students know and can do is easily assessed and anonymously displayed. Students can enter and send their responses to the teacher computer and teachers can easily send questions, and receive, organize, and display students’ answers, so that the interaction between the teacher and students and among students is greatly facilitated. Four functions of TI-Navigator System are particularly helpful for formative assessment implementation: (a) Quick Poll—allowing teachers to immediately collect and display all the students’ responses to a question; (b) Screen Capture—allowing teachers to monitor individual students’ work progress at anytime; (c) Learn Check—allowing teachers to administer quick and frequent formative assessments and provide timely feedback; and (d) Activity Center—allowing students to work collaboratively to contribute individual data to a class activity.

The teachers in a study by Owens and colleagues found that students in TI-Navigator classes were perceived to be more responsive to individual learners’ needs, more focused on knowledge building and assessment, and more community centered (Owens, Demana, Abrahamson, Meagher & Herman, 2004). However, although the teachers obtained information about student’s knowledge, they did not necessarily change their instructional procedure based on the information obtained. The researchers found stronger evidence for technology implementation than for change in instruction. (Owens, Pape, Irving, Sanalan, Boscardin, & Abrahamson, 2008). Because classroom observations found that teachers did not make full use of the potential of the connected classroom for formative assessment in the study by Owens, et al, it was important to design the Project FANC Professional Development (PD) model around a framework for formative assessment when using TI-Navigator. The case studies reported in this paper give insights into how teachers’ views of students, assessment and technology, their pedagogical practices, and their mathematical content knowledge for teaching, among other factors, influenced their implementation of formative assessment in a networked classroom.

The participants were divided into two groups, called FA and NAV, and all teachers were provided with laptop computers, LCD projectors, Elmos, and a classroom set of TI-73 calculators at the beginning of the project. During the first summer, the participants in the NAV group received TI-Navigator Systems and received PD using the TI-Navigator for
formative assessment while the FA participants received PD in formative assessment only. Each group participated in five follow-up sessions during the first school year as well as received coaching visits from project staff. During the second summer, the NAV participants received continued PD in using TI-Navigator with more of a focus on formative assessment, while the FA participants received TI-Navigator Systems and PD on using the TI-Navigator for formative assessment. Additional follow-up sessions for the combined groups continued through the second year as well as continued coaching.

Data sources for the case studies were background information provided by teachers, classroom observation field notes, notes from coaching visits, focus group and individual interview videos, writing prompts, and the Learning Mathematics for Teaching assessment. While case study data were collected for 10 participants, we have chosen to report on two participants, Ms T and Mr. R., because of distinct characteristics they have in common. Both teachers 1) were relatively new to the profession, 2) taught in schools with approximately 900 students using a form of block scheduling, 3) were comfortable using technology, 4) handled technology issues well, 5) had positive experiences with using TI-Navigator, and 6) have good classroom management. In addition, their entire mathematics departments implemented TI-Navigator, in part, as a result of Ms T and Mr. R.’s participation in Project FANC. There were also differences in the two teacher’s backgrounds and the manner in which they implemented formative assessment using TI-Navigator as well as other differences that are reported in the descriptive case studies that follow. As the multiple sources of data were analyzed both with individual teachers and across the group of 10 teachers in the case study, the following categories emerged as a means for reporting similarities and differences that could be applied to Ms T’s and Mr. R.’s implementation of formative assessment using TI-Navigator: Context, Experience with Project FANC, Classroom Management, Comfort level with TI-Navigator, Mathematics Content Knowledge, View of Students, Pedagogy, Discourse, View of Assessment, Use of TI-Navigator, Technical Issues, School and Collegial Support, Professional Growth, and Looking Back/Looking Forward.

The Case of Ms T

Context
Ms. T is in her 30s and had one year of teaching experience in middle grades mathematics when she became a participant in Project FANC. She began teaching after attending a Teach for America Program summer institute to be an elementary teacher. She expected to teach at the elementary level since she was trained to teach third grade in the Teach for American institute. However, there were no elementary teaching positions when she came to start teaching in Hawai‘i, so she was asked if she wanted to teach mathematics or English. She chose mathematics and was given the position as an eighth grade teacher at a middle school five days before the start of school. In her second year she moved to 7th grade because the school loops and teachers follow their students from 7th grade into 8th grade. Ms. T teaches in a middle school with approximately 900 students in an economically disadvantaged community with 66% of students qualifying for free and reduced lunch, 24% English Language Learners, and 10% Special Education.
The ethnic majority is Filipino, with minority populations of Samoans, Native Hawaiians and other Pacific Islanders. The school has a large immigrant population, qualifying many students as English Language Learners who do not speak English as their first language. The school has not made Adequate Yearly Progress (AYP) and they are an Americas Choice school. Forty percent of the students were proficient in the past year with 11% exceeding, 30% meeting, 17% approaching, while 44% fell below.

Ms T’s background provided her with interest and expertise for using technology in her classroom.

My undergraduate background degree was in Mass Communications with a specialization in Computing and a minor in Human Complex Systems. Both of my academic disciplines had an emphasis in technology, which has affected my approach to solving problems in my classroom.

There are several computers in the back of Ms T’s classroom and the classroom is equipped with a Smartboard. On the sideboard there are progress charts of each of the periods that track student preparedness for class (coming with planner, uniform, homework done and ID around neck).

**Experience with Project FANC**

Ms T was assigned to the NAV group, therefore participated in PD on formative assessment using TI-Navigator and received the Navigator System during the first summer PD. The second summer she participated in PD that focused more on formative assessment in a classroom that has a TI-Navigator System. Ms T said her first year of teaching, which was prior to her participation in FANC, was a total disaster, "I had no training and it was totally on-the-job training." As part of the Teach for America program, she entered the University of Hawai‘i’s 'on-the-job training' master’s program in teaching with an emphasis in secondary mathematics. She received a master's degree and secondary mathematics certification after two years of teaching. She also had a mentor from the University of Hawai‘i coming in to help her. Ms T said the second year was a lot better after receiving training as a part of Project FANC the summer after her first year of teaching, “And I think it was a lot better because the training the grant gave me was the best training I had out of Teach for America, University of Hawai‘i’s Master’s program, America's Choice and the schools training because it was the most mathematics-based."

After the first summer PD, Ms T was so excited but said, “I could not remember everything we had done cause we learned so much.” She said the coaching visits helped her remember how to use some of the features of Navigator. At the completion of FANC, Ms T felt really good and put herself at an 8 on a 1 – 10 scale for using TI-Navigator. However, she thinks she can implement more, “If we had time to collaborate and learn, I could be better and could bring it up to a 10, but I still feel hesitant especially on Learn Check.” She feels there is so much on the TI Activities Change website that she would like to learn about and think about where it fits into the curriculum. She said, “I still feel like there is more out there that I have not explored.”
Classroom Management
As students come into Ms T’s classroom they go to the front of the room to get calculators from the wall caddy, take a hub and connect the calculators without any direction from Ms T. She reminds students that their role as an audience is to pay attention and ask questions when they see something that they do not understand.

Ms T organizes lessons around ‘I Can’ goals, which are based on benchmarks, to introduce an overall structure of the class to the students. She created an ‘I Can Toolkit’ with the strategies of self-regulation in student friendly language to ‘guide students’ metacognitive practices’. She works on ‘cultivating a classroom environment that promotes self-sufficient learning’. In observation field notes it was stated that, ‘Ms T’s classroom management is exemplary. She seems to run a student-centered classroom although it is clear that she is directing all classroom activities and conversations. The classroom environment is generally relaxed’.

Mathematics Content Knowledge for Teaching
Ms T’s content knowledge for teaching was assessed using the Learning Mathematics for Teaching assessment developed by the University of Michigan. Her score on the pretest was 97% while her posttest score was 89%. She has also passed the Praxis Content Knowledge test in Mathematics for secondary certification.

Although Ms T used multiple representations in her lessons she tended to move quickly among representations such as a tables, graphs, and equations during her first year. Her pacing improved the second year and she was able to limit how much was appropriate to present to students in the allotted time.

Ms T was trying to be mathematically accurate, but was not always sure of her information. For example, in one instance Ms T said, ‘I don’t think diameter is a dimension…it is a measurement.” During a lesson on measures of central tendency, she defined the median as the middle number rather than defining it as middle of the distribution of the data with half above and half below.

View of Students
After Ms T’s first year of teacher she said that she wanted her students to become better self-regulators so she designed an I Can Toolkit that outlined the stages of self-regulated learning. The title of her master’s paper, Teaching Students to Self-Regulate Their Learning, reflected the focus she was placing on self-regulation. A poster on the front board outlined these stages and the class reviewed each step of the I Can Toolkit and modeled the expected behaviors.

• I can identify the goal of each problem.
• I can monitor my progress as I work.
• I can check my answer.
• I can re-read the question and use my own resources before getting help.

Ms T saw an algebra teacher that was talking about 'I Can Algebra' and she borrowed from that system. The algebra teacher had a blog spot where he had mini lessons and practice problems that she incorporated into her classroom instruction. During the Focus
Group Session following completion of the first year of FANC, Ms T reflected on the changes she had made.

I felt the big shift this year was in general taking the gateway to knowledge out of my hands and putting it into the students hands because before all 90 of my students had to come through me. Unless they were in class or coming through me they had no way to access the knowledge. The website and doing that way of formative assessment was like putting it into their hands.

Ms T said, “I challenged my students to check the accuracy of their answers by trying to represent their answers in multiple ways and going back to plug in their solution.” She also wanted her students to help each other more. She described what she does to help make this happen.

I ask them, “Have you tried yourself? Have you asked your partner before you ask me?” I want them to ask their neighbor. If I showed them once I guarantee someone in their group remembers so they should be asking before they ask me. I am trying to give them the tools to help each other.

Ms T said she specifically uses formative assessment with TI-Navigator to help inform students of their progress, “My thinking was that if students knew their needs they could then self-regulate their mistakes.” She says her students are excellent at using the graphing calculators, and the technology enabled meaningful participation from all her students. During a compliment activity that Ms T did in her classroom, students were thanking each other for helping them when they had troubles with calculators or Navigator issues or if they did not know what screen they were suppose to be on. In talking about the activity, Ms T said, “It was good that they thought people helped them out and it wasn't always me. It was their neighbor.”

Ms T mentioned that she was not sure how students did on the FANC student assessment but noted scores on the Hawai‘i State Assessment for her first year in FANC took a huge leap especially for her lower students. The students in her second year of the project started out better with two high classes and they could explain more and do higher-level thinking. There was more discourse, with students taking charge more and arguing and using mathematical terms. The one lower class did not seem to grow as much and she attributed that to furlough Fridays (During this year, students in Hawai‘i did not have instruction on 17 Fridays due to the financial crisis). She said she has learned that, “ It is hard to know if every individual gets everything every moment. I have allowed things to develop over time more where not every individual gets everything everyday.”

Interestingly, after the first year of using TI-Navigator Ms T observed that boys were more engaged by the technology whereas in her first year of teaching she really felt that the females in her class were outperforming the males.

I don't know if that is like middle school or what but the boys seemed like this is something they could relate to more. Not that the girls did not take to it cause they definitely did but I think I saw my male students rise up to that level of engagement and be like equally into the conversations and into the math.
Pedagogy
During observation and coaching visits Ms T demonstrated that she was very comfortable and efficient in using technology. She said she was so excited to get the Elmo and projector because she hated teaching with just the white board marker her first year. She said that was not the way she learned. When she was in middle school, all students had laptops in the public school and she was in a laptop program.

Teachers had projectors and Elmos and college teachers had them. I was educated in the beginning of technology coming into schools and came here and felt like I went back in time as now I only had a whiteboard. I was so excited to get technology cause this is more the style I felt more comfortable with in teaching. I was passionate about implementing technology in daily routines with my students.

Ms T wanted to have computers in her classroom so she sought out donations from an insurance company and other sources to buy some computers to place in the back of her classroom. She believes that students can access knowledge whenever they want and can use Google to learn about any skill they want. She noted that using the technology was not the same as completing investigations in class.

I wanted to help my students the first year, prior to FANC, but it was on my time and I felt like I was the gatekeeper to knowledge. I would hold study sessions when I had time on concepts I chose. I wanted to put the keys in their hands and have them access knowledge. I wanted computers so got donations from First Insurance and some other people so I was able to get computers. I thought with the computer you can access any knowledge anytime so you could use Google for whatever skill you want to learn. Not that it is the same as trying to investigate it in class but making your class more hands-on and investigative and group work is awesome but it is not going to hit every type of learner. So if a learner can do things on their own they can use the computers. I wanted my class to be group work so there is a lot of group work in class. If they are more of an individual learner, OK, that is on the website. If they want to go and practice and do things on your own or look up things they can do that. I wanted to get it paced on your own so that was why I was getting all the technology.

Ms T broke the standards down into ‘I Can” skills and then made a website so that her students could work on them at lunch, after school, or at home on their own time.

They could try to go back and relearn it, rewatch the video, do practice problems and show me they have been trying to relearn it on their own. If they still have problems I can help them or they can take it to someone else. They can come with a partner.

In addition to using PowerPoint to present lessons, Ms T also uses the online National Library of Virtual Manipulatives to demonstrate concepts. Students then use the virtual manipulative website on the computers in the back of the room to further explore concept being studied.

View of Discourse
Ms T’s classroom discourse has changed since she began teaching and she credits her participation in FANC for some of that change.
The grant made me realize that you have to have students talking and sharing their thoughts every 10 minutes or you are losing them. If I don't hear their thoughts or what they are thinking for a while then I might not realize they are not getting something. So the more I can hear from them the better and Quick Poll is a really good way to hear from them quickly.

She said that her first year of teaching, prior to FANC, was ‘super-traditional’ and she had rows of desks. Students were not working together and she had behavior problems. She contrasted her first year with how her classroom has changed.

The first year students just said let's ask teacher and I would tell them. Now I try not to tell them or say what students can say. I know my kids know a lot and they can either argue it out or come up with it if I give them the opportunity.

With the Navigator System, Ms T’s classroom setup has shifted to tables and she allows the students to talk more. She said, “I allowed them to present their ideas more. It is a lot better when they talk more cause they teach each other. There are 10 teachers in the room instead of one.”

She has also changed the way she handles homework. She asks students for suggestions of homework problems they want to go over in class, assigns problems to groups and then asks them to present their work on the Elmo. She says the classroom is ‘more of a talking classroom.’ Discussions are changing over time and she is especially focusing on the dialogue between students. Ms T has sentence starters posted on the front of the room that are divided into three parts: 1) The Problem [I was trying to find…], 2) Your Process [I did…because…] and 3) Your Answer […]which makes sense because…].

I started using sentence starters to help students have the words to start sharing their thoughts and putting the time into that to really develop that among students so they were able to have intelligent discussions among themselves. I could remove myself from the discussion and have them asking each other questions and having them share and explain in more detail. They have a list for when you are presenting because I felt students were always going up and saying their answer. I wanted that to be the last thing they said. I wanted them to talk about what they were looking for, what they did, and the last thing they could talk about was what they got. So it was giving them a context for what they were going to present.

Students were also provided audience sentence starters such as 1) I agree or disagree with you because…, 2) What do you mean by…, 3) I see how you did this, and 4) I did it a different way. She asked them to use them because ‘sometimes people will be presenting and then nobody is doing anything’.

It is because they all agree but no one is raising their hand to say I agree with you so I am just kind of pushing students to say something. Everyone's responsible and it helped, too, when I started doing sentence starters to have students write it down and then say it so they have a bit more time to process. They knew what they would say cause they are so stage fright so ‘shame to talk’. I am working around that and trying to pull them out a little more because discussions are so rich and people benefit from them. I was having a hard time getting those discussions started outside of me because I can always be the one to push it but I would like it to come from the students more.
Ms T says she loves it when her students argue about mathematics and drew parallels to what she experienced during the PD provided by Project FANC.

It was cool because we would always do it in our trainings and, even with all these people that know a ton about math, people still have disagreements. I enjoy it when my students can argue and disagree. It is so empowering for them to have a voice.

### View of Assessment

When talking about how her ideas of assessment were formed, Ms T said that letting go of grading and formative assessment came from Project FANC. She also said that using the Elmo came from the project since during the PD teachers came up and shared and she also viewed videos of other teachers using it to have kids talk more. Ms T noted that, “Even if you get the equipment it doesn't mean you know how to use it.” She had visited the high school that her students will attend and saw that all the teachers had Elmos but she did not see any students using them.

During Ms T’s first year of teaching she said, “I did more of a traditional quiz or a test with a lot of benchmarks in it and just modeled after other people.” She said her students viewed their grades as some magical formula and they did not understand where their grades came from. So in her second year of teaching when she was a participant in FANC, she changed the way she assessed. Ms T assesses her students on 24 different benchmarks, written as I Can Statements, on a scale of 0 – 4. They have to get a three or four to pass. Students have to pass twice to get mastery and their grade is how many skills they have mastered out of how many benchmarks were assessed. She has multiple versions of every benchmarks assessment so she may give two in class and then the other three are available for make-ups. On any day, students may be working on all different skills. Ms T has developed a process to check that students have been practicing on their own before they retake assessments. They can do practice problems or watch lessons on videos, but they need to show her that they have been trying to relearn it on their own. She feels that the first time students may not have been ready but, now that they have done reviews and used the concepts in other contexts, students are really a lot better at understanding the material. Students take the make-ups at lunch or after school. Ms T said that the students are more motivated because they are responsible and in control. As soon as they retake the assessment she updates their grades and they can check them on the computer and see it right away.

Ms T uses a standardized item bank to draw from because although she thinks the Connected Mathematics textbook is excellent and really investigative, she believes that some of the tasks are not up to the standard of what the state is asking. She takes problems from the item bank or more open-ended problems from the back of the book to construct assessments.

The assessment may be a constructed response or one in which they have to think creatively. Maybe I will give two, where one is like a quiz form and one is a project. Those are the only things I count in their grade. So for three weeks they are doing all the things that are not in their grade and they are still doing it so it wasn't about the grade. Now we do tons of things that are not in their grade and
they are still doing it and they are engaged. If the activity is engaging enough they will do it because it is exciting to them and it does not need to be in their grade. Ms T said that this change for assessments totally changed the time constraints that she had.

We will do stuff in a set time in class. But as long as a student wants to come back and keep on retaking various assessments for that skill, they can. I saw a lot of students at any of the quarters or at the end be really successful with things we did at the beginning because we had reviewed and they had seen them on homework. So it really made me understand that students totally learn on different times and having a set date when everyone has to know this by this date is not developmentally appropriate for all students. Just making that available to them almost makes everything we do in the whole year formative because we always were learning from our mistakes. Even on those assessments that were more summative, the students could still learn. They could still retake assessments and they could still be forming a concept throughout the year.

Changing the way she did assessments changed Ms T’s understanding of assessments in general because ‘everything kind of became a formative assessment where they were always forming the concepts and I just allowed that to take place and they took that seriously’. She said students took it upon themselves to make up things that they missed even if it was on a quiz she was going to go over in class.

Ms T said that the Navigator System was one piece that influenced her change in assessment. Previously, she would walk around and see what everyone had on their paper, however other students in the class could not see what she was able to view. Ms T said that with students submitting data in Activity Center all students in the class could view all of the data.

It is like taking the power out of my hands and giving them the view that I have. I wanted to inform my students instantly so I could empower them to be the agents of change. Ms T talked about a time when she collected student’s first attempts at solving an inequality that she sent out in a Quick Poll and allowed students to have reflection time. She did not identify their misconceptions or tell them the correct answer; she simply encouraged them to go back and reflect on their answers for accuracy. She asked questions like, “Does your solution meet all the conditions? Have you tested your answer?” Then she waited. After the wait time, she collected second attempts and noticed that the number of correct responses jumped from eight to fifteen students.

I believe that my students, regardless of their achievement level, have the potential and ability to use mistakes as learning opportunities. In English class it seems like students get lot of opportunities to edit their work, but in math students get an answer wrong and then have to practice what they learned on new problems without having a chance to re-do the exact same problem. With the TI Navigator system I have been able to give more feedback and allow students an opportunity to re-do the problem after they evaluate it.

When students gave correct answers, Ms T went on to ask them how they knew. When students said that ‘it was obvious’, she continued with asking them how they could prove it
Comfort level with TI-Navigator
Ms T felt that the Navigator System was ‘awesome’ but that there was a lot of information to learn during the first summer PD. In addition to learning the technology, 7th grade mathematics was new to her as well. Learn Check is the feature of Navigator that she did not use very much the first year since she was not sure where to fit it into the curriculum. She used Quick Poll for a lot of different things.

It was too hard to do Learn Check. I was kind of going through it with the students. I did not know much about 7th grade math let alone how to implement the technology because I never taught 7th grade before. But students loved the calculators right away.

Ms T uses Quick Poll to hear from her students, “If I don’t hear their thoughts, I need to hear from them and Quick Poll is easy way to hear from them quickly.” She also uses Quick Poll to collect homework answers, opinions on things, for an interest question about what they would be doing for the day and to see if students agree or disagree on various things. Ms T uses Quick Poll most of the time for right at the moment questions although sometimes it is planned to start the lesson. Ms T also used Screen Capture and uses the Activity Center for collecting data when they are doing representations so they do not have to spend so much time collecting the data.

Using TI-Navigator
Ms T said that in her first year of teaching, she had a false perception of what her students understood because of the discussion of the stronger students or students she would call on.

I would get this feeling like they know it. Using TI-Navigator shows me a real clear picture of who does not get it and what are they coming up with. It is not just for me, but also to make it apparent to the whole class so they can all benefit. Because my higher students get it, they may not have the opportunity to see misconceptions and where that might have come from. When students submit a line in Activity Center and one is off, there is an opportunity for the higher students to look at why it would be off. It is another formative assessment tool for someone who is always getting it to look from another perspective what could have gone wrong. It is a way to expand their mind and their view of things.

In an interview, Ms T talked about a lesson in which she used the Activity Center to collect data from her students and then had them make box and whisker plots. Students were given a list of data about 100 students and how many movies they watched per week. Students were asked to start with a sample size of five. They were told to randomly generate five numbers between 1 and 100 with the calculators to choose their sample. Students created box and whisker plots of their data on their calculators. Screen Capture on TI-Navigator was used to display what each student’s box plot looked like with their samples of five. When the captured screens had variations based on who was in the sample, they did sample sizes of 10 and then 25 out of 100. Ms T displayed the students’ box plots so they could see how they were different or similar. As they moved from a sample of five to 10 and then 25 their box and whisker plots started looking like each other. They could see that there was a larger variation when the sample size was small and closer to each other with a larger sample size. Then they did all 100 and the box plots
were captured with Screen Capture so students could see how that with 25 it was similar to the representation of 100 but with five it was difficult to make interpretations. Ms T found the Screen Capture feature of Navigator invaluable for this lesson.

It was great to have screen capture for that lesson. You can see that on your own but for some students, just by chance, their first one with a sample size of five might have been similar to the real one. But some students were way off so they could see that with a super small sample size you are not always going to get the same results. They could tell that because suddenly they saw everybody’s up there at the same time whereas if you just make your own you could be misled. It was easy for students to compare and they started making the connections on their own by actually doing it. I don't think I could have done that without spending a lot of time by hand if I did not have the Navigator system. It was really cool!

Ms T conducted an action research project in her classroom as a requirement for her Master’s Degree at the University of Hawai‘i. In her paper she stated the one of the purposes for her research was to explore how to use the technology in her classroom to address the needs of her students.

Students were able to self-regulate their answers when they saw their shortcomings and resubmit corrections. For each concept assessed with the TI Navigator system, I tracked students’ initial responses and follow-up data to look for improvement in the formative process. In all of the instances where data was compared between first and second attempts, there was an increase in the number of correct answers in the second attempt. Not only did the number of correct answers improve between first and second attempts, it also improved over a series of follow-up questions that practiced the same skills. That means students were not only learning from their mistakes on problems they evaluated, but they were getting better at the skills as they practiced. I saw my struggling students pick up on the process the higher students were modeling. Evaluating the data gave me a deeper understanding of how formative assessments could actually be used to help students ‘form’ concepts. The TI-Navigator system served as a great tool for checking progress because it allowed the whole class to see all of the responses. There were key formative moments that took place during our class discussions in response to the data.

Ms T also sees the limitations of TI-Navigator.

Sometimes I feel the Navigator System helps that everyone gets it but sometimes I feel it is more class based because students may just jump on board with what is going on because now all the information is out there. I try to figure out how not to disclose too much too fast. Sometimes a student has this misconception that comes out when they are sharing and another student has a question and that is like a really rich experience. But if you put it all up with TI-Navigator first, the student that had the misconception might not be willing to share anymore, because she or he realizes she or he is outnumbered or sees other answers and decides to change it and not know why. I have had to pull back on the timing - know when to have class discussion and have individuals share their ideas before they look at what class thinks I have students do writing activities of the trends they saw and have people share out at the end.
Technical Issues
Ms T said she wanted to ‘hop in’ and get started but she did take the time to have every student practice. In reflecting on the first year of using Navigator, she noted that it was important to have students do all the things they can do to troubleshoot. After teachers in the NAV group received the new model of access points and TI-Navigator software, the number of communication errors eased. However, Ms T had to reinstall TI-Navigator to get the Activity Center to work properly. She also had a charging bay that sometimes did not charge. Like other teachers in project FANC, Ms T did occasionally have calculators that needed to be reset by removing the backup battery. Probably the most bothersome technical issue was when the projector bulb burned out, and even though the projector was under warranty, the company said that the number of hours for which Ms T had used the projector was more than normal use. That was because Ms T uses the projector and Elmo everyday and the TI-Navigator most days.

During one of her lessons Ms T posed the following question, “If you put 60 chocolate chips in an bowl and make a dozen cookies, will each cookie have five chips?” She wanted to use Activity Center’s frequency plot to simulate the problem, but the projector was not talking to the computer even after restarting. A colleague from her department was observing her so she was so ‘bummed out because it would be so much better on the computer with the Navigator’. Ms T described how she has learned to troubleshoot and asks herself, “How else can we do this if we don't have this at this exact moment when you are planning on doing something.”

School and Collegial Support
Ms T said that she is, “Happy to be in her job.” She has been working with the department chair at her school, who also was a participant in the NAV group, to encourage administration and the rest of the mathematics department to integrate technology into their classrooms. She presented her findings to her colleagues at her school in order to ‘encourage teachers to rethink their formative assessment practices and how they support learner independence’.

The entire mathematics department at Ms T’s school has recently been involved in additional PD on using TI-Navigator for formative assessment. This has provided her with an opportunity to work more closely with her colleagues. During the PD meetings, she has taken a leadership role to impact the direction of the work as well as share lessons she has used with TI-Navigator and the ways she used it for formative assessment. She has commented on how this PD was so good for their school and that it provided an opportunity for the department to talk about mathematics, which they had not often done.

Professional Growth
A statement that Ms T made indicates her intense desire to grow professionally, “Instead of just being on the receiving end of research and teacher trainings, I was excited to take an active role in my own professional development and classroom.” She definitely did take an active role in her own professional development by the enthusiastic way she approached implementing formative assessment with TI-Navigator. As a result of the
manner in which she implemented technology Ms T was asked to be a member of the instructional team for a summer STEM workshop on TI-Navigator.

Ms T’s professional growth was influenced by a several different factors since in addition to being a participant in FANC; she was enrolled in the Teach for America program, which led to a Master’s Degree from the University of Hawaii with secondary mathematics certification. While Ms T felt overwhelmed having so many things to do, she also felt very appreciative for the opportunities.

It all happened at the same time. All the pieces needed to be there for me to try all things I wanted to do. I was fortunate because everything happened at once for me so I changed as a teacher all at once because of a lot of different factors.

The two main problems around which Ms T built her master’s degree paper were: a) students are rarely taught to regulate their own learning and this affects their ability to become independent people and b) formative assessments are not utilized to their fullest potential as opportunities for students to monitor their progress. Her professional growth was definitely affected by the process of seeking solutions to these problems.

The systematic inquiry and reflections definitely improved my teaching practices. I documented my students’ behaviors thoroughly in a way I had never done before this study. With each new intervention, my intense introspection spurred new ideas that became a stimulus for change in my classroom. I grew a lot in this experience, and even though the impact of my study is currently small, my own changed mindset could have an immense impact on my classroom in the future. This study gave me a greater understanding of how I could emphasize independence in my lessons over the course of an entire year.

Looking Back/Looking Ahead

Ms T said she was sad when Project FANC ended because she liked working with everybody and she respects them and looks up to them as professionals. She mentioned one participant in particular whose school she would like to learn more about and the direction they are taking their mathematics instruction.

Ms T continues to be involved in the PD opportunities that are available to her and has expressed her strong interest in developing self-regulated learners.

I truly have a desire to see my students achieve and think on their own so I hope to continue to grow in this area as I contemplate where to draw that support line in each activity we do. It is tough as the teacher to get used to turning over the ‘lead role’ to students and taking on more of a ‘supporting role’ to let them shine.

Summary

Ms T’s desire for using technology in her teaching and belief that students should have ready access to knowledge with technology came out clearly in the data. While presented with challenges her first year of teaching, she fully took advantage of the opportunities Teach for America and enrollment in a master’s program gave her. However, she felt that the professional development she received from Project FANC was most influential.
There are several common themes that run through Ms T’s case study that can be seen in her view of students, view of assessment and use of TI-Navigator. Ms T wanted her students to become self-regulated learners and she orchestrated her assessments and used TI-Navigator to move students in that direction. The design of the I Can Toolkit, changing her assessment method, and providing a means for students to monitor their progress all put more responsibility on the students. The TI-Navigator played a large role in helping students self-regulate their learning because they received immediate feedback.

**The Case of Mr. R**

**Context**
Mr. R is in his 30s and had three years of teaching experience in middle grades mathematics when he became a participant in Project FANC. Both of his parents were teachers and he commented that his father was strong in mathematics. Prior to participation in Project FANC, Mr. R was in his current teaching position for one year. His colleagues view him as the ‘tech’ person. The middle school where Mr. T teaches has approximately 900 students of which 34.5% qualify for free and reduced lunch, 9% Special Education and 6% English Language Learners. The school met Adequate Yearly Progress (AYP) for the general student population with 46% proficient. However only 23% of the Special Education population was deemed proficient by the NCLB standards so the school is in restructuring. The school has a diverse student body with 29% Filipino, 26% Hawaiian or Part-Hawaiian, 15% Caucasian and 11% Japanese along with smaller numbers of other ethnicities.

Mr. R attended K-12 schools in the Pacific islands and received his undergraduate degree at the University of Hawai‘i at Hilo with certification in elementary and middle school education. Mr. R’s classes have approximately 27 students. His classroom is equipped with at Smartboard and his classroom is well laid out with posters, calendars, progress chart and agenda.

**Experience with Project FANC**
Mr. R reported attending seven professional development programs prior to participating in the FANC PD. He was assigned to the FA group, which focused on formative assessment strategies the first year and then received a Navigator System with accompanying PD the second year. Mr. R commented on his first impressions of the FANC PD.

In the beginning it seemed like it was the same thing I have heard in my college classes. When we got more depth into the FA - Where are we going? What do we do now? - the PD helped me see that formative assessment is not just a pop up quiz but more in depth on addressing the misconceptions. More like thinking as student yourself … how would students approach certain problems and be prepared with questions to address students thinking.

When asked to write about one aspect of FANC that impacted him the most, Mr. R said, “One specific aspect that stood out for me was the opportunity provided for any project
member to share ideas/teaching strategies during the follow-up sessions.” He felt that he learned about different approaches to teaching concepts that he was able to apply to his own classroom. This opportunity helped him work with different skill level students on the same concept using different approaches.

Classroom Management
Mr. R relies on a timer as a tool for class management and he has said, “I love the timer.” He said feels that time goes by really quickly when everyone is engaged and this is a way to keep track of time. In the focus group session he described his use of warm-ups to ‘use the 77 minutes that he has more successfully’. He uses warm-ups on the basic skills to have students working by the time the second bell rings. Students who are engaged and know the answers are given the opportunity to come up an do a quick multiple choice question or write their answers on the board.

Reflecting in the focus group after the first year, Mr. R noted that sometimes he finds himself rushing.

I have seen that a couple of times I am rushing myself and then I give in and give up and just say, “Ponder it.” Then I move on. I see the tendency for them to fall back on the yes and no answers and I accept it because I am forgetting about time. I then go back with a redirection approach and ask, “What would you think about it?” That gets them discussing it.

Consistency is important to Mr. R as he expressed concern that he was not consistent enough sometimes. Some days he would have warm-ups, while other days he would choose to spend more time on a lesson and not do warm-ups. The students would come up and ask, “Where’s our warm-up and I feel bad.”

As Mr. R was discussing getting ready to use the Navigator System after the second summer PD, he also focused on consistency with the technology.

You have to have it set up and ready to go and be on top of it at the beginning of class. Even if you take 5 – 10 minutes into your period just doing things you were supposed to do five minutes before, it is going to take up a lot of time. You are going to have to deal with ‘mine’s not on’ and other small things so just consistency is the thing.

Mr. R’s students sit at tables in groups of four. His classroom is quiet and organized with very little off-task behavior. Students seem comfortable with the teacher and with each other. They know the routines Mr. R expects them to follow. For example, during the second year when Mr. R had a Navigator System in his classroom, students picked up their calculators and hubs and were logged in and ready when class began. During the second year, he used both the Smartboard and TI-Navigator as class management tools.

Mathematics Content Knowledge for Teaching
Mr. R is certified to teach elementary and middle school levels. He scored below 50% on the content knowledge for teaching on the Learning Mathematics for Teaching Assessment pretest and increased to 74% on the posttest after two years as a participant in FANC. Mr. R has said he still needed to work on coming up with questions to have students using higher-level thinking.
I am still at that stage where 'I don't know' and then I get so antsy I end up giving the reason why. The student goes 'yeah, that could be the reason why'. But that's what I said and maybe you are only agreeing with me now so I am still challenged with coming up with leading questions. I can kind of see the misconceptions that students have. But I am not good at asking them why and being ready with the responses they provide and going from there to see if I can go into more depth or just say ‘let's move on’.

Mr. R said that when he lets the students take risks he runs into the problem of not understanding some of the representations they are providing.

I sometimes have to stand back and ask, “Where do you think they're coming from? Is this right, or is this wrong?” I already have a mindset of what the correct answer is and what my way of solving it would be. I know there are different ways. It is just when I run into that then I run into a brick wall and I do not know how to walk around it. Then I pull the students aside and tell them, “I want you to know that you are right but I have a hard time explaining to you why it is correct but it is a different way of looking at the correct answer.”

It takes an insightful teacher to have this kind of introspection and demonstrates that he is growing professionally.

**Pedagogy**

Mr. R tells his students at the beginning of the year that a lot of the learning is going to come from them and from communicating with each other.

I am there to facilitate discussions and make sure you are on the right track - answer questions that you as a group can't answer. At times when I need your attention these are the three words I will use, Stop, Look and Listen. I am thinking of changing this to Pause, Look, and Listen so students do not think it is the end of the opportunity for them to finish their work. I just need them to pause and listen so they won’t miss out on anything that is important. Then they can continue working on where they left off.

Mr. R described the manner in which he uses ‘redirection’ questions with his students.

You have to be prepared to have those redirection questions to be able to put in their terms. They want to answer but they do not understand what you are asking them. They want to think about it. I have learned from a few other students. I adopted some of the questions the higher-level groups were asking each other. That helped me with the lower level students because this was coming from a student and they could better understand their version than my version of the same question.

It was observed that Mr. R is very efficient in his use of time and engages with his students in a variety of ways during a class period. As an example, during one observation he monitored students’ work on their projects, held student conferences, and then introduced and supported a task on how perimeter and area change with scaling. He gives the students very clear instructions and visual models/cues. He builds in multiple opportunities for students to complete their work. Field notes from observations over two years have reported changes indicating that Mr. R has gone from being an overly cautious, novice to a calm, practiced teacher.
**View of Students**

Mr. R said he treats his students using the same concept that was used in his own home as he grew up, “We gave respect to elders and when you earn it, they give it back.” Therefore he ‘gives students back’ if they show respect to him.

Once I see students give me the opportunity to stop them as a teacher and have them look at me and listen then I make sure I return that favor to students in the classroom and almost always outside the classroom. I am not just some authority figure in my classroom and when I go outside I don't know who they are.

Mr. R wants students to feel part of the classroom and he said that he wants to build a relationship with students beyond being their mathematics teacher, “I will listen to you whether it be questions about school or we can extend that and I can be an adult you are comfortable talking to within school if you need somebody.”

Being a second language learner, Mr. R tells the students that he has a hard time explaining himself. Therefore he feels that he can relate to his English language learners and ‘their way of thinking’. He feels he can understand when students say, “To me this is right, how can it be wrong.” He tells his students that it doesn't necessarily mean if he provides them with a tool that they have to use this tool to be correct and illustrates this with a story.

I can give you a bunch of nails and tell you to take this hammer and this is the only tool you can use to put these nails up there. But you are someone who learned to use a rock to put nails in the wall. If you use that rock and still get that nail on the wall then you did what I asked you to do. You just used a different tool. It may take longer than I thought and it would be easier by giving you the hammer but you still got the job done.

**View of Discourse**

Mr. R sets the tone of the classroom for students to be held accountable for contributing to a positive environment. Students who understand concepts more easily are expected to help those who are having difficulty so that they can keep up. He tries to apply Hawaiian values to his teaching.

There is always someone who is more superior to you in some way. You never know in what way a person could be better than you so don't think of yourself as superior over others. Always consider that there is something that the other person can do better than you can and be respectful.

Mr. R is a strong believer in establishing the expectation that students share knowledge instead of the teacher directing them every time. For example, when students have an assignment to complete as a group, he suggests he might randomly choose a paper to grade. He would ask the group if they would be satisfied to have that paper represent their effort. Then he moves away from the group to see if student leaders emerge who will help others.
View of Assessment

Mr. R said his view of assessment has changed and now sees the ideas behind formative assessment. Prior to FANC he had viewed formative and summative assessments as quizzes versus tests. He would give small quizzes on one or two benchmarks and then a final test that grouped everything together. As a result of FANC he learned about the uses of formative and summative assessments and why you would want to have formative assessment and how it can benefit his students.

I was one of those kids that gave the wrong answers and never knew why I gave the wrong answers or what I could do to change. Nobody asked me why I viewed it that way. Now I get a chance to understand that if I address this one problem I see from this one student, it can bridge a whole gap and bring them to where I want them to be by simply asking them, “Why were you thinking this way or what made you provide this as your answer.” I need to address misconceptions and understanding that formative assessment is more than just a quiz, see where the students are and what I need to reteach. Formative assessment goes into depth on misconceptions and why students think this way. Then how can we address it so that we are all on the same page?

Mr. was observed using individual student conferences to address student misconceptions. He seemed to have a very clear idea of where students were in their thinking when he called them up to conference, using their quizzes to give them feedback on their progress.

Comfort level with TI-Navigator

During a focus group held the professional development in the second summer, Mr. R said he was glad that he was pushed into running one lesson.

It helped me come up with my own little shortcuts so I kind of have a better understanding. If I want to prepare something for a short QP I know what I need to do to make it successful. I know what I am comfortable with so far.

Troubleshooting is going to the biggest thing. I am learning a lot of good knowledge but I am going to have to dedicate some time during the summer to really go in and set it up.

After participating in PD on using the Navigator the second summer on using the Navigator System, Mr. R reported that he felt he was a 9.5 on a scale of 1 to 10. He and a colleague at his school who was also in the FA group worked together during the PD so he felt comfortable going into the school year. When asked where he would rate himself after a year of using TI-Navigator, Mr. R said he was a 10 at using the system.

But at coming up with questions to have students using higher-level thinking I am still at a 6 or 7. I am still working on how to view the problem from students' perspective so I can talk more about the misconceptions rather than just the right answer and talking about why a student would give this as an answer instead of 'here are the correct answers'.

Mr. R feels that he is very comfortable with setting up and using the system as a whole group discussion.

It is real easy to use. It is easy to set up. It just takes time each morning to come in and get everything set up and opened so you are ready to collect from the class.
with Class Analysis. That way it is always there for you because if you try to start up the program during class it is going to take forever.

During the focus group session, Mr. R agreed with other FA participants that they thought having all the technology at once like the NAV group did would have been difficult. He added that at the beginning he just used the TI-73s for a reward because they did not want to shy away from the four-function calculator that can be used on the state test and that the ‘TI-73 has a lot of different functions’.

Using TI-Navigator

When asked what aspects of the Navigator System he uses, Mr. R said that his choices depended on the benchmark he is trying to cover. He commented that he had not been very comfortable using Activity Center until third quarter when the class worked with linear functions, graphs and tables. He said his colleague “showed me a lesson that tied into that and how to use that from being a simple warm-up and then tying it into a whole class activity and using the results as a means of discussion in class.”

Mr. R said he tended to use Learn Check (LC) frequently, both as a LC file and a Quick Poll (QP), because, “You can type more into a LC file and send it as a QP rather than using the QP itself. After walking around and noticing that is where the QP comes in.” He said he repeats the process throughout his periods so he is more comfortable by the ‘second day’s first class than first class on the first day’. He uses students’ questions as his ‘leading questions’ for the whole group or uses students’ responses from other classes to challenge students’ thinking.

I will say that someone from another class said this or disagrees and then ask, “What do you think was his approach?” It helps sometimes to clarify things for them and I am not always telling the yes or no as the teacher.

When teaching a lesson on ratios and proportions Mr. R gave students a map and asked them to use the scale from the map to set up proportions to find distances from point A to point B depending on what was on the worksheet. He said that using LC allowed him to assess students’ understanding.

So when we go into Class Analysis and we look at the answers and I see two different setup proportions but still marked as being correct, I would use that discussion as why these two look different when one has miles on the top and cm on the bottom or another has cm on the top and miles on the bottom. Why are they still being considered correct answers? The discussion went really well and students noticed that it was important to use units to identify measurements from the map to be consistent within the proportion.

Technical Issues

When asked what technical issues there had been using the Navigator System, Mr. R took some time to think and did not note any immediately. He then mentioned the importance of clicking on the file that you are sending or collecting, on the TI-Navigator home screen. By clicking on the file it will show the students who received the file or the students from whom the file was collected in Class Analysis. At first, he did not know why student icons were different colors when he was collecting Learn Check files with Class Analysis. But now, when he does not get everyone's responses, he has a way to
check which students’ files were not collected. He was concerned that if this were a
graded activity, he would not have everybody's results. When he uses the Navigator
features to check for sending and receiving results he is able to ‘just going over to
student's calculator and make sure they are online’.

He also reported that at times when he opened TI-Navigator, the access point was not
recognized so the hubs were not connected. Therefore one day he had to trouble shoot
what to do instead of what he had on the board. He said that he had to ‘fall back on using
the Elmo’. He did not know how to fix the problem but then his colleague told him that
all he had to do is just restart TI-Navigator. Mr. R reported that he had called the support
line for TI-Navigator at various times when he had questions.

School and Collegial Support
Mr. R works with a collaborative faculty and describes the faculty as a ‘healthy group’
because they respect each other’s views and are open in seeing where the other is coming
from. Mr. R works with his colleague who is also in the FANC project and sees that they
think very differently from each other. When they sit down and work out problems they
discuss where they think the students will have misconceptions and their different
approaches.

We saw it was easier when the two of us would plan and then we do have our own
approaches. She saw I was doing things she would usually do and then she was
doing things I would do. We are not on same page but still understanding what the
main thing we were going for even if our approaches were different. My
colleague has been very open with understanding that I may not take it in depth
with my set of students as she would with her students and she is OK with that.
She knows that I think that it is good enough for my students to move on with that
understanding versus she where she wants to go. I do everything that is manual
labor and she does everything that needs the thinking part and I have never had a
complaint.

Mr. R’s school is just entering restructuring and he feels that he can provide some
assistance since he had previous experience working in a restructuring school.
What I learned from my colleagues in my former school is that if we stick
together as a department and as teachers everything is going to be fine. I see the
pressure on our own administration right now. They are overwhelmed that we are
going through this and see the state is asking them to do things. I see them
balancing and trying to be fair with everyone cause even our scheduling next year
is not looking the same. I will be teaching an eighth grade class next year so will
have some of my own students again.

Professional Growth
Mr. R feels very fortunate to be at his school and paired with his colleague.
I challenge myself to do the same way she approaches things because I know it
works really well. If I can challenge them and I know what example to use, I don't
have to come up with one myself, I can just use what she does.

He also went back to his college textbooks for ideas.
I go back and read up on the middle school mathematics books I got when I was going through the program. One of the books I have addresses misconceptions and why kids may answer certain ways and what possible backgrounds they may be lacking to help them get to where you want them to be.

**Looking Back/Looking Ahead**
Mr. R has taken a leadership role in his school for integrating the use of technology, and in particular the TI-Navigator. As a result of his students’ enthusiasm, a parent working for an economic development non-profit organization visited his classroom. The non-profit purchased Navigator Systems for the rest of the mathematics department and provided funding for professional development.

I had a very great experience and am glad that it is actually not over as we get to continue it. I am very excited and look forward to helping my own colleagues and sharing with them what I have learned from this program. Since a lot of them are overwhelmed with the tech side, I am happy that I will be helping them be more comfortable. My other colleagues see that I am comfortable setting up and being the tech person so I have been asked and I have always been willing to help them out. I want them to be comfortable and happy with this because I think they will benefit once they start using the program in their classroom. It is definitely better than I when grew up with the textbook. We were told to turn to page so and so. Here are some examples. Do 1 - 150 for homework and I will see you tomorrow. If you want, you can check the answers in the back.

**Summary**
Mr. R’s view of assessment changed as a result of his participation in Project FANC and he now sees how uses of formative assessment can benefit his students. He still struggles with formulating questions to move students to higher-level thinking. He believes that learning should come from the students and he asks them to be accountable for contributing to all students’ learning. Mr. R strives to have an environment of mutual respect and to build relationships with his students beyond the classroom.

It is important to Mr. R to be able to share ideas and his collaboration with a colleague greatly influenced his implementation of formative assessment using TI-Navigator. While he felt very comfortable setting up and using TI-Navigator with few technical issues, it was the planning he did with his colleague that set the direction for lessons.

**Discussion and Conclusions**

Ms T and Mr. R were in different PD groups that met in different locations during the first summer and for follow-up sessions. During the second summer PD, the two groups met in the same building, however they attended different PDs held in separate rooms. During the school year, the follow-ups combined the two groups and that would have been the first time the two teachers would have had any opportunity to talk with each other. However, while Ms T and Mr. R did participate in the follow-up sessions together, they did not tend to share with each other directly.
Both Ms T and Mr. R have successfully implemented formative assessment using TI-Navigator in ways that are consistent with their expressed views of students, discourse, pedagogy and assessment. There were identifiable differences between the two teachers in their view of students. Ms T wants her students to become better self-regulators of their learning and discussed ways of taking the gateway to knowledge out of her hands and putting it into students’ hands. She uses formative assessment with TI-Navigator to inform students of their progress so students could self-regulate their mistakes. Ms T noted that the features of TI-Navigator that allow the whole class to input data or view are important formative assessment tools for both her and her students.

Ms T encourages students to help each other and tries to give them some tools to facilitate that. She asked her students to represent their answers in multiple ways, check the accuracy of the work and ask members of their group for help before they ask her. Students demonstrated that they value this help by complimenting each other for providing help with the technology when they needed it.

Mr. R wants his students to feel part of the classroom and he wants to build a relationship with students beyond being their mathematics teacher. He puts emphasis on understanding his students and offers them respect in return for the respect they show him. He tells them that they do not necessarily have to use the tools he has provided to be correct. Mr. R holds his students accountable for sharing their knowledge with each other and to help those who are having difficulty so they can also be successful. He reminds his students that there is always something that another person can do better than he or she can. In fact, Mr. R listens to the questions the higher-level groups asks each other to help him with questions for the lower-level students. Mr. R noted that while he is very comfortable using TI-Navigator, coming up with higher-level questions when using it for formative assessment is a challenge.

While Project FANC was a good experience for both Ms T and Mr. R and provided a means for professional growth for them, they described this growth in different ways. Ms T’s growth was on a fast track as she had just entered the teaching profession as a Teach for America Fellow, was enrolled in a master’s program and was new to the field of education. The mathematics-based PD of FANC was highly valued by Ms T and the technology that she received allowed her to implement instructional strategies and assessments that integrated the technology. She was able to design her research study for a master’s degree around using TI-Navigator to help her students self-regulate their learning in mathematics. Reflections on her teaching practices spurred new ideas and impacted her implementation of TI-Navigator for formative assessment. After two years of implementing TI-Navigator, Ms T described how she used all the various features of TI-Navigator for formative assessment. She also gained an understanding of ways formative assessments could help students learn concepts better. Ms T noted that she now understands that learning develops over time and not every student will get everything everyday.
Mr. R followed a traditional track to becoming a teacher and had three years of experience in education when Project FANC began. Therefore, much of his growth was building upon or modifying previous knowledge about teaching and learning. He had attended previous PDs and expected the FANC PD to be similar to other experiences. However, he quickly realized that implementing formative assessment could really benefit his students. Since Mr. R had established a style of teaching and had been implementing formative assessment in his classroom for one year, he focused on using the Navigator System with the consistency he feels he needs to maintain in his classroom. Through the sharing of ideas by other Project FANC participants, Mr. R was able to incorporate different approaches into his teaching. However, the admittedly biggest influence came from his teaching colleague who was also a participant in FANC. They planned lessons together and discussed their approaches to implementing their lessons. They each brought strengths to the table with one of Mr. R’s strengths clearly being his comfort level with using TI-Navigator. His primary use of TI-Navigator for formative assessment has been Quick Poll and Learn Check and indicates that he is still working on the formulating good questions.

Both Ms T and Mr. R are using the experiences they have had with implementing formative assessment using TI-Navigator to help enrich experiences for the teaching colleagues who now all have Navigator Systems in their classrooms. Sharing what they have learned will benefit both students and teachers in both their schools.

Implications

Case studies can provide us with a closer view of the factors that influence implementation of PD experiences. As can be seen in the cases of Ms T and Mr. R with the implementation of formative assessment using TI-Navigator, multiple factors were involved in how that implementation was realized in their classrooms. Some of these factors were a result of the PD experience while others came from previous or simultaneous events in their professional lives. When interpreting results to explain the success or lack thereof of professional development, using mixed method methodology to include both qualitative and quantitative analysis should provide a better picture than either used separately.

References


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1. TITLE:
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6. ABSTRACT:

Background/Purpose: GeauxHeart Baton Rouge was a community outreach project aimed at improving access to health care and reducing health disparities in The Greater Baton Rouge community for residents who are especially susceptible to cardiovascular disease but may have limited resources or access to seek preventative care. Cardiovascular disease (CVD) takes a disproportionate toll on many racial and ethnic groups that have higher rates of CVD and related risk factors. Yet, these populations face more barriers to CVD diagnosis and care, receive lower standard of treatment and experience more serious health outcomes than their white counterparts (Bonow, Grant, & Jacobs, 2005). Numerous factors such as income and education, genetic and physiological factors, access to care, and communication barriers are linked to these disparities (Yancy, et al. 2005). This project seeks to bridge the disparity gap by offering free risk factor status assessments and utilizing services and educational materials from the American Heart Association (AHA) programs such as Power to End Stroke and Search Your Heart. The purpose of this community service project is to develop and implement a collaborative community outreach program aimed at promoting healthy lifestyle changes and reducing health disparities in communities that face serious health problems with limited financial means to seek preventative care.

Subjects: Five hundred forty-four male and female subjects between the ages of 21 and 70 were recruited from the Greater Baton Rouge area to participate through a number of health fairs conducted at community and faith-based facilities with predominant socio-economic disparity participants.

Methods: This project consisted of two phases. Phase 1 - Participants were invited to attend one of the "GeauxHeart Baton Rouge" health fairs conducted at local community or faith-based centers. After completing an informed consent, the participants deemed eligible to take part in the health fair activities completed a
short healthy lifestyle lecture (educational component), completing questionnaires and preliminary cardiovascular health-risk screenings. The health history questionnaire and body composition (heart rate/blood pressure; blood glucose; cholesterol; body fat index) measurement values were obtained to establish each subject's cardiovascular risk level and to provide initial risk reduction and health promotion information (diet; exercise; community resources, etc.). The cardiovascular risk level was determined by a medically accepted algorithm to identify low, moderate, or high risk of cardiovascular disease. The algorithm criteria was based from classification systems established by the American College of Cardiology (ACC), American Heart Association (AHA), American College of Sports Medicine (ACSM), and the New York Heart Association. High and moderate cardiovascular risk subjects were then identified and invited for optional participation for additional follow-up testing in Phase 2. Based on information gathered from the questionnaires and health risk assessments, participants deemed at moderate-to-high risk for cardiovascular disease (ACC/AHA/ACSM guidelines) were contacted and offered free clinical testing (ankle-brachial index and 12-lead ECG exercise treadmill test) conducted by qualified personnel at Louisiana Cardiology Associates as part of Phase 2 of this project. Exclusion criteria for Phase 2 were inability to walk on a treadmill, pregnant, and individuals with contraindications to exercise testing (ACC/AHA, 2002; ACSM, 2006).

**Results:** Of the 544 subjects participating in the project, 116 subjects met the inclusion criteria for Phase 2 follow-up free clinical testing. A total of 50 subjects accepted the invitation for additional testing (8 subjects did not show up for testing). From the Phase 2 testing, nine subjects (2% of the total subjects) were recommended by the attending physician for additional consultation due to abnormal or health status findings.

**Conclusions:** Baseline data from this project provided much needed evidence about the cost-effectiveness of conducting community-based cardiovascular risk assessments and the clinical value of follow-up exercise testing in members of healthcare disparity populations. Additional longitudinal studies are needed to investigate the long-term efficacy of the medical history questionnaire and health risk assessment algorithm developed by the investigators to cost-effectively identify cardiovascular high-risk subjects.
Transformative Learning and Subject Matter Experts

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Transformative Learning & Subject Matter Experts

Abstract: This paper explores the potential transformative learning experiences of subject matter experts collaborating with instructional designers during e-learning course development. Particularly, is there a disorienting dilemma within the context of the instructional design process as a catalyst for shaping transformation? If so, what does the transformation look like?

There is a growing momentum on education mediated by computer technologies, or e-learning service delivery. The development of e-learning service delivery requires an instructional designer who applies instructional design principles to developing content area. The instructional designer analyzes the goals, needs, and characteristics of the learner to understand the instructional situation. Then, it is the instructional designer’s responsibility to build the subject matter content, provide guided practice and assessment of the content area all of which is completed without having content expertise. While reading textbooks or reference materials on content area may be helpful, instructional designers talk to experts in the content area, known as Subject Matter Experts. Subject matter experts are generally busy people and optimizing instructional designer and subject matter expert time can prove challenging during the process of eliciting sufficient information so that the instructional design process can proceed.

Subject matter experts are the content area specialists in a particular field of knowledge. They may be an academic from a college or university, a business person, a health care provider, a military expert, trades or industry person or a medical or legal professional. One of the functions of the subject matter expert in what Keppell (2001) refers to as the Content Production Process is to provide accurate subject area content during the design process. The subject matter expert has two roles: to provide a clear description and explanation of the content area, and to assist the designer in conceptualizing, clarifying and verifying the content (Keppel, 2001, p. 3). Keppel’s (2001) own work as an instructional designer has enabled him to “interact with over forty-six subject matter experts in the gas and oil industry in Canada from July 1993 to July 1994. Content areas included cementing, acidizing, fracturing, coil tubing, pipeline pigging, hydrostatic testing, vehicle inspections and nitrogen” (Keppel, 1991, p. 602). It is the role of the instructional designer is to shape the content for the audience. However, the subject matter expert is a major factor in determining the success or failure of the project (Keppell, 1991, p. 602).

A review of the literature on the instructional designer and subject matter expert procedure revealed a topic largely dominated by Keppell (1997, 2000, 2001) who promotes the Content
Production Process (CPP) for assisting instructional designers in eliciting and conceptualizing unfamiliar content from subject matter experts. Keppell’s (1997, 1999, 2000, 2001) research and the literature at large is void of a voice from the experience of the subject matter expert’s point of view of the content production process. In considering the theory of transformative learning and how it may have applications on the subject matter expert experience, the following literature review is provided.

Transformative learning theory (Mezirow, 2000, 1991) has been around for over 25 years and has become the most researched and discussed theory in adult, higher and continuing education. “It is a theory that is partly developmental, but even more it is about where learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one’s experience in order to guide future action” (Mezirow, 1996, p. 162). Recent studies are raising questions about the research trends in transformative learning theory, what new understandings may have been discovered and the role of experience, critical reflection and relationships in the transformative learning process (Taylor, 2007, p. 174).

A study by Taylor (1997) endeavored to build on Mezirow’s (2000, 1991) transformative learning theory by investigating the literature about perspective transformation. The literature provided much to support Mezirow’s (2000, 1991) theory yet suggested a need to reconceptualize the process of transformation and recognize the influence of context as being a catalyst in the process. Recommendations identified the minimization of the role of critical reflection and the increased function of other ways of knowing. Other ways of knowing, or unconscious knowing sheds light on an aspect of the learner that is outside of the learner’s consciousness and not easily defined (Taylor, 1997, p. 14). Taylor (1997) determined that:

Transformative learning needs further study to provide a greater understanding of the varying nature of the catalyst of the learning process (disorienting dilemma), the significant influence of context (personal and social factors), the minimization of the role of critical reflection, an increased role of other ways of knowing, and the clarification of the definitional outcome of a perspective transformation. (p. 16)

Ten years later, Taylor (2007) reexamined the various purposes, settings and methodologies that had surfaced in the previous literature supporting Mezirow’s (2000, 1991) construction of transformative learning and its relationship to self-development and pursuit of autonomy. Noting that a shift, had occurred from identifying transformative experience in various settings and stages of transformation, towards making sense of the factors that shape the transformative experience; preceding research had continually focused on critical reflection as essential to transformative learning. Taylor (2007) identified new concerns over a lack of discrimination regarding critical reflection which appeared to assume that all forms of reflection were significant (Taylor, 2007, p. 186). The more recent research by Taylor (2007) calls for a need to explore more informal settings for transformative learning (Taylor, 2007, p. 174).
Regardless of the insufficiencies, a number of significant findings emerged from Taylor’s (2007) study. It appears that the recognition of knowledge change among some participants was not sufficient for a transformation to reach fulfillment; other factors needed to be in place. Factors like ongoing support to act on the new understanding, as well as guidance to put the new understanding into practice (Taylor, 2007, pp. 186,187). Progressions are required to ensure that individuals have the necessary skills to act on their new understanding. Questions raised in the previous research concerning an individual’s responsibilities regarding the transformative learning experience and the role of relationships in the transformative process continue to linger (p. 187).

Gagne & Medsker (1996) believe that learning is a reasonably enduring modification in individual capacity to learn that is not attributed merely to the progression of development. They argue in favor of critical reflection and reorganizing meaning to arrive at a more discriminative understanding of one’s experience (Mezirow & Associates, 1990, p. xvi). A more discriminative understanding of one’s experience having stemmed from a disorienting dilemma which proceeds to critical reflection toward perspective transformation which the individual ultimately acts upon (Roberts, 2006, p. 100).

Roberts (2007) looks at the effects of disorienting dilemmas induced by adult educators on their learners and the impact on learner performance. Adult educators induce disorienting dilemmas by exposing the limitations of the learner’s current knowledge. This has different effects on learners depending on the learner’s personality, experience, personal issues and the nature of the disorienting dilemma. When a learner’s current beliefs, values and assumptions are questioned, the learner may become angry, argumentative and/or defensive. They may begin to resent the instructor or feel angry, especially if, or when they are shaken by unexpected feedback. Some learners may feel humiliated resulting in feelings of shame which may lead to guilt and even trigger depression affecting all areas of the person’s life (Roberts, 2006, p. 101).

In the event a disorienting dilemma is induced by an adult educator on a learner, a complex love-hate relationship may develop on behalf of the learner toward the instructor. This may result in symptoms such as a decrease in punctuality, absenteeism, reduced participation in class; a general withdrawal during which time the learner may question their decision to pursue education. Some learners may drop the class, the program, or change their career (O’Sullivan, 2002). The reaction of the learner is contingent upon the effect of the disorienting dilemma and how the learner handles it (Roberts, 2006, p. 102).
Some learners may navigate the disorienting dilemma through discourse with others. Cranton (1994) notes that the essence of the discourse varies on the personality of the learner. Some learners may engage in a rational discourse realizing their disconnect experiencing a paradigm shift, exploring new options, a different course of action resulting in their development of transformation. Alternatively, when the essence of the discourse is negative, it may debilitate the learner’s performance resulting in an inability to function (Roberts, 2006, p. 102).

The theory of transformative learning and the role, or presence of a disorienting dilemma may have a minimal, devastating or no consequence at all in the communicative and collaborative process between a subject matter expert and instructional designer during course content development for e-learning service delivery. However, if the premise of transferring course content knowledge to a web based learning platform is contrary to the subject matter expert’s own personal values and beliefs about facilitating learning, they may struggle to come to grips with the transference of their knowledge creating a disorienting dilemma which may be acted out against the instructional designer in one way or another. If, on the other hand, the process of transferring course content knowledge aligns with the subject matter expert’s own values and beliefs about facilitating learning which creates delivery options for learners, there may be a positive relationship with the instructional designer and the presence of a disorienting dilemma not apparent.

Dodson (2009) examined participant’s approaches to resolving critical life events which may be considered disorienting dilemmas. Her purpose was to gain insight into the approaches that were utilized in the resolution of disorienting dilemmas. Findings from her research revealed that factors such as the acceptance of the dilemma, the nature of the dilemma and a variety of emotions played significant roles in changing or not changing perspectives and negotiating disorienting dilemmas. Results also concluded that no transformations were sudden or immediate. Some of the participants reported it took anywhere from a month to six years to even begin processing and resolving their disorienting dilemma. Dodson (2009) also found that most transformations were “modified” and not a total transformation as participants continued to sustain many of their preconceived ideas (Dodson, 2009, p. ii - iii).

Is it possible then for Mezirow’s (1991, 2000) theory of transformative learning, specifically the presence of a disorienting dilemma to play a role, or have implications for the relationship between an instructional designer and a subject matter expert? This study proposes to examine the subject matter expert’s experience working with an instructional designer during the content production process of developing computer mediated learning technology. The research will pose the following questions:
1) What are your experiences working with an instructional designer during the content production process?

2) Did your relationship with the instructional designer play a role? If so, explain.

3) Was there a disorienting dilemma at any time during this process? If so, explain. Do you know what precipitated the disorienting dilemma?

4) What was your response to the disorienting dilemma?

5) Do you think that the disorienting dilemma (If identified) will have any effect on your practice/career? If so, explain.

6) Was there anything you would identify as personally transformative that resulted from the experience? If so, explain.

7) Did you learn anything about yourself as a learner, or about your area of expertise that you did not know before? If so, explain.

8) Does (did) this experience change anything about your practice as you return to your respective career?

Method:

The proposed methodology of research will be snowball and strategic sampling. Expected outcomes are that all subject matter experts will identify useful strategies for communicating and collaborating with instructional designers. Some subject matter experts may identify a disorienting dilemma occurring during the content production process, however, some may not. It is also expected that some interview participants will identify a shift in perspective regarding their own professional practice, while others may not. From the data collected I hope to gain greater understanding of the subject matter experts experience working with an instructional designer developing multimedia learning tools. The results of the data collected will provide useful information for future training and professional development for both instructional designers and subject matter experts.
References


Keppell, Mike (2001). Optimizing instructional designer—subject matter expert communication in the design and development of Multi-media projects. *Journal of Interactive Learning Research*.


Furthering a College-Going Culture in Secondary Schools: A University-School-Community Partnership Reports

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In year four of the East Texas Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) project, the project leaders sought to strengthen a college-going culture in the ten partner districts in order that the mission of GEAR UP of increasing the number of low socioeconomic students who access and succeed in postsecondary education would be attained. Because the project leaders recognized that achieving both access and success in postsecondary education for students requires ongoing, interconnected actions, multiple systemic initiatives were employed. These systemic initiatives were designed to meet the project objectives. Specifically, the initiatives were designed to increase the rigor in classes and increase student participation and success in advanced level classes; to provide outreach and support to students to enter and perform successfully in the classes for on-time graduation with fewer absences; to increase the number of students who will graduate under the Distinguished Graduation Plan, and to increase parents’ knowledge of the importance of challenging courses, of the steps needed for college access, and of the requirements for financial aid.

The initiatives occurred within a local context and were designed to meet the unique needs of each individual campus through a carefully designed implementation plan. The designers of the yearly campus intervention plan included a GEAR UP coordinator and the campus GEAR UP council which included the principal, key teachers, the counselor, a parent, and a student. An advisory council of business and community partners provided input on the merit of the project’s work and recommended additional ways to meet project goals. All activities of the East Texas GEAR UP project were designed with the goals of achieving sustainability and systemic change as guiding forces for the work of the project. The East Texas GEAR UP project sought to serve as an integral part of the campus in meeting local district goals rather than as an isolated, add-on activity. The project leader connected the project with supporting initiatives, such as, the State of Texas Closing the Gaps in College Readiness campaign and the local P-16 Council for Angelina and Nacogdoches counties. Also, the project leader recognized the importance of principal leadership as a key factor in strengthening a positive campus culture of high expectations for all students. Therefore, focused leadership institutes for principals were an integral part of the university-based professional development. Distributed leadership was very important in this school improvement effort. Therefore, individual institutes for counselors, for GEAR UP council members, for student leaders, and for the community were held. Each event was carefully evaluated to discern next steps. The GEAR UP special projects coordinator, the GEAR UP principal investigator, and the project director met regularly to review overall project data and to determine next steps.
Primary components of increasing college readiness includes developing intellectual openness, inquisitiveness, analysis; reasoning, argumentation, and proof; interpretation, precision and accuracy, and problem solving as well as strengthening content knowledge, developing academic behaviors, such as, time management, and study skills and increasing college knowledge (Conley 2007). In improving the academic performance of students in the East Texas GEAR UP project, increasing student access and success in rigorous, advanced level classes was a primary intervention. An important part of improving access was developing dual-credit, concurrent enrollment classes, and Pre AP and AP classes. For example, one partner school added an option of nine dual credit classes from no dual credit classes that were offered. The high schools are strengthening the additional dual credit, concurrent, and AP courses to assist students in attaining 12-18 hours of college credit before they graduate. Attaining college credit while in high school can serve as a motivating factor for students to attain a college degree. For example, students in one partner high school are taking college algebra in high school. A teacher shared her enthusiasm for this initiative stating, “It has been an absolutely wonderful experience for us and for the students. The professor, our school’s graduate who teaches at SFASU, has gone out of his way to check on the students to ensure mastery of algebra.” A teacher added, “The whole program has gone above and beyond expectations.” Teachers enthusiastically reported that enrollment in AP classes has grown. New courses have been added, such as, Pre AP Algebra I, Pre-AP anatomy and physiology and AP history. A partner school council member also shared, “At the middle school, we now offer Pre AP in all four core subjects and are in conversations to create a plan whereby every student takes an upper level course.”

A part of improving the academic performance of students has been providing faculty development to increase teachers’ knowledge and skills in teaching Pre AP and AP courses. Another part of increasing students’ academic preparation has included providing support. A teacher explained the merits of a geometry Pre AP preparation camp that was provided at Angelina College by Angelina instructors with business and community support, stating, “College visits or some type of summer program make a lot of difference.” With 100% attendance every day, and with the districts providing transportation to the college each day, students were able to move into geometry Pre AP upon successful completion. This pilot camp then served as a model for a one day math camp that was provided during the school year for the remaining GEAR UP partner schools.

Improving Academic Achievement

An administrator stressed that three elements are particularly influencing the improvement of students’ academic achievement. These elements are professional development for the teachers, strengthening the academic foundation of students, and building positive relationships with students. This administrator pointed out that it is not enough simply to add advanced level classes. Students must be encouraged to take the
classes; teachers must gain skills in teaching diverse students’ advanced level content; and structures, such as, advisory groups must be designed to ensure that students develop positive relationships with adults. In a partner school, for example, each teacher is assigned an advisory group of nine students. A teacher explained, “We meet with them, check their grades, and try to offer a helping hand.” Other campus partners are seeking to overcome the anonymity of a large high school through an advisory group for all students. One partner campus further provided support for positive relationships with students through a high school Achieving via Individual Determination (AVID) class for students.

With the focus on the preparation of students for the rigorous challenge of advanced level classes, access to the classes has increased. In all partner schools, the numbers of students taking the advanced classes has increased. Overall, the participation of enrollments in advanced level course in the East Texas GEAR UP Project has increased from 8,970 enrollments in 2007-2008 to 11,004 enrollments in 2008-2009. An integral part of encouraging more students to take the advanced classes is that schools have open enrollment for the Pre AP classes. Building a strong foundation and a pipeline to the dual credit, concurrent enrollment, and AP classes has been instrumental in improving the academic performance of students in the GEAR UP cohort. A high school teacher who was very pleased in the results being achieved in her high school of increased numbers of students taking advanced level classes commented, “I am extremely proud of our school, because for a small school, we offer many AP and concurrent courses as well as offering Angelina College courses at night.” As she further noted, “Our enrollment is up in all of these classes, and I think that’s due to GEAR UP. I really do.”

Administrators and teachers emphasized that improving the academic performance of GEAR UP students would not have been possible without professional development. Enriching professional development opportunities were provided, such as, AP training, participating in the College Board Forum, visiting another school to gain ideas on strategies to implement in a summer academy, attending subject specific conferences, such as, the state conference for the advancement of science.

*Increasing educational expectations of participating students*

Key initiatives in increasing the educational expectations of partner students included targeted student interventions as well as having all students take the PSAT and participate in a math intensive day at Angelina College. Targeted interventions at one partner school included implementing an English course for Hispanic males that targeted Hispanic males to prepare them for the Pre AP and/or the Gifted and Talented Program. The targeted intervention resulted in half of the class members moving into a Pre AP class and half into a gifted and talented program that included two AP classes. As a teacher shared, “This intervention has been a big success.” Another targeted intervention has been provided for female African American students. In this English class, the girls studied female African American writers. The teacher credits the GEAR UP program with being “instrumental in allowing us to come up with flexible programs that are working to increase the number of minority students taking Advanced Placement
classes.” Also, GEAR UP has helped to provide a robotics program for students that, as a teacher reported, “Is helping students to see the relevance of higher academics, such as physics and advanced math.” The students are learning academic content but also key cognitive strategies of problem-solving and working as a team.

The Role of College Visits and College Fairs

College visits have also served as an integral part of increasing the educational expectations of students. During year four of the East Texas GEAR UP project, multiple college visits with small groups of students have been provided to further enrich the whole class college visits that the students participated in during 7th and 8th grade through GEAR UP. An e-mentoring initiative was provided to two GEAR UP campuses. In this intervention, university students who were preparing to serve as secondary teachers were paired with 10th grade students. Topics were explored, such as, “What is the best way to prepare for college, and how is financial aid attained?” At the end of the semester, the high school students who participated in the e-mentoring group project visited SFASU for a program of activities that included the opportunity to meet their mentors in person and participate in class activities. The success of this e-mentoring project was shared through a DVD as a Texas GEAR UP Promising Practice. The DVD was filmed by the State GEAR UP project and was provided to all high school in the state of Texas through the State’s GEAR UP website. A teacher shared the students’ enthusiasm, “On the trip to SFASU, the students were very excited because they were able to e-mail a student from SFA then meet the mentor in person. They were really excited about having a mentor. They didn’t want the program to end.”

Encouraging all students to attend the College Fair with recruiters from multiple universities, colleges, and the armed services was also cited as highly beneficial for students. In addition, a part of increasing expectations for college for students has been requiring students to keep portfolios of their high school accomplishments. Service learning has been stressed. Students are encouraged to document service activities as a resource when they later are completing college application forms. As a teacher stressed, “We have provided nice portfolios where the GEAR UP students can document service. That way, when students are applying for college or even completing job applications, they will have the information to list.”

Follow-up to Four Year Plans

Providing follow-up to four year plans has also been an important step in increasing educational expectations of participating GEAR UP students. As a counselor stressed, “I’ve been conducting follow-up interviews with students about their four year plans, and based on college and career goals, I have changed students to more rigorous classes.” Parents are included in the four year plan discussions.
Improving student and family knowledge about postsecondary opportunities

A part of increasing student and family knowledge about postsecondary educational opportunities has included parent-student meetings to discuss PSAT results and AP Potential scores, mailing newsletters focused on college to parents, mailing a 9th-10th grade Planning Guide to parents, hosting student and parent meetings, strengthening GO College and Career Centers in the high schools. Teachers and administrators pointed out that the population of individuals 25 or older with bachelor degrees in the region is low. A teacher explained that all students are not interested in the PSAT until the scores arrive. Then, through parent meetings and individual discussions with students of ways PSAT scores can prepare the student for taking the SAT or ACT as well as helping to identify targeted areas, students’ interest in the test increases.

Multiple Forms of Communication

The GEAR UP newsletters and 9th-10th grade Planning Guides that are mailed home in Spanish and English were cited as wonderful forms of outreach to families. However, personal conversations were also cited as an important aspect of parental outreach. As an administrator praised the GEAR UP coordinator,

I’d like to give our GEAR UP coordinator a lot of praise for our successes in communicating with parents and teachers. She loves GEAR UP, and I think she is inherent in our success. I’m very proud of the job she does and how much she promotes GEAR UP in the community as well as the school district.

This praise was repeated concerning the work of the GEAR UP coordinators on each of the campuses. Providing personal follow-up with students and parents on students’ academic progress has helped both students and families to understand more fully how to prepare for postsecondary education. A council member shared a comment that was representative of other partner schools’ successes in increasing communication about postsecondary education with parents:

I would add that we have seen great results from our communication with parents. We get compliments from parents on our teachers’ communication with parents and on the value of our website. We’ve provided strong communication to the parents that has really given them good information to use so that they can help their children take the right courses and schedule the right courses to be prepared.

A high school administrator shared the benefits of communicating the PSAT results with parents in helping them understand their child’s score report and ways it has served as a tool for SAT or ACT preparation.

Innovative titles for parent meetings have been used, such as, Cookies, Cokes, and College night. Ongoing communication has occurred. As a GEAR UP coordinator explained,

I send their progress reports and report cards home. If a child is having a problem, I am on the phone with parents. We try to encourage parents to attend meetings on scholarships at schools. Our superintendent shared information about college preparation on the phone call-out system that automatically calls all parents.
Indicators of Success in Parental Outreach

An indicator that parents are receiving the messages about college preparation is the statement by a teacher, “I’ve heard students in the GEAR UP program say, ‘My mother is now going to college.’ We have raised expectations for the students and parents. The project is having a deep impact.” Another partner district teacher stressed, “There is a sense of pride among minority parents as increased numbers of minority students are taking Pre AP. Taking these courses is serving as confirmation that the students can go to college.” Another partner school council member emphasized, “We are required to contact at least 30 parents a six weeks. We’re discussing the child’s progress with parents on a regular basis.” The teacher admitted, “I’ve done a much better job of communicating with parents, because I’ve been forced to. But, you know what? I’m happy.” A teacher from still another partner district shared a positive result of targeted outreach by stating, “We had 70% of the parents come for a meeting of the African American girls’ English class.” He further added that many of the parents also requested a reading list of the literature written by African American authors that the students were reading. Another council member from another partner school emphasized that including parents on college visits and hosting AVID family workshops are “very valuable.”

The Strength of Community Partnerships

Results in working to improve high school graduation and college-going were strengthened through community partnerships. The East Texas GEAR UP Project partnered with Top Ladies of Distinction to host a community wide effort to share the importance of preparing for college as part of a special program during Martin Luther King week. This project resulted in over $16,000 in matching funds through the volunteer efforts. The GEAR UP partner, Top Ladies of Distinction, worked closely with the GEAR UP special projects coordinator to implement this program. Enlisting the support of community partners, such as Top Ladies of Distinction and churches, is another way the project is working to improve high school graduation.

Linking with External Initiatives

The East Texas GEAR UP project partnered with Sky Ranch in providing an opportunity for students to attend a Leadership Camp where students gained leadership skills as well as goal-setting strategies and knowledge of college preparation. These students have, in turn, assisted other students in understanding the steps needed for college admission through panel discussions and through the GO Centers at the high schools. The Go Centers are part of the State of Texas College for Texans campaign to provide increased numbers of students with college and career information as a strategy in increasing the college-going rate in Texas.
**Working to Meet External Performance Measures**

The East Texas GEAR UP partner districts have worked to meet the Annual Yearly Progress (AYP) status. The final AYP results for Year Four have not been received. For Year Three of the GEAR UP project, six of the ten districts met AYP. All districts have worked hard to meet the goals of AYP for Year Four. Results will be forthcoming. For the State of Texas Academic Excellence Indicator System (AEIS), one district received the academic rating of Recognized and the remaining nine districts received the academic rating of Academically Acceptable. Each of the districts have aligned curriculum, implemented plans to improve attendance, and targeted specific subject area needs through a sustained process. The East Texas GEAR UP project works in concert with the districts as a collaborative partner with a clear alignment of GEAR UP goals and AYP and AEIS goals to prepare students for graduation and for college.

**The Success of Talented and Caring Teachers**

The teacher is the primary determiner of student learning in a school and second to this influence on learning is the principal’s role (Leithwood, et al., 2005). The principal serves as the catalyst in creating a school culture that focuses on improving learning of all. The East Texas GEAR UP councils reiterated the importance of quality teachers in influencing the success of the GEAR UP project. Administrators stressed that having high quality teachers who care that students achieve to high levels is making a difference. As one administrator shared,

> I think our biggest strength and what helps us the most is our teachers. They push. They provide everyday attention to their lessons to make the activities interesting. They encourage the students to come for tutorials and stress that we are here for a purpose and that is to improve each student’s life and to help students become leaders.

Another partner school council member shared, “The teachers are phenomenal. We care about our students very much. We take our jobs very seriously, and we care about each other.” Another campus partner stressed, “We have great teachers. There are a lot of teachers that really care about the students and try to set high expectations for them to do their best.” Another campus partner shared,

> Our teachers are expecting more. The teachers that are using the AP teaching strategies are seeing more success and interest from the students. The interest generates success. It is changing the campus atmosphere. The students seem to be excited to be in class. To me, that’s what increasing academic performance is all about.

The school administrators are also influencing the ongoing commitment to a vision of helping all students to prepare for some form of postsecondary education.

**The Success of Distributed Leadership**

Distributed leadership by all members of the GEAR UP councils and by community leaders further adds to the success of the GEAR UP partnership. As a teacher stressed,
“We promote preparing for college all the time, and the students listen.” The ongoing emphasis on college preparation is expanding horizons of students that continued to grow. As a teacher expressed, “We were offering one physics class. Now, we’ve expanded physics, and we now have a robotics team, and other clubs have come from this. The wave of one opportunity strengthens other opportunities.” The project allows the flexibility to design special strategies to meet campus needs with a multiplying effect. Another teacher added that she had seen the benefits of the GEAR UP initiative in her regular classes:

I implemented the AP world history course at the request of my administrator last year. The rigor was more challenging than some student expected, and I actually raised the rigor in my regular classes. I’ve seen success stories in my regular classes as my tests are now strictly essay and students are rising to the challenge.

Another teacher added, “We are providing students with opportunities and avenues to think about ahead of time.” Another teacher stressed, “The rigor and involvement of my older son who is in the GEAR UP cohort is influencing my younger son.” She said, “He sees what his older brother does and has decided to do what he is doing. It’s more work on me, but it is good work.”

The Success of the School-Community College-University Partnership

The partnership with Angelina College and SFA is also credited as a part of the project that is having great impact. The partnership provides a structure for sharing ideas and collaborative planning on ways to meet the goals of the GEAR UP project. Teachers note that the synergy of an entire project joining together for initiatives, such as, college visits “is really helpful for the GEAR UP students to see others also involved in this project.” The partnership also stimulates idea-sharing of successful strategies yet allows the flexibility to design specific strategies to meet campus needs.

The Success of Professional Development Opportunities

The professional development opportunities were also cited as an aspect of the project that has great impact. A representative comment of teachers was, “I think the professional development that teachers have received has enriched our program.” The teacher further clarified, “When you go to a good conference or workshop, you gain knowledge that you bring to your classroom, and your enthusiasm trickles down to your students. It helps put rigor in all your classes.”

The Success of University-Based Initiatives

Other aspects of the East Texas GEAR UP project that are highly successful are the university-based initiatives, such as, tutoring and e-mentoring. As a teacher explained, “The tutors that we have provided valuable college information to students.” The project has “afforded the opportunity for success,” explained another teacher, “because all of us had some things we wanted to implement, but the GEAR UP project brought us all to the table. It gave us a vehicle to get things accomplished.” As an administrator shared,
It’s not just my vision. It’s everybody’s vision sitting here at the table, and that probably speaks volumes more than anything. We have a concerted effort, and we’re all on the same page about that. We believe in developing whatever we think will help make our students successful. That, more than anything, I think is the success of our program.

A teacher of another partner campus stated,

The GEAR UP program is strengthening students and, in return, is strengthening our schools. This project, because of the mentoring programs and the way it set up, gives an opportunity for all students to get noticed. As teachers, we’re seeing strengths of students we might not have seen before. This program makes us look at every student, not just a few.”

The Success of College Outreach

College and university tours, campus panel discussions by college students, and tutoring and e-mentoring, according to a council member, “give the students a connection with college-aged students” and are credited as primary successes in demystifying college and helping students to see themselves as future college students. College experiences, such as, robotics classes and geometry camps on college campuses have particularly been effective in increasing students’ aspirations for postsecondary education according to council members. Council members commented that students went on college visits on Saturday which points to the high level of interest. Council members reported that students who never had pictured themselves on college campuses are now in welding programs or nursing assistant classes at the community college. As another administrator shared, “Until we started the GEAR UP project, our students had a limited number of things that they believed they could do. I think they have now had some experiences and opportunities that have changed their outlook of the future. I think we have definitely expanded some horizons.” Another representative comment of a teacher was, “I think more students will be participating in AP courses as a result of the awareness from GEAR UP. GEAR UP has provided a way to make our students aware of what’s out there.” Another partner school teacher added, “Every year our classes get more intense. We put more rigorous assignments into them. We want students to push themselves to raise the bar higher.” Another teacher shared, “We expect every student to do some form of postsecondary education after high school, and they know it.”

The Success of Enrollments in Advanced Level Courses

The addition of Pre AP and Advanced Placement, dual credit, and concurrent classes and encouraging more students to participate in the advanced level classes have been successful initiatives in preparing students for the rigorous requirements of college level courses. As a teacher shared, “We are preparing our students so that they won’t go to college as a freshman and drop-out by Christmas due to lack of preparation. These initiatives are helping students to expand their knowledge of choices for careers and postsecondary preparation. Targeted interventions, such as, the English class for Hispanic males and the English class for African American girls’ at a partner school are credited as strong successes in meeting an identified need to increase minority
participation and success in advanced level classes. A teacher noted the success of opening access to advanced level classes to all students. As she stated, “At one time, students were in the AP courses because of who their parents were.” This comment supports the research of Noquero (2005) who found that low income parents were less likely to question their child’s schedule because of limited knowledge in navigating the high school experience as a step in the journey toward college. Now, the partner schools are using AP potential, analysis of TAKS scores, PSAT results, and classroom performance to identify students for participation in the advanced level classes. As one teacher shared, “I had a student who made C’s every six weeks, but ‘blew the top-off’ the TAKS test. I saw this and said, ‘There’s an AP student.’ We had another student in regular English who was from a tough situation who we talked to and said, ‘You are capable of much more. We can see that.’ At semester, we moved her into an AP class, and then we got her involved in UIL academic events. We told this child who had attendance issues, ‘You’re going to do this. There’s no excuse.’ Now, she is all smiles walking down the hall. We looked not only at the child but also at the data behind the child.” A department chair at another partner school shared a similar story by stating that one student had not even passed TAKS, but they knew he was very capable. Through the support of the Hispanic male English class section, he has not only passed the TAKS test but is now in a Pre AP class.

The Success of an Increase in Parents’ Expectations for College

The change in some parents’ expectations for students was a success that was noted even though parent involvement was also cited as a continuing challenge area. The newsletters to the homes and personal contacts are having an impact, though there is still a need to continue the effort.

The Success of Expanded Special Initiatives

Other aspects of the GEAR UP program that have had a strong impact on students’ preparation for college include expansion of college and career centers on campuses, tutoring for students who need extra help, guest speakers, and leadership institutes for students, such as, the SKY Ranch Leadership Development Camp with an emphasis on college preparation. As an administrator stressed, “We have expanded opportunities. I think just creating more of a college-going culture is paying off, and some of the other classes are seeing the advantages, too.” Another partner school teacher shared that benchmark test scores were greatly improved and that the tutorials were really helping students. Partner schools were increasingly providing the tutoring as part of the school day so that students who work or engage in extracurricular activities could access them.

The Success of a Strengthened College-Going Culture

Achieving results by the students in partner schools were primary successes of the grant. As a teacher shared, “It is becoming automatic to say to students, ‘When you go to college or to trade school, not if you go to college.’” Another partner school teacher emphasized, “Our primary success has been the light coming in students’ and parents’
eyes that we have gone above and beyond to make postsecondary education information available and to reinforce that education doesn’t stop at high school. A strength has been the unity and understanding of postsecondary education that has increased for students and parents. Other parents are asking, ‘How can my student be part of GEAR UP?’ Our success is spreading.”

Barriers or problems encountered in administering the grant and ways barriers have been addressed

A change process occurs over time, not as a single event but as a process that is characterized by incremental steps with challenges as well as successes (Fullan, 2008). Sustained leadership is vital in facilitating a change process for a systemic change effort and is characterized by support from administrators, counselors, or coordinators for a district as well as campus level educators (Duffy, 2005). Seeking ways to prevent the challenge of competing priorities is important in maintaining a focused school improvement effort (Fullan, 2008).

Transitions in Leadership

In the fourth year of the East Texas GEAR UP project, the barrier of transitions in campus and district leadership has presented a challenge. As one superintendent shared, We have a new counselor and a new superintendent this year, and I know other schools have experienced this in GEAR UP. Getting everyone up-to-date on what we have been doing through year four of the project is a challenge. We seek to meet the challenge through communication, making sure that everyone knows what we’ve been doing and what’s been successful.

Changes in personnel have presented a challenge for the GEAR UP project. Ways this challenge has been addressed was through on-site district meetings with the project director and project leaders, particularly, with new administrators, counselors, or coordinators for the district. GEAR UP leadership institutes were designed to clearly meet project objectives, and a Leadership Manual pertinent to the project was provided to all participants. Responsibilities of the GEAR UP councils regarding project planning, implementation, and documentation of GEAR UP and matching funds were discussed as listed in the GEAR UP Leadership Manual. Individual meetings with persons responsible for the expenditures and matching documentation for each district were also provided. Attendance at the leadership institutes was required for council members as was attendance at the partnership’s monthly GEAR UP meetings. The meetings provided an opportunity for dialogue and data analysis in addition to information that was shared by outside consultants. Careful selection of consultants to specifically advance the East Texas GEAR UP goals and objectives was provided. For example, Vivian Lee, a consultant from College Board’s National Counselor Initiative, served as a presenter of information regarding the need for increased student participation and success in advanced level courses as a prerequisite to success in college. In addition to locally designed leadership institutes, teams from campuses participated in other professional development opportunities that were pertinent to GEAR UP, such as, the GEAR UP
Capacity Building Workshop. An advisory council meeting of business and community leaders as well as school superintendents was held bi-annually to further an understanding of progress toward GEAR UP goals as well as to understand ways that GEAR UP and the P-16 Council for Angelina and Nacogdoches counties could work together to achieve the mutual goals of preparing more students for postsecondary education.

GEAR UP coordinators were required to meet with the GEAR UP councils and the superintendents to reach consensus on the plans. These opportunities for dialogue and collaborative planning provided an opportunity for new personnel to gain an understanding of the GEAR UP goals and objectives and to understand the campuses’ progress to date in meeting the goals. Ongoing dialogue and communication served as a means for strengthening buy-in of all new project personnel. GEAR UP coordinators were required to offer professional development for all new grade level teachers to help each teacher to gain an understanding of GEAR UP goals, objectives, and interventions. In one district, a change in leadership resulted in a request by the district to withdraw from the project. The district was the smallest district in the collaborative with a cohort class of 40.

Lack of College Awareness

A second barrier reported by GEAR UP councils in some of the partner schools was a lack of college awareness by parents and community members. With the number of adults over 25 with a bachelor’s degree at 13% for our region, many of the parents may not have the knowledge of the steps that are needed in preparing for postsecondary education or an understanding of ways to receive financial assistance in achieving a college degree. As a GEAR UP council member shared,

We have been going through the educational process through the GEAR UP partnership to bring that wall down of lack of understanding of the college and financial aid process, tearing down those barriers that restrict students from attending college and letting the parents know that college is attainable and accessible.

Newsletters mailed to parents in English and Spanish, meetings at various times for parents, Planning Guides provided in English and Spanish about the steps for college preparation in the 9-10th grades, and personal outreach were ways the barrier of lack of understanding of the college admission process was addressed with parents.

For some parents, gaining an understanding of the importance of students taking advanced level courses was a challenge. Counselors, administrators, and teachers shared information with parents that more important than the students’ overall grade point average is the students’ success in rigorous advanced level classes to students’ later success in college as Adelman (1999), a U.S. Department of Education research analyst, emphasized in the report, Answers in the Toolbox. A teacher shared, “Changing the mindset has been a barrier.” However, the teacher also added, “Parents are beginning to realize that when we say college, we are also referring to some form of postsecondary education.” Sharing information with parents about community college, technical school,
certification programs, and the military has also helped parents grow in understanding of the options possible for students.

On the parent survey 91% reported a belief that their child would attend college. However, 23% were not sure their child could afford a four year college and 7% listed probably not or definitely not in response to whether their child could afford a four year college. GEAR UP campuses shared information about scholarships and financial aid with parents through increased outreach efforts. As a GEAR UP council member expressed,

A lot of students and parents think if they don’t have the money that their child is not going to be able to go to a college, university, or trade school. We are seeking to open the doors to postsecondary education and to let students and parents know that lack of money is not an excuse not to go to college.

Sometimes parents have not encouraged students to plan for attending college because their financial resources were limited. GEAR UP educators have met with parents to encourage them to stress the importance of postsecondary education. A teacher stressed, “The Hispanic parents do care, but sometimes the boys want to help financially.” She reported that she calls the parents, and together, they encourage the student to stay in school. Another teacher stressed,

Some students have a mindset that when they graduate, they should go to work as opposed to if I graduate, I’ll go to college and get a better job than I could get at the mill. We are working to break the barrier of the first child in a family to go to college by communicating more often with the parents.

Conflicting Priorities on Time

Another barrier that was reported by GEAR UP council members was the barrier of conflicting priorities on time. In this age of high stakes testing and accountability, finding time to provide tutorials in school so that students would come to the sessions and time to take students on college visits when students also needed to be in class sessions as part of the instructional process was difficult. Teachers expressed a concern, “Wonderful ideas are shared, and it would be wonderful if we could implement them, but we still have to teach school and help students to pass Texas Assessment of Knowledge and Skills (TAKS). Finding time is difficult.” Time to schedule students in activities, such as, college visits and Leadership Camps was difficult. Also, council members reported that students’ work schedules make the rigorous expectations of homework in advanced level classes difficult for some students. Preventing students from working more than the 20 hours a week that is recommended as the maximum work schedule for high school students is difficult. Council members reported, “Most of the students we have work at part-time jobs. That limits what we do after school and on Saturdays.” To respond to this challenge, in school tutoring has been moved from after or before school to within the school day by many of the partner schools. Another way a campus partner reported that support is being provided for the student is through establishing student study groups. A teacher reported, “Study groups have been established for the Pre AP and the AP students. Some of the students are really getting excited about this opportunity. They have a time before school that they meet.” For some students who attended activities,
such as, Sky Ranch Leadership Camp, teachers reported that students talked through issues and learned ways to be leaders, but it has been difficult to schedule follow-through. However, teachers reported that the Sky Ranch opportunity was very beneficial in stating, “We try to make contact with each student who attended Sky Ranch. We do have a pep rally scheduled that the students will plan.” A counselor added that she is able to draw upon this positive experience when the students experience problems from a counseling standpoint. Time to offer concurrent classes and also allow students to remain active in extra-curricular and co-curricular activities has led to an 8-period day with shorter class sessions. Pre AP and AP teachers reported in some partner schools difficulty in having time to provide extra help during the class session. Before or after school tutoring is being provided on these campuses. A teacher proudly reported,

Recently, a student said, ‘I’m proud of myself. I chose attending tutoring instead of visiting with my friends, and I’ve not made anything less than a B on homework, and on tests, I’ve made all A’s. I’m proud of myself.’

The teacher added, “We are teaching students to make right choices.” Scheduling the advanced level classes so that the student do not have to make difficult choices of participating in co-curricular activities or advanced level courses are being addressed by encouraging students to take some high school courses in middle school or summer school to gain flexibility in their high school schedule.

**Students’ Lack of Motivation**

Council members also reported that lack of students’ motivation to set long-term goals was a challenge. Designing engaging lessons, communicating the message of the benefits of postsecondary education to a student’s future financial success or life, and demystifying the college experience were ways that GEAR UP campuses have sought to increase student motivation to achieve postsecondary education. These efforts are achieving positive results as the GEAR Up survey of 10th grade students that documents 87% of GEAR UP students are planning to attend college with 6% planning to attend trade school.

**Need to Increase Minority Low-Income Student Participation in Advanced Level Classes**

The need to increase minority students of low income backgrounds’ participation in advanced level classes led to analysis of access to advanced level classes providing special forms of outreach or interventions, such as, the AVID program implemented by one campus partner and an English class for Hispanic males provided by another campus partner. Parents’ nights when information was shared only in Spanish were held to target a growing Latino population in sharing information about college. Newsletters and planning guides in Spanish were also provided. Personal one-to-one outreach to minority low income students to participate in advanced level classes was provided by teachers, counselors, and administrators. Counselors, teachers, and administrators reported that data analysis of TAKs scores, PSAT results, and the AP Potential report has assisted in identifying additional students who would benefit by participating in advanced level classes. Teachers communicated, “We feel like a C in AP or Pre AP chemistry is worth more than an A in regular chemistry.” Parents and students are informed that study
groups will be formed to assist students in these classes. One partner school even provides neon bracelets that say, “Advanced Placement,” to allow the students to pass in the halls to a study group meeting.

**Failure to Take Steps to Attend College**

A barrier that exists nationally in middle school is that 95% of the students say that they plan to attend college but they fail to take the steps needed for preparing for college (Mau & Hitchcock, 2000). GEAR UP councils have combatted this barrier to college enrollment by requiring all 10th grade students to take the PSAT and by providing sessions where the scores are interpreted. Plans are being made for the hiring of a college coordinator at Angelina College who will ensure that all students complete the common college application for Texas and complete the FAFSA. Campuses are providing multiple sessions for FAFSA and college admission processes.

**Lack of Course Rigor**

Another barrier to preparing for college has been the lack of rigor of high school courses. Teachers have attended professional development to strengthen the rigor in classes. In addition, all AP syllabi have been submitted to a College Board audit to verify the level of rigor of the courses. As more rigorous content is added, some students are not rising to the challenge. A teacher stressed, “We need more vertical alignment and communication of expectations in the lower grades so that students aren’t surprised how rigorous the courses are.” This need is being addressed through vertical team meetings and the curriculum alignment process.

**Utilization Evaluation**

The theory of change that the evaluation plan was based upon of utilization evaluation emphasized that the primary purpose of evaluation should be to strengthen the attainment of goals, determining areas of strength to build upon and areas of weakness to strengthen. The context of the project is in rural East Texas, a partnership of 10 partner districts, each exceeding a student population of 50% low income students; a community college; a university; and community and business partners. Inputs of the project included the project participants; GEAR UP councils; partner school students,’ faculty and administration; the university steering team; an advisory council; and partner representatives. The primary components of the initiatives included whole cohort interventions to strengthen a college-going culture with increased student access and success in rigorous classes; targeted interventions, such as, mentoring and tutoring; parent and student outreach and support; data analysis to encourage on-time graduation and high student attendance; local campus plans; and overall GEAR UP initiatives. Outcomes for students, teachers, administrators and parents were analyzed through multiple data sources. Primary data sources included a parent and student survey, focus group interviews with GEAR UP councils, professional development evaluation forms, Academic Excellence Indicator System campus results, transcriptions of GEAR UP council meeting discussions, and specialized intervention evaluation, such as, tutoring
logs, e-mentoring evaluations and logs, community project evaluations, and leadership institute evaluations.

Evaluation Data Sources

The evaluation team identified four primary areas for project evaluation: (1) student progress and achievement and the impact of each project activity on these outcomes; (2) quality and impact of professional development activities for teachers; (3) effectiveness of project management; (4) the extent to which project activities meet stated goals and objectives. The team utilized formative, summative, and quantitative/qualitative evaluation strategies to ensure the impact of the project strategies and activities. Data collection was based on the goals, outcomes, and measurable objectives for the project. The project director and principal investigator were responsible for reviewing and communicating to all staff and partners the baseline data against which project effectiveness was measured. Focus groups were used to collect qualitative data to evaluate the effectiveness of the strategies and for preparation of this annual report.

Analysis of the Data

Ongoing analysis of the data was facilitated through providing campus data on student participation and success in advanced level courses, accountability data, and parent and student survey results for discussion during leadership institutes, campus council meetings, and advisory council meetings. In addition, the university steering team of the project director, the special projects coordinator, and the principal investigator engaged in ongoing study of the data to discern important next steps. For example, evaluation data from each institute’s evaluation were used in planning the next leadership institute. The evaluation data led to targeted professional development for the project in year four of a leadership institute for GEAR UP councils, for administrators, and for counselors. Evaluations of conferences attended contributed to the selection of speakers and the format of the Leadership Institutes. Parent and student survey data were analyzed using SPSS software, and comparisons between the first survey results and the present results were analyzed for the overall project and per campus.

Continuous Response Loop

A continuous response loop for evaluation was established through monthly coordinator’s meetings to give all partners the opportunity to provide input into the ongoing development and expansion of the project, based on their observations and experiences. The feedback and central coordination for assessment ensured that evaluation activities were articulated and communicated to all project participants.

A Shared Understanding and Commitment to the Goals

A shared understanding of the purpose, rationale, and processes of the innovation are essential if an innovation will be sustained (Fullan, 2007, Hargreaves, 2007). Open collaboration and dialogue can assist in the endeavor to promote systemic change as
policies, practices, and processes are reviewed to discern important next steps (Duffy, 2005). The East Texas GEAR UP districts, campuses, community college, university, and community have achieved substantive gains in the number of secondary students from low socioeconomic groups who are participating in advanced level courses in secondary school and preparing for postsecondary education. Duffy (2005) argues that campus reform alone is insufficient for successful school change processes as policies and practices at the district level can work against campus initiatives. Both the district and campus need to be working to achieve a shared vision for sustainable reform to occur (Duffy, 2005). In the East Texas GEAR UP project, the GEAR UP focus has been communicated and implemented from both the district and campus levels. That the project is not an isolated, add-on project intensifies the assurance that the activities and outcomes will be sustained over time. The project is viewed as a way of meeting district and campus goals and is characterized by facilitative, collaborative leadership. The partnership studies data through an ongoing process of improvement in order to meet the GEAR UP goals and objectives. It is noteworthy that the goal of achieving systemic change is frequently communicated through group meetings, written materials, and individual conferences. That GEAR UP partners were encouraged to implement design practices and processes to achieve systemic changes at the local level rather than a pre-set mandate of one method of implementation for all campuses has encouraged the needed buy-in for the goals and activities that will ensure that they are sustained over time. The community involvement has reinforced the need for the project and provided a web of support to sustain the project’s activities.

Practices and Processes that Influenced Sustainability

In this project, practices and processes that were evident through analysis of the evaluation data of reasons the project activities and outcomes are likely to be sustained over time include:

- GEAR UP goals were an integral part of the district and campus goals.
- Sustained leadership by individuals who ‘walked the talk’ was provided.
- Continuous quality professional development has been provided through the project.
- Districts and campuses have studied their performance data and survey results, targeted needs, and continually designed programs to meet the needs.
- Flexibility has been provided through the project to design activities to meet local needs.
- Changes were made as part of a school reform effort not through a mandate of a program, but through embedded changes that strengthened access and support for advanced level courses, that demystified college, that provided professional development, and that increased parents’ and students’ knowledge of the steps for college admission and financial aid.
- A structure of collaboration and a network of support has been provided to the partner schools.
• The project has worked in concert with similar initiatives, such as, the university P-16 Council that was funded by the State of Texas to create a synergy and a shared understanding of the needs.
• A process of continual planning, implementation, evaluation, and assessment has characterized the project’s activities.

Ways Systemic Changes were Fostered

Systemic changes that have occurred are further illuminated through the following partner comments:

I think that, as far as sustainability of the Advanced Placement program, the teaching strategies will be there for as long as these teachers stay with the district. The availability of the advanced courses, such as the dual credit and AP courses is going to remain as part of the partnership with the community college and university. I think instructionally, the systemic change of greater opportunities for advanced level courses will remain.

The benefits of the systemic change of increased knowledge and skills were reinforced by another teacher:

I think that the professional development that the teachers have received has enriched our programs. When you go to a good conference or workshop, you bring back ideas to your classroom, and your enthusiasm does trickle down to all students. This also helps put rigor in all the classes. The tutors also enrich our students and that gives them even more ammunition to strengthen students’ academic preparation and to be ready for college.

Additional Initiatives that will Sustain

College and career centers. Another council member commented that the enhanced college and career centers are another systemic change that will remain. The systemic change of strengthening a college-going culture through ongoing communication of the benefits of postsecondary education with outreach and support to parents and students was also discussed. As a teacher explained,

When I first started teaching in East Texas, in this county, the students thought they only had one or two choices. They could either go to college or they could go into the logging woods. I think they are now seeing that there are choices for them. When they’ve attained additional education after high school, if they remain in our community, this will be good. Then, their children will have this different view of the importance of postsecondary education.

Another teacher emphasized that data are now analyzed in seeking students to participate in advanced level classes rather than providing obstacles to admission to these classes through policies or practices. This systemic change in mindset of encouraging rather than limiting students’ access to advanced level course work was cited as a systemic change that will sustain.
Support for students. Teachers commented that support will continue to be provided in school, such as, study groups, advisory periods, and tutoring. As a council member emphasized,
“We already have documentation that these students have moved to this step, and we’ll just build on that. We certainly won’t take a step back.” Another teacher added, “I can’t really see us saying, “Oh, you know what? These advanced classes are just too hard. Let’s just go backwards and not do any of that. I think that’s probably the most positive thing that GEAR UP has created. It’s been exciting to see it.” Still another council member reinforced, I think the resources of GEAR UP have allowed the school to establish an attitude among the employees and the students of higher level projections for higher level education. That attitude will maintain because the practices and processes are in place. GEAR UP has established a mindset by the teachers in the classroom. This will sustain.

A GEAR UP administrator stressed,
Until we started the GEAR UP program, there were a very limited number of things that many of the students really believed they could do. I think now they’ve had experiences and opportunities that have changed their outlook on what their future will be. They have siblings coming behind them, so I can see GEAR UP’s influence as a longer lasting impact.

Ongoing practices that were strengthened. Some practices were begun even before the GEAR UP project began, but the way they will be implemented is a change that will sustained. An administrator explained,
We had given PSAT before GEAR UP began, but we have made improvements in the number of students who are taking the test. We have developed a College Center that will sustain. Our curriculum writing in all four core areas will be a lasting change. We are checking more closely to see that the curriculum is being taught and that students are mastering the curriculum. All of these things are sustainable and are going to continue as a systemic change even when the grant is over.

Increased communication. Increased communication with parents through enhanced websites, principal newsletters, monthly newsletters, and one-on-one conversations is a systemic change that will sustain. In short, a council member commented,
We try to give information to the parents about strengthening the college-going culture and really give them good information to use so that they can help their children take the right courses and be prepared. Taking the SAT or ACT and the PSAT tests are yielding positive results. There’s no doubt that we will continue to stress this.

Conclusion

Raymond Paredes, the Texas Higher Education Coordinating Board Commissioner of Education, in a recent College Board conference address, stressed the importance of rigor and academic support for a student’s successful preparation for college. As students
transition to high school, taking rigorous courses as part of the Recommended or Distinguished Graduation Plans prepares them for the next steps of postsecondary education after high school. Adelman (1999), in a research study entitled “Answers in the Toolbox,” identified that the rigor of courses a student takes in high school matters more than the student’s grade point average or class rank in the student’s later success in postsecondary education. Success in rigorous courses in high school is also important for a student’s success in careers. The Undersecretary for the US. Department of Education, Sara Martinez, in speaking to GEAR UP teachers, counselors, coordinators, and administrators emphasized that 90% of the fastest growing jobs in the United States require postsecondary education. Keith Johnson, Lockheed Martin General Manager, in a GEAR UP advisory council meeting reinforced the need to prepare students to a high level through a local comparison by stating, “The careers of today are not going to look anything like the careers ten years from now in this changing job market.” He further elaborated, “For example, an electrical engineer ten years ago isn’t doing many things an electrical engineer is doing today. The jobs are different. On paper, they are both electrical engineers, but, in reality, what they are doing is different.” In this global economy characterized by change, learning how to learn will be vitally important.

The East Texas Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) project seeks to assist students in understanding the vital connection between academic preparation and careers. As a superintendent stressed in a GEAR UP advisory meeting, “What we’re trying to do is to show our students that education brings about more choices in life.” The GEAR UP project schools have worked hard to strengthen the academic preparation of students, such as, encouraging participation in Pre Advanced Placement, Advanced Placement, and Dual Credit courses. However, just as rigorous coursework is influential in student’s later success in college and careers, support for success is also vital. The partner schools are providing that support through encouraging students to seek help, if needed, through the school’s tutoring services that are provided, through parent and student outreach, and through GEAR UP partnership initiatives. The East Texas GEAR UP program provides college campus visits, tutoring, and mentoring to ensure each student’s success in the transition to postsecondary education and to careers. Students in the East Texas GEAR UP project are experiencing both rigor and support in high school as a step to success in the transition from high school to college and careers.

By Year Four of the East Texas GEAR UP project, the number of enrollments in advanced level courses increased 46% from the baseline number which more than doubles the final project goal of a 20% increase in enrollments. The increase of 1,937 total enrollments for Year Four represents a 93% increase in the number of minority students who were enrolled in advanced level classes from the baseline number and exceeds the 20% increase that was projected to be achieved by the end of the GEAR UP project. The increase from a baseline of 2,149 to 4,177 enrollments of low income students in advanced level classes represents a 91% increase in enrollments by Year Four rather than the 20% projected growth by the end of the project. Increased numbers of students are taking college level courses in high school through dual credit courses,
concurrent courses, or AP courses. 93% of the 10th grade students were completing algebra by the end of 10th grade. Only 11 students did not progress to 10th grade in the GEAR UP cohort, and targeted assistance is being provided to these students for credit recovery through programs, such as, Plato, A+ Odyssey, and Virtual High School courses.

For the parent survey, with a 79% return rate, 37.4% of the parents stated that they had knowledge of the courses their child needed to take in high school to prepare for college up from 14% who expressed having this knowledge in 2006. This increase in knowledge is a 23.4% increase and exceeds the benchmark increase of 10%. In the 2006 parent survey, only 10% of the parents had received any information about the availability of financial aid to help pay for college. In the 2008 survey, 16% of the parents acknowledged that they knew of the availability of financial aid. In summary, the East Texas GEAR UP project is meeting and exceeding project goals and objectives. Through sustained and focused efforts characterized by strong leadership, students’ preparation for college is being strengthened as well as their preparation for adult life.
The Diffusion of Geographic Information in Taiwan’s Senior High Schools

Jinn-Guey Lay\textsuperscript{a}, Yu-Wen Chen\textsuperscript{b}

1. Introduction

Geographic Information System (GIS) developed in North America in the late 1950s. With the gradual popularity of computer technology, the concept of applying computers to illustrate maps and to process geographic information began to emerge. However, early application was only limited to few governmental departments and academic institutions. In the 1980s, geographic information industries gradually took shape. Companies created packages that include a number of GIS software, allowing the functions of storing, searching, and demonstrating data. These packages were broadly accepted by governmental agencies and universities, facilitating the application of GIS. After the 1990s, geographic information further spread to industries, high schools, primary schools, and even to normal citizens. With the advent of the 21\textsuperscript{st} century, global positioning system (GPS) and information networks enable GIS to have an even wider outreach to normal citizens in various parts of the world (Bednarz and Ludwig, 1997). Google Maps and Google Earth are quintessential examples of this advancement.

Such development also triggers policy-makers and educators to ponder the utilities of teaching GIS in K-12 education. GIS may allow students to know how to analyze geo-data, offering them new ways to think and explore our world (Drennon, 2005). In traditional geographic education, teachers tended to confine themselves to conventional maps and pictures in textbooks for their teaching. GIS provides alternative potentials for students to know about our world. It is also beneficial for those students who enjoy learning through visual stimulation (Kerski, 2003). In the US, for instance, geographic information techniques were included into the K-12 geographic curriculum in 1994, and were recognized as basic abilities which citizens need to have in our modern time.

In Taiwan, the emergence and gradual development of geographic information education in high schools is itself a process of innovation diffusion. Universities are breeding grounds for the ideas to introduce geographic information to high school geography teachers and pupils. Through various communication channels and social networks, such ideas gradually spread to high schools. The crux of this paper lies first of all, in examining the current status of GIS diffusion among high school geography

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teachers in Taiwan, and secondly, in discussing the diffusion mechanisms at work in a wider social network context. Understanding the process of diffusion can then direct us to know what prompts and what hinders the diffusion, enabling us to provide useful suggestions for GIS-promoters to adjust and improve their strategies in the future.

The structure of this paper is as follows. In the second section, we introduce recent development of the geographic information in K-12 education in Taiwan. We seek to place the diffusion of GIS among high school teachers in the context of networks that these teachers are embedded in. We believe this network perspective has been poorly understood in current literature, but it is necessary because GIS adaptation and utilization occurs in specific contexts in practice. In the third section, we specify our questions. The fourth part is about our method and data. We introduce a number of ongoing projects initiated by the first author to critically evaluate the diffusion of geographic information in Taiwan’s K-12 education. As some projects are ongoing, we do not have complete sets of data yet. However, we provide some preliminary findings that would allow us to have a broader picture of the development in Taiwan in section five. Our empirical finding confirms that the network approach, which we laid out in the second section, is indeed necessary for comprehensive understanding of GIS diffusion in Taiwan. In the concluding section, we will highlight what will be completed in our continuous research.

2. GIS Diffusion in K-12 Education

Geographic information came into prominence in Taiwan’s high school geography education in 2006 when a large portion of hours were added for learning GIS in the standard curriculum. Take the 10th grade geography course as example, among the 36-hour teaching in one semester, 1/3 is about cartography as well as concepts and applications of geographic information. Geography is compulsory in the 10th and 11th grades courses. This means that all high school students in Taiwan are equipped with basic GIS concepts. This new geography curriculum immediately leads policy-implementers and educators at the front line to ponder some foreseeable challenges. The main obstacles are as follow:

First of all, concerning the hardware and relevant facilities, there need to be sufficient numbers of modern computers in high schools. Next is the question of software. Commercial GIS software is highly complicated and professional. It is not easy to learn in short time. Even high school teachers have learned it, applying it in their own teaching constitutes another task. Hence, it is better that schools have personnel who can provide technical assistance to facilitate the application and maintenance of relevant software and hardware.

Thirdly, there is lack of time for teachers to get familiarized with GIS and to design GIS-based curriculum (Bednarz and Audet 1999; Meyer et al., 1999; Kerski, 2003).

Fourthly, there is deficiency of educational training for teachers. Most teachers first
get to know GIS through on-the-job training, while trainees rarely have the chance to learn GIS before they become formal teachers. If during the period as trainees, teachers do not have solid GIS training, they need to compensate this part in their career later (Bednarz and Audet, 1999; Kerski, 2003).

The challenges of time and resources could be incrementally tackled with governmental supports. It is, however, not facile to improve teachers’ capacities in short time. Some scholars have pointed out the difficulty arises from how geography teachers regard the utilities of GIS (Meyer et al., 1999; Kerski, 2003). Some teachers might just treat GIS as map-generating tools. They use GIS to create blank maps for teaching. Some treat GIS as a tool to collect and organize data as well as to facilitate regional comparison (Bednarz and Ludwig, 1997). The way teachers perceive the value and importance of GIS varies. So is their level and scope of interest and engagement in applying GIS in their teaching.

The above obstacles have been confirmed by scholars studying GIS promotion in countries such as the U.S. We have also envisioned similar struggles facing GIS-promoters in Taiwan. One of the main purposes of this paper, as will be shown in our analysis, is to understand the obstacles facing GIS-promoters in Taiwan. In addition, we intend to add one theoretical perspective to this topic, that is, the factor of “networks” in GIS diffusion. Geographic information system is a new knowledge and technology. It diffuses among members of a society. The popularity of a new technology or concept usually goes through a process of innovation and diffusion. A network perspective is necessary because diffusion usually occurs among certain “agents” (e.g., teachers, policy-makers) who are linked together in a social context (Anderson and Jay, 1985). Adoption and utilization of GIS cannot be understood outside this context. Essentially, we surmise a relationship between how teachers are embedded in a social network and their level of GIS use. If the aforementioned challenges of resources and time can be solved, we must further ask whether GIS can be more widely adopted if teachers are in a more highly nested network for them to stimulate greater use of GIS.

3. Research Questions

As we aim to understand the current status of GIS education among high school teachers in Taiwan, explore the obstacles for its implementation and further propose suggestions for policy-makers, we need to answer these questions:

(1) How many teachers use GIS in teaching in Taiwan? How do they use GIS and how frequent do they use it?

(2) What is the relationship between teachers’ GIS application and their personal attributes, educational backgrounds, school locations, and personal networks? Do teachers living in urban and rural areas show variations of engagement in terms of attending GIS workshops?
(3) Who provide GIS training workshops and teaching resources in Taiwan? Where do they locate?
(4) How do teachers get to learn about GIS training opportunities and obtaining teaching resources?
(5) What are the factors that would influence teachers to obtain GIS resources? What are the obstacles?
(6) How do teachers use social networks to exchange information on GIS learning activities?

4. Method and Data
We have a number of projects aiming to answer our research questions. Each is in a different stage of research development. First of all, we have conducted a survey on GIS training activities for high school teachers in Taiwan. The design of our questionnaire is inspired by Baker (2009), Kerski (2001) and Kerski (2003). Their surveys target problems facing teachers in American high schools, including software, hardware, time, educational training and the factor of pupils, etc. Since the first author has been involved in promoting GIS education in Taiwan for years, the first author tried to adjust the questionnaire for Taiwan’s conditions. The final version of the questionnaire includes four sections: 1) basic information of the teachers, 2) school facilities, 3) GIS utilization in teaching; 4) teachers’ self-evaluated GIS abilities and experiences.

Taiwan’s Ministry of Education has sponsored the first author to organize on average ten to twelve nationwide workshops for high school geography teachers annually. Among Taiwan’s 1,400 high school geography teachers, around 350 of them have attended in the ten workshops held in 2008. The research team directly gleaned the data by inviting participants to complete the questionnaire during the workshops. In this paper, we will focus on presenting some preliminary findings of this data. The analysis is in the fifth section of this paper.

Secondly, we plan to carry out a census on all 1,400 high school geography teachers in Taiwan. The questionnaire investigates two main aspects: backgrounds of teachers (e.g., graduation school, years of teaching experiences, gender, characteristics of their schools) and GIS teaching activities (e.g., present teaching mode, usage of GIS facilities, and GIS demands). We will phrase our questions in ways that can let us capture both the attributes of the respondents (i.e., attribute data) and the relationships among the respondents (i.e., relational data). Relational data is particularly important because it allows the mathematical measurement of the relationship between our agents, and can help us visualize the network(s) our respondents are nested in. We are still at an early planning stage of this project, and we expect to distribute the questionnaires in 2011.
Thirdly, after we finish the survey analysis, we will have in-depth qualitative case studies of the experiences of some teachers. This includes the interviewees’ social networks, as well as their motives for participating in GIS workshops and for learning GIS.

5. Analysis
In Taiwan, there are in total 484 high schools, including vocational schools at the parallel level. 336 did not have any teachers participating in workshops. Among the remaining 148 schools, 84 had once, 27 had twice, 16 had three times, and 21 had more than four times of their teachers showing up in GIS workshops. National Taichung First Senior High School in central Taiwan had their teachers attending workshops 19 times, rendering this school the most active school engaging in GIS training in 2008.

Figure 1 shows the number of teachers attending GIS workshops in 2008 from each school. Teachers locating in remote area (e.g., eastern Taiwan) appear to be less active in attendance. However, we notice that even for those living in Taipei city, many did not take part. This implies that the accessibility of transportation or living in urban/or remote regions cannot completely account for teachers’ attendance in GIS workshops. Figure 2 shows the difference of teachers’ attendance ratio in each county.

To explain the variation of attendance manifested by Taiwan’s high school teachers, we might have to consider the aforementioned “network” approach. It is likely that in the nascent stage of GIS promotion, teachers who are not highly embedded in the promotional networks set up by the government are less informed of relevant GIS training activities. Also, it is possible that teachers with fewer connections with other colleagues are less informed of relevant GIS activities, so they tend not to show up in workshops.

For instance, in the greater Taipei metropolitan area, the most active teachers are the so-called seed teachers selected by the government and their schools to assist GIS promotion. They naturally form a network where they can share the latest information of GIS training activities and GIS resources. Apart from these seed teachers, other geography teachers in Taipei are less active in attending workshops.

A similar pattern can be observed in Taichung. Because Taiwan’s Ministry of Education has assigned National Taichung Girls’ Senior High School to be the hub of promoting and facilitating geographic education in Taiwan, teachers in Taichung are relatively more active in attending GIS workshops. We surmise this is related to the relatively mature network among geography teachers in Taichung, which allows them to spread information of GIS development faster than teachers in other parts of the country.
Although teachers in eastern Taiwan tend to show less degree of participation, they are still more active than those from the rural counties of western part of the
country (e.g., Miaoli, Yunlin). We postulate this might be due to the top-down policy of the government to let Hualien serves as a sub-center of GIS promotion in eastern Taiwan. Teachers in the rural part of the western, such as Miaoli and Yunlin, however, are not well-connected to any promotional channels because most of the workshops were held in the urban areas of northern, central, and southern Taiwan (i.e., Taipei, Taichung and Kaoshiung respectively). They are hence less active in attending workshops.

In our survey, we also attempted to understand where these participants learned about GIS workshops in 2008. The majority actually received the information from governmental announcements which were passed on to schools. A large number of participants also learn the information from the main GIS promotion website hosted by the Department of Geography at National Taiwan University (http://gisedu.tw), which is essentially a cooperative result of the first author and the Taiwan government. From this statistics, we learn that the top-down promotion approach led by the government and universities in Taiwan play a leading role. But as illustrated above, there appears to be a lot of room of improvement in terms of participation rate and outreach. Educational efforts to change teachers’ practical behaviors in adopting GIS have faced limits. What we can be sure of is that top-down selection of seed teachers and promotional (sub-) hubs can foster the formation of different kinds of social networks and information networks at various local levels. Teachers who are more embedded in any of these local networks tend to be more informed of relevant activities and hence have more likelihood to join GIS workshops. In a way, this pattern is logical and suits into our common-sensual understanding of how innovation technology would normally diffuse in modern times.

6. Conclusion

This 2008 survey allows us to understand the general participation of GIS workshops among Taiwan’s high school geography teachers. The pitfall of this survey is that it only generates attribute data for conventional statistical analysis. This data does not contain any relational data for social network analysis, although we do notice that networks among all agents (e.g., government, universities, seed teachers, hubs) play a role for GIS diffusion. We will add questions that can gauge relations among agents in our next nationwide census among the 1,400 high school geography teachers in Taiwan in 2011.

We believe that it is necessary to delve into the aspect of “networks” in our continuous research because as laid out in the beginning of this paper, we expect that our research can have an impact on policy-making and implementation. Effective promotion in the form of incentives cannot be developed without a better comprehension of the ways in which GIS are introduced in various learning settings. This paper consolidates our belief to further explore the usefulness of the network
perspective in studying the GIS diffusion process among high school geography teachers in Taiwan.

References


Paper Abstract:
Until 1941 when Pearl Harbor was attacked by a Japanese task force, the interest of Korea was forgotten, or intentionally ignored, even by the United States Government, as well as other countries. For all the historic events which had taken place in the peninsula over the intervening years, there existed no foreign policies toward Korea except Japan's dehumanizing colonial ones.

The U. S. military personnel in Korea tried to replace Japanese educational system in Korea with an American-type educational system. They faced many difficulties in applying their educational thought to the Korean educational setting because Korea had a seriously upset economic, political and social situation during the USAMGIK era. The Koreans faced a chaotic economic, political and social period during the USAMGIK era. They also did not have the capacity to solve the long standing problems of their economic political systems.

Especially, there were still a lot of remnants which admired highly Japanese Imperialism and nationalism in history education but had to remove as soon as possible in released Korea. Korea should throw away the Japanese distorted history and find out the way how to stand by itself and learn the right Korean history in order to be international people. U.S. Military Government, 1945-1948 thought that American Social Studies was the best solution to solve these problems.

They set the goals for the removal of the vestiges of Japanese Imperialism in history education and started to emphasize the concept of ‘the Citizen’ instead of ‘the Nation’.

It is appropriate to briefly analyze domestic political situation and the international relationship in order to examine the American influence on Korean educational thought during the period of U.S. Military Government, 1945-1948.

Korean education was, under the specific conditions produced by the U.S. Military Government, practiced in the context of interactions with the international and national situation. Education proved to be one of the most successful civil affairs activities, during the USAMGIK era, although no radical changes could be made within the short three year period, Korean leaders tried to reexamine their educational problems in light of the economic, political and social chaos.

They began to assimilate new educational knowledge and techniques, while also reviving ancient Korean traditions. They started to make new textbooks of Social Studies. But in spite of all these trials, the civil activities and the concept of ‘the Citizen’ were not familiar to Korean who have lived in Confucian culture and have experienced without their own history for 35 years during the period of Japanese occupation. It goes without saying that there were a lot of problems including the type of Social Studies, textbooks and curriculum when Social Studies in school was introduced at first in Korea. It has been a long time until it settled down in Korea.
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Development of Authentic Listening Materials for College Students in EFL Learning

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Abstract- Most of the educators in Taiwan are more concerned about the English capabilities of students based on students’ poor performance in recent TOEFL and TOEIC tests. EFL education has been regarded as one of the most important courses in students’ freshman years, so that the development of ESL courses has been diversified. This study demonstrates the findings of a survey from first year college students relating to the listening class that they were taking. In the regions around the world which are devoid of native English speakers, listening and speaking are the most difficult, yet least developed, skills. One needs to listen well in order to speak well, a general rule for good discipline in every language. Current literature, surveys, and interviews suggest that using authentic listening materials in the class may enhance students’ language learning in comparison to the use of textbooks only for EFL teaching purposes. The detailed processes of selecting, and designing activities for authentic listening materials are introduced in this paper through a literature review, needs analysis conducted with ESL teachers and students, criteria for selecting materials, lesson plans, and sample activities. To achieve this goal, a sample course in listening has been suggested for college freshmen in Taiwan through the introduction of authentic listening materials, as well as practical learning strategies for the students themselves. The design of this portfolio includes a sample collection of authentic listening materials that will serve as supplementary materials for the textbook Impact listening 3 (Harsch & Wolfe-Quintero, 2001). These listening materials were taken from a wide variety of media. Students need to demonstrate productive tasks as a way to assess their listening comprehension. The designed course aims to provide sample authentic materials and provide activities that will serve college students’ diverse language levels and interests. It will not only raise teachers’ awareness of the importance of adapting authentic listening materials in the class, but also be able to present samples of engaging materials and activities for practitioners of EFL teaching.

Keywords - authentic material, listening comprehension, EFL education, ESL

1. INTRODUCTION

Like most of the non-native English speaking countries in the Asia-Pacific rim, English has long been one of the required foreign languages in Taiwan, starting from middle school until college, but most of the instruction conveyed in classes is focused on grammar acquisition rather than the other important skills such as listening comprehension, oral presentation, comprehensive reading, etc. Standard written tests are given mostly to test students’ grammar competence mostly. English listening and speaking practice are extremely insufficient, and many students’ oral performance is unsatisfactory as a result.

Most college students believe that their lack of progress in English is due to the fact that English is no longer a part of the required curriculum after their freshman year. Over the years of their undergraduate study, majors in every field, they lose the ability to practice and develop their English skills. Campbell and Zhao (as cited in Wu & Wu, 2008) commented that traditional methodologies such as memorization, recitation, and translation, kill students’ motivation and overwhelm them with over-drilling. In addition, question-and-answer drilling does not help students to facilitate language in a communicative way, but instead only makes students passive learners. Authentic materials, however, are mainly produced for native speakers and not specifically for teaching purposes. They not only provide a wide range of vocabulary, genuine practice, and linguistic richness, but also are more intrinsically motivating (Wu & Wu, 2008). Therefore, authentic materials provide interesting alternatives in traditional classrooms, where drilling takes the fun out of English learning.

On the other hand, while listening has not always been considered to be a pivotal part in English language learning, gradually its role has been increased in foreign language acquisition (Joiner, Adkins, & Eykyn, 1989). The ability to master English listening greatly enhances one’s foreign language learning. Benson & Hjelt (1978) said that understanding oral messages serves as a prerequisite in communication, and receptive skills, such as listening and reading, play an important role in students’ acquisition of competence. Therefore, developing English listening skills to achieve communicative competence is just as important as developing other aspects of English language learning.

Traditionally, grammar-focused English classes alone are not enough to provide students with many of the necessary communicative skills, especially in Taiwan. In an EFL setting, where learners have less access to authentic conversation and culture, how can they develop and sustain their English learning comprehension beyond the classroom? Tsai (as cited in Wu & Wu, 2008) suggests that creating a learning environment with culture essence will help students to learn English fluently and effectively. Authentic materials are no doubt mandatory supplementary materials in EFL curricula. Wu and Wu (2008) argued that an authentic learning environment is the most vital factor in promoting the English language in Taiwan.

Therefore, the purpose of this study is to highlight the importance of using authentic texts to better help Taiwanese students’ English language competence in a natural way by supplementing a variety of genuine, real-life listening materials.
such as videos, broadcasts, and movies, etc. The materials presented in this project will range from use with intermediate to advanced level English learners. However, these materials can be modified to work with learners at different levels.

II. LITERATURE REVIEW

A. Authentic materials

Authentic materials are defined as those that are “genuine or real”, unedited texts, the purpose of which is to achieve communicative competence (Long & Harlow, 1988). According to Herron and Seay (1991), “authentic” means speech that is delivered by native speakers with context that mirrors the target culture. Moreover, authentic texts are described as “live” texts that will enhance students’ learning by emphasizing communicative competence, with the target culture presented naturally (Herron & Seay, 1991). The best example of this type of material is authentic video. Authentic videos provide the most current linguistic resources, contain a wide variety of accents, and show people’s behaviors and ways of thinking within the target culture (Sherman, 2003). Texts that are designed specifically for English teaching have different focuses than authentic texts as we can see from Table 1.

B. Current practices in the field

Students in an EFL environment do not have much access to natural English in their daily lives. With today’s advanced technology improvements, information exchange has become easier than ever. Several educators throughout the Asia-Pacific region implemented different media of English teaching, such as internet (Liu, 2005), computer-assisted language learning (CALL), authentic materials chosen from different media sources (Sinha, 2009), etc.

Authentic materials are raw materials. Teachers still need to make some modifications while also selecting topics that best suit their learning objectives. Some difficulties that learners may encounter include unfamiliar discourse, vocabulary, speech rate, and linguistic features. For many reasons, the instructor’s role is very crucial in the selection of effective authentic listening materials. The materials need to help students feel a sense of accomplishment (Joiner et al., 1989).

In short, the current English curriculum in Taiwan strives to provide students with as much exposure to real life English as possible. Authentic listening materials can help to supplement the insufficient amounts of natural speech in an EFL classroom. Through examining current good practices in the use of authentic listening materials in the class, we may learn how effective they can be in enhancing students’ learning in a natural way.

III. NEEDS ANALYSIS

The data collection was to obtain sufficient information concerning the development of appropriate authentic listening materials. For this purpose, three different groups of participants were involved: two EFL college instructors in Taiwan, one ESL college instructor from the American English Institute (AEI) at the University of Oregon (UO), and EFL students in Taiwan. One classroom observation was conducted at the AEI to observe how a teacher can utilize authentic listening materials in real teaching scenarios.

The questionnaire was administered to several engineering major students in a top-ranked university, via online responses. Many interesting points that came out of this data analysis have served as good suggestions for this material portfolio, Table 2. First of all, ESL/EFL teachers and EFL students expressed their beliefs, including the need to listen to authentic listening materials in, and beyond the classroom. Some students perceive authentic materials as difficult, so teachers can utilize some pedagogical strategies such as group work and handouts with more scaffolding to help students get used to authentic listening materials. As for their interests in authentic materials, the top three choices were entertainment, sports, technology, with their favorite genres being movies and television episodes. Other topics, such as news, art, accents, and jobs were based on one EFL teacher’s syllabus. Some factors that hinder the students from comprehending the English programs are as follows (from the highest to the lowest factor): too much unknown vocabulary, the speed in which the speech is delivered, slang, accent, and lack of exposure to English programs.

From the interview with the ESL instructor at the AEI, and the classroom observation, I have come to the conclusion that using a textbook along with authentic materials promotes an effective listening class. I have decided to use a textbook as a primary source, with authentic materials as supplementary materials in this portfolio.

Based on these teachers’ and students’ points of view on authentic materials, this portfolio aims to supplement a text with outside listening materials that are fun and will motivate students to achieve better comprehension levels of authentic English.

IV. DEVELOPMENT OF SAMPLE MATERIALS

The goal of this portfolio is to collect authentic listening materials that will serve as supplementary materials for the textbook Impact listening 3 (Harsch & Wolfe-Quintero, 2001). This textbook was chosen because one of my interviewees is currently using this book in her listening class, and it includes a variety of topics and many activities that I find valuable. As stated in section 3, the teachers who are currently using authentic materials in ESL/EFL settings, and the college students who responded to the online questionnaires, all believe that authentic materials can enhance overall listening comprehension. Using authentic listening materials has its advantages that textbooks cannot provide. Valdman (as cited in Larimer & Schleicher, 1999, introduction p.1) said,

“Communicative ability, both in the productive and receptive modes, can be attained only if learners are exposed to a variety of authentic oral and written texts illustrating a broad range of genres and pragmatic situations.”

Most of the resources chosen are from different types of media, and students need to perform productive tasks, not just
receptive listening. The following material collection aims to select sample authentic materials and provide activities to meet students’ diverse language levels and interests. Although the tasks are designed for high-intermediate level students, practitioners in this field could also adapt and modify these materials to meet their needs.

A. Criteria for selection of materials

Findings from the literature review and needs analysis have shown that there is a need to use authentic listening materials in the classroom. Guidelines that were taken into account for this portfolio were as follows:

- Materials used are genuine, unedited (the language in these materials will not be simplified), and reflect life-like conversations.
- Materials that will motivate students’ interests in language learning.
- Materials level of difficulty to meet diverse level learners’ needs, and
- Activities aim to enhance learners’ communicative competence.

The types of materials included in this portfolio mainly correspond to the interests and suggestions of teachers and students. The teachers suggested the following topics: relationships (roommate problems), technology, and business. Some topics that the students showed interest in were entertainment, sports, and technology, with their favorite genres being movies and television episodes. Other topics such as news, art, accents, and jobs are based on one EFL teacher’s syllabus. She mentioned the importance of using authentic materials to introduce different accents to the students. Technology is embedded in the unit on news, as students and teachers all suggested this topic. It is hoped that the materials and activities presented here will develop students’ fluency in authentic listening. Nation and Newton (2009 p. 163) provide a fluency checklist that I have included as part of my criteria for text selection:

1. Are the learners interested in the message?
2. Are the learners easily able to understand the message?
3. Is the message coming to the learners at a rate that stretches the fluency of the learners?

Taking the above criteria into consideration, the interest level of materials, along with communicative activities, were the two most dominating principles in the selection of materials and activity design.

B. Organization of the material

Materials and tasks are sequenced from simple to complex. The source/link of each authentic material will be provided to the students. Teachers can find these materials by pasting the URL link into a web browser, or putting the title of each material into the Google search engine. The topics are based on the students’ interests and teachers’ suggestions, as was mentioned. The tasks are mainly focused on real world communication, as well as developing listening fluency, and group work is utilized for a majority of the materials. Some individual work has been designed to help students build their bottom-up skills.

The textbook Impact listening 3 does not sequence from easy to difficult in terms of content or listening tasks, so I have to move the textbook units around, with the units in this portfolio sequenced based on task difficulty (easy to difficult). The units in this portfolio, Table 3, are the same as the sequence of each activity. The demonstration shown in Tables 4 and 5 shows how to proceed with the lectures using Unit 5 as an example, and also how to test the students’ capability of learning.

V. Conclusion

The materials developed in this portfolio are just one of many typical examples, with an attempt to provide EFL college learners more exposure to authentic English. In Taiwan, and other EFL countries that have few native English speakers, listening and speaking are the most difficult, and yet least developed skills in a language classroom. Studying English for more than six to ten years, but not being able to communicate well, is a frustrating yet common, problem among EFL learners.

This portfolio is designed to improve Taiwanese college students’ listening proficiency by supplementing authentic listening materials along with an existing textbook. It is hoped that English teachers in Taiwan can take the initiative to introduce and use authentic listening materials, along with textbooks, in order to help students achieve fluency and accuracy in language learning.

Through researching authentic listening materials, and creating activities to correspond to textbook materials, I have some suggestions for teachers who want to take this path in their teaching. First of all, one needs to consult with an experienced teacher or work with co-workers. Talking to teachers who have extensive experiences in using authentic listening materials will give novice teachers a good start. Second, one needs to make sure the chosen materials match the course objectives and learners’ levels. Fun materials are intrinsically motivating, but do not guarantee efficient learning; on the other hand, a difficult lecture might not motivate learning, either. Good materials are what motivate good lesson plans. Third, searching for materials is not a waste of time. The searching process is very time-consuming, but almost all materials can be utilized in different contexts later. Finally, teachers can make efficient use of their students’ resources. Teachers usually introduce authentic listening resources, but it is not necessarily the teachers’ job alone to provide materials. Teachers can assign students to listen to English programs and report to the class as part of their homework. Teachers can also collect the materials that the students presented in the class, using them to improve future classes.
Acknowledgments

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References


Table 1 The comparison between textbooks and authentic text.

<table>
<thead>
<tr>
<th>Textbook Unit</th>
<th>Unit in this portfolio</th>
<th>Authentic materials</th>
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</thead>
<tbody>
<tr>
<td>Unit 15</td>
<td>Entertainment</td>
<td>&quot;India's Bollywood film industry tries to produce crossover movies&quot;—FOA news</td>
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<tr>
<td>Unit 20</td>
<td>News</td>
<td>&quot;Technology rewires our brain&quot;—BBC news</td>
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<tr>
<td>Unit 5</td>
<td>Nationality</td>
<td>&quot;Amy Walker 21 accents&quot;—YouTube</td>
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<tr>
<td>Unit 7</td>
<td>Movies</td>
<td>&quot;Mulan: Reflection&quot;—YouTube</td>
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<tr>
<td>Unit 3</td>
<td>Lifestyle</td>
<td>&quot;Friends season 2, episode 17&quot;—Tudou.com</td>
</tr>
<tr>
<td>Unit 9</td>
<td>Jobs</td>
<td>&quot;5 Across: Smartphone etiquette&quot;—PBS</td>
</tr>
<tr>
<td>Unit 4</td>
<td>Art</td>
<td>&quot;Why do we like what we like&quot;—NPR (12/22)</td>
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<tr>
<td>Unit 12</td>
<td>Business</td>
<td>&quot;Across: Social media marketing 101&quot;—PBS</td>
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Table 2 Parts of the data analysis from participating EFL students.

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<tr>
<th>Unit 5</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td>1. Ss will listen to main story lines and details in an episode and be able to write a summary of the story in English. 2. Ss will be able to improve communicative language skills by speaking English with group members. 3. Ss will retell the story in English.</td>
</tr>
<tr>
<td><strong>Procedure</strong></td>
<td>Activities</td>
</tr>
<tr>
<td>Warm-up</td>
<td>T explains this lesson has the theme that relates to unit 3 in the book (living with people). The clip that Ss are going to watch is about the relationships between roommates and family members.</td>
</tr>
<tr>
<td>Watching clip</td>
<td>T plays the clip. Ss can take notes if they want.</td>
</tr>
<tr>
<td>Comprehension check</td>
<td>Ss work in a group of four and discuss the main story lines in the clip. Then T asks each group to tell different parts of the story.</td>
</tr>
<tr>
<td>Wrap-up</td>
<td>Each group has one person talking about the summary of one part of the story in English.</td>
</tr>
</tbody>
</table>

If time

| Group discussion | T asks Ss to write the possible ending of Chandler and Joey’s relationship and practice acting it out. | 15 min |
| Whole class discussion | T initiates a classroom discussion of the comprehension questions and listens as each group shares their experiences. | 10 min |
| Script writing | T asks Ss to write the possible ending of Chandler and Joey’s relationship and practice acting it out. | 15 min |
| Performance | Each group performs their script | 15 min |

Table 3 The designed course of the listening materials as a supplement to the textbook.

Table 4 The sample course unit 5 in Table 3, showing the process of delivering a two hours lecture in the class.

Table 5 Lecturing of Unit 5 materials: (a) Starting with the listening of DVD’s and catch up the idea of the story, (b) comprehension questions will be asked by the teacher to test the students’ listening comprehension, and (c) ask students on questions about what will happen in the story for the coming up story, in order to understand whether they clearly understand the video or not.
Together at a Distance Pan-Arctic E-Learning Project

Authors: Dr. Elizabeth A. Childs & Collene Armstrong

Project Team Members included:
Neil Burgess
Malcolm Campbell
Gwen Frankton
Murray Horn
Dr. Terri MacDonald

Together @ a Distance Research Report Executive Summary

We discussed how a course on igloo building could be structured between Moodle, Elluminate and the use of the LOR as a warehouse for the resources. We discussed the value of video recording the Elders demonstrating how to determine snow quality to have it available to others as well as the supporting Inuktitut terminology. We discussed how Elluminate® could be used as a tool to bring the students together from different parts of the Arctic to share how this is done and what words are used in their region. The value of recording, saving, reusing and sharing these resources through e-learning had the Elders very excited (Elders, personal communication, Feb 2010).

Mr. Speaker, I believe online learning will help us develop and make new courses and learning resources available to adult learners across northern Canada. Online or as it is better known, e-learning, will help us share our culture, maintain our language, and increase our ability to participate in the world economy by helping to improve literacy levels and teaching essential skills to adult learners (Tapardjuik, 2009).

Introduction

The Together at a Distance project was a three year (2008 – 2010) project aimed at developing e-literacy skills for adults in Inuit Nunavut (homeland) across the Canadian Pan Arctic. It was funded through a grant from the Canadian federal government’s Office of Literacy and Essential Skills of Human Resources and Skills Development Canada (HRSDC) and was led by the Nunavut Department of Education with support of the Northwest Territories, Nunavik, and Nunatsiavut. As the leading quotations above illustrate, this project had strong support from both the Inuit Elders as well as the Territorial Government as both groups recognize that “it is critical that Aboriginal communities continue to explore ways of adopting and using learning technologies to avoid falling deeper into a “digital divide” (Greenall & Loizides, 2001, p. 1).

A collaborative design model, based in the principles of Inuit Qaujimajatuqangit (IQ) which involved Inuit Elders, adult Inuit learners and northern educators not only informed the Together at a Distance project but provided the framework for the six online workshops that were created. The content of the first two online workshops introduced e-learning and
examined how to effectively take an e-learning course from the perspective of Inuit adult learners. The additional four online workshops examined in more detail how to facilitate, teach, adapt and design e-learning. These online workshops were targeted at educators, community access point facilitators or trainers whom would be working with, or creating content for Inuit adult learners.

As part of the collaborative design model employed in this project, meetings were held with adult educators, content experts and the Elders from the Arviat Department of Education Office. Six pilot sites (Taloyoak, Arctic Bay, Nain, Iqaluit, Fort Simpson and Rankin Inlet) were solicited from the various geographical areas in the north with each agreeing to host a pilot. The pilot consisted of face-to-face workshops that focused on introducing adult Inuit learners to the online workshops. These were conducted in six locations across the north to nine different audiences by members of the project team. Eighty-six (86) adult Inuit learners participated in these workshops with 15 participants being in the “trainers/facilitators” target audience group and 71 representing the broader “adult Inuit learner” target audience group.

Each face-to-face pilot workshop was a minimum of two days in duration with one being conducted synchronously via Elluminate (Fort Simpson, NWT). A facilitators guide was created for use at the face-to-face pilots to ensure consistency of message as well as technical support protocols. Data collection included a 46 item online survey at the completion of W2 which addressed the content of W1 and W2 as well as a separate 46 item online survey at the completion of W4, focus group interviews, and individual reflections captured in the individual participant online journals.

The survey questions covered the following broad areas depending upon the workshop: (1) general demographic information, (2) motivation, (3) e-learning and digital literacy skills, (4) awareness of e-learning opportunities, (5) online workshop design, (6) Inuit Qaujimajatuqangit (IQ), (7) awareness of facilitation and workshop preparation skills of e-learning design and delivery. These areas were developed from a review of the literature, the research questions and the design philosophy informing this project.

Two websites were created to support the project: (1) an online portal (www.togetheratadistance.ca) and (2) the Moodle site (www.ndlp.ca). The online portal was created as a web-based access point for the online workshops and additional tools and resources that participants identified as useful throughout the pilots. Links were provided to the Moodle version of the workshops from the portal as well as to download the web-based stand-alone option that was created for each of the online workshops. All project content was made available free of charge via the Together at a Distance portal and additional communication materials were created including quarterly e-newsletters as a way of increasing awareness of the project.

There is a long standing tradition in the North of effective action-based, community-based research and its ability to drive policy development. As a result, a participatory, inquiry based action research framework guided the research conducted on this project. Using this research
framework created space for the project team to (1) directly involve and build on existing relationships with the Elders, northern educators, and content experts; (2) ground the project design model in IQ, and (3) to remain dynamically responsive to the online learning experience and associated needs of the adult Inuit learners provided to them via the pilot workshops.

**Design Assumptions**

There were several online workshop design assumptions that informed the creation of the online workshops. These included the: (1) need to ground the online workshops in Inuit Qaujimajatuqangit (IQ); (2) use of a social constructivist instructional design paradigm, (3) role of a supportive learning community, (4) varied audience characteristics (5) need for content integrity, (6) requirement for interoperability to maximize learner access to the content. These key components evolved from discussion with the Elders, the adult Inuit educational community, past experiences of project team members and applicable best practices in the field of online learning. The project recognized that best practices for southern online learning may be different than those required when designing for a northern adult Inuit audience and as such, the collaborative design model was essential to ensuring relevance.

*Inuit world view has gone from learning from the family, from the community and then from the world in a matter of few years. During this short or nonexistent transition period; methods, timelines and best practices are usually the last topics considered. This is usually due to the urgency of people's needs; using the analogy of the fisherman, fish is given to the population, without teaching them how to fish for themselves.*

*It is good to take an inventory of best practices and what methods can produce the best outcomes. It is even better to identify and set values, standards and principles that are meaningful to the target group instead of imposing a set of standards from another group (Suluk, 2010).*

This report examines and discusses the research findings that emerged from the Together at a Distance project across the six pilot sites.

**Research Questions**

This research project initially began investigating the following two areas:

1. The change in access and awareness of literacy opportunities for the Inuit population in NWT, Nunavut, Nunavik and Nunatsiavut as a result of the Together at a Distance online workshops on e-learning.
2. The capacity for facilitators and trainers to prepare adult literacy e-learning in the Pan-Arctic as a result of their participation in the Together at a Distance online workshops.

However, the recursive nature of the project design model provided opportunities for a further refinement of the research/project goals while the project was developed and implemented. The revised research goals include the above as well as the following:
1. The relevance of IQ to the online learning experience of the adult Inuit learner (including learner, facilitator, designer and teacher).
2. The functional and instructional design requirements of e-learning for the adult Inuit learner to enhance accessibility and relevance.
3. The support for the development of mastery and an individualized toolset of resources and tools for future real world application.

**Research Findings**

While there were 86 participants in the pilot workshops across the six locations, only 52 online surveys were successfully completed due to intermittent connectivity when the surveys were being completed which resulted in transmission errors. Of the 52 participants that completed the W1/W2 online survey, 58% were female. This is consistent with the demographics of the populations in the pilot communities as well as the target groups that were represented in the pilots; predominantly education and municipal government. 73% of participants were under the age of 39 which is again consistent with the demographics of the Inuit population (ITK, 2008). The majority (50%) had completed grades 10 – 12 with 15% having completed Grades 7 – 9; 13% having completed a University Bachelor’s degree and 12% having completed a College Diploma. The majority of the 52 participants were full time or part-time students (65%) with others working for a municipality (17%).

In terms of their level of comfort with technology, 73% of participants had never taken an online course before but the majority of participants rated their comfort level with technology prior to participating in the online workshops as somewhat comfortable (46%) and very comfortable (25%). This increased to 83% after their participation in the online workshops. When asked their comfort level with e-learning prior to participating in the online workshops, 27% rated themselves in the uncomfortable or very uncomfortable categories. When asked to rate their comfort level after participating in the online workshop, 84% rated themselves as being comfortable, an increase of 13%.

The following themes emerged from the data; (1) motivation, (2) e-learning and digital literacy skills, (3) access to e-learning opportunities, and (4) IQ and Online Workshop Design. They are briefly discussed below with more detail provided in the body of the full report.

**Motivation**

When asked whether their motivation to pursue further e-learning opportunities had increased as a result of their participation in the online workshops, 54% said “yes” with an additional 31% rating it as “somewhat” and 7% rating it as “no”. The following commentary provides a sense of the features and aspects of online learning that the participants found meaningful.

“There is more to it than I was expecting – I feel that this is something that could be beneficial for a lot of people living in this area” (Survey Respondent, 2009/10).

“Yes, especially if I can further my education without leaving my community” (Survey Respondent, 2009/10).
E-learning and Digital Literacy
The following definitions were used in the Together at Distance project for these two terms.

**E-learning** encompasses all learning that takes place online, including distance learning and lifelong learning, facilitated by an e-teacher or on your own.

**Digital Literacy** is the ability to locate, organize, understand, evaluate and create information using digital technology. It involves a working knowledge of current high-technology, and an understanding of how it can be used. Digitally literate people can communicate and work more efficiently, especially with those who possess the same knowledge and skills.

When asked what specific continuous learning skills had improved as a result of their participation in the online workshops, participants indentified the following: (1) develop a learning plan (60%), seek out learning materials and resources (44%), apply new knowledge and skills (44%), recognize individual learning style (38%), learn from past experiences and apply lessons learned (29%). The use of the learning plan for many was a new tool to add to their continuous learning toolkit and several commented on its value beyond the online learning application.

“[the learning plan] makes me plot down what I have to do” (Survey Respondent, 2009/10).

When asked whether their digital literacy skills had improved as a result of their participation in the online workshops, 87% said yes.

**Awareness of E-Learning Opportunities**
The majority of participants (94%) felt that their awareness of other e-learning opportunities available to them had increased as a result of their participation in the online workshops. Several of them commented on how valuable it was to learn about both the various e-learning opportunities as well as the different technology such as Skype®, the Inuktitut fonts and the Living Dictionary in the focus group discussions.

“Now [I am] thinking what options can this lead to, what can I now achieve. [I] didn’t know about the possibilities before” (Focus Group Participant, Fort Simpson, April 2010).

**IQ and Online Workshop Design**
There were two aspects to theme of IQ and the design of the online workshops: (1) IQ as the guiding philosophy for content presentation and meaningful connections and (2) the structure of the online workshops themselves as it contributed to the end user experience. Participants were asked to comment on whether the workshop design which included the IQ focus was valuable and why. 94% found it to be valuable and commented that it was “simple and
understandable – especially with the Elders involved” (Survey Respondent, 2009/10). Several participants found it to be “an excellent overview of the different technologies that can be used...step by step headings made the design user friendly” (Survey Respondent, 2009/10). They also commented that “the information provided was easy to find” (Survey Respondent, 2009/10).

In keeping with the design philosophy described above, a variety of multi media were used to convey the content. The majority (64%) of the participants found that the pictures, stories and vocabulary supports encouraged them to learn more and was motivational. 77% of participants felt that the inclusion of Inuit Qaujimajatuqangit (IQ) assisted in their learning while 83% of the participants identified the inclusion of the Elders comments to be important in their learning.

“the topics were from actual people and there was even real Elders so it was pretty convincing” (Survey Respondent, 2009/10).

With respect to the actual structure of the online workshop and the associated end user experience, the following themes emerged from the survey data, focus group discussions and participants online journals; (1) page layout and structure, (2)navigating embedded content, (3)volume of text on screen, and (4) language level. The design and development process responded to these emerging themes through iterative structural and instructional revisions over the course of the project.

**Feedback on W4 – W6**

The audience that was initially the target for W4, W5, and W6 were to be adult Inuit learners who had taken on an educational role in their current work setting as either a facilitator, trainer or community based educator. However, due to logistics and availability, this was not the audience that was able to be secured for the pilot workshops. Three participants at the Arctic Bay pilot (2009), seven participants at the Iqaluit pilot (2010), four participants at the Rankin Inlet pilot (2010) and one participant at the Fort Simpson pilot (2010) explored the content of W4, W5 and/or W6. For the most part, those who completed W4, W5 and W6 were participants in the Northern Teacher Education Program (NTEP) who were preparing to teach in the face-to-face K-12 classroom. Five of the participants in W4 were Arctic College faculty and one participant was an Member of the Legislative Assembly (MLA).

In keeping with the participatory nature of this project, all W4, W5 and W6 participants were directly asked to provide feedback on how to make the online workshops more effective for the intended audience. As with other feedback gathered through the project’s participatory and iterative design model, the Together at a Distance project team honored the feedback from W4, W5 and W6 participants by directly applying their feedback to the actual design and structure of the online workshops.

**Awareness of Facilitation and Workshop Preparation Skills for E-Learning Design and Delivery**

Several participants in W4 commented on the value they found in the various checklists and tool sets that they were able to download, print and take away for their toolkit. Many used
their online self-reflective journals to remind themselves of the need to print or download specific checklists to use when working with students in their face-to-face teaching.

“Remember to consider literacy skills, make a list of support systems both technical and educational, download and print checklists... print module 5 checklist” (W4 Participant Online Journal, 2010).

The majority of W4 participants found the content to be very valuable and applicable to their face-to-face teaching. One of the instructors at Arctic College who completed W4 stated “I am going to use some of this (W4) content in my pedagogy class next term. What is presented here is the basis of good teaching” (D. Fraser, personal communication, Feb 2010).

Many participants in W4, W5 and W6 commented that they would be using the skills they acquired in W4 to seek out e-learning teaching and facilitating opportunities to further develop their skills. One participant was interested in setting up an online course to support her learners at a distance across the various Arctic College sites.

**IQ and Online Workshop Design**

For the majority of W4, W5 and W6 participants, the inclusion of IQ as a design philosophy was identified as valuable. For some participants who were non-Inuit, the IQ module that addressed the foundational components of IQ was instrumental in their understanding of the concepts associated with IQ. As several W4 participants expressed, their experience with W4 provided them with alternative ways of conceiving how online learning could be created. For many Inuit participants, this included incorporating videos, pictures and Elder stories throughout the learner experience.

“As Inuit are the most dominant populations within the north so I think it is fair that we are most represented. But I think that I am biased when saying that because I am an Inuit myself” (Rankin Inlet Focus Group Participant, 2010).

“(workshop) content was both relevant and meaningful and all information was new. Elders’ comments were interesting” (Focus Group Participant, Fort Simpson, 2010).

As mentioned above, the W4, W5 and W6 participants were asked directly to provide comment and feedback on readability, language, errors and omissions or additions that they felt would make the online workshop experience stronger for the intended end users. Several participants provided detailed feedback and corrections to grammar, spelling and use of language and these were incorporated into the subsequent versions of W4, W5 and W6. An example is provided below:

“under Kinds of e-learning in the Case Study description it talks about a housing project case study that is online. It does not have a link to this. Perhaps the link should be added” (W4 Participant Online Journal, 2010).
Other feedback from W4, W5 and W6 participants was that the design of the workshops was “clear and straightforward” (Iqaluit Focus Group, 2010) and with the addition of the worksheets and checklists, “valuable and will use them again to guide participant learning” (Focus Group Participant, Fort Simpson, 2010).

**Key Findings**

Based on the experience of the pilots conducted with the Together at a Distance online workshops, a variety of key messages emerged from the survey data, the focus group discussion, the participants self-reflections and online journals, the facilitators observations and discussions with participants. These are summarized here. In the full report they are discussed in more detail and where appropriate, aspects of the Government of Nunavut 2010 Report Card are used to illustrate the connection between the work done in this project and potential ways it can be leveraged to address the areas of improvement identified in the GN Report Card.

**Key Finding 1: Holistic Design Model**

It was through the design, development, delivery and implementation of the online workshops and the collaborative participatory approach taken in both workshop design and delivery that the holistic design model (Figure 1) emerged. As depicted in Figure 1, the design model is grounded in IQ and supported by a technical infrastructure and policy directive. It is dependent upon the creation of a community of learners and a supportive learning environment. The three-pronged supportive learning environment (social/emotional, technical and academic support) is achieved through the use of a blended or hybrid model of delivery.

In order for the community of learners and a supportive learning environment to be fostered and maintained, adequate funding for a collaborative content development approach across a continuum of learning (K-post-secondary) and teacher training and professional development is required. These two elements are facilitated through the technology toolkit which includes a learning object repository (Sirlauq), a learning management system (Moodle) and a synchronous tool (Elluminate). They result in the ability to provide differentiated content, individualized learning paths and community-based support to meet unique learner needs. Inherent in the design model is the support for the development of the competencies in language and literacy. The goal of the holistic design model is to assist in the attainment of learner mastery.

*Figure 1: Holistic Design Model – C. Armstrong & E. Childs (2010)*
Key Finding 2: Learner Support

The data from the Together at a Distance project highlighting learner support is consistent with the best practices in the field of e-learning (Bale et. al, 2005; McMullen & Rohrback, 2003; Palloff & Pratt, 1999), which identifies learner support as critical to the success of e-learning initiatives. In the context of the Together at a Distance project, learner support had three key aspects: (1) social/emotional, (2) technical and, (3) academic. These three aspects were supported in and by; (1) the community, (2) the design and structure of the online workshop, and (3) the ownership the student was required to take for their own learning path.

In this context, community is defined as those person(s) who supported the learner to be successful in the online workshops. This may have been the CAP instructor, the high school teacher, the spouse that was encouraging, the auntie who took the children so that the learner was able to devote time to their online workshop, the employers who were supportive, the online facilitator, the technical support, the Elders etc. This community based support approach was modeled in the content of the workshops and their delivery was based on best practices in e-learning that identify that “the most crucial support is facilitation at the locale where the students do their work” (Bale et. al, 2005. p.26).
The opportunities that e-learning provided with respect to differentiated instruction, individualized learning, and multiple learning pathways facilitating learner choice meant that in the T@D online workshops the content level did not need to be lowered. Instead, students were supported to develop and build mastery through the learning process. The Elders saw distributed learning as a mechanism that was able to provide real world application and the necessary learner supports required for the acquisition of competency. At the same time, it was also able to reinforce the values of IQ and the express of lifelong learning.

They appreciated that the content was not dumbed down and that students are encouraged and scaffolded toward understanding and competency. They also noted that students must take ownership and responsibility for their learning path as well (Elders, personal communication, Feb 2010).

Key Finding 3: Move from E-Learning to Distributed Learning
Through the experience of the Together at a Distance project, it became evident that there is a real need to expand beyond the concept of e-learning in the north so that the term does not limit the possibilities. The holistic design model proposed allows for a broadening of the concept of e-learning to one of distributed learning (DL) in that it extends into a blended model of learning and the integration of technology mediated learning supports into the regular classroom, the online classroom and wherever the learner is located in order to support learning that is independent of physical space and time. The inclusive nature of DL is captured in the following definition:

_Distributed Learning (DL) is not just a new term to replace the other 'DL,' distance learning. Rather, it comes from the concept of distributed resources. Distributed learning is an instructional model that allows instructor, students, and content to be located in different, non-centralized locations so that instruction and learning occur independent of time and place. The distributed learning model can be used in combination with traditional classroom-based courses, with traditional distance learning courses, or it can be used to create wholly virtual classrooms" (Saltzberg & Polyson, p. 10).

As illustrated above, DL enriches, expands and enhances the learning opportunities provided in regular, online and mobile learning environment. Learners in a DL environment have greater control over how, when and where they learn which increases their responsibility for their own learning. Education providers are, in turn, able to create inclusive learning environments that maximize learning opportunities (Bowman, 1999).

One area for inclusivity that is often not supported in the North is within the classroom, both in a blended community based model and through hybrid integration. Moving from the concept of e-learning to one of DL allows for the inclusion of many more learning environments than just the traditional face-to-face school setting. In reviewing the Government of Nunavut Report Card recommendations, there appears to be the potential to address several of them using a DL approach informed by the holistic design model.
Next Steps

Based on the data and experiences of participants in the Together at a Distance online workshops and the holistic design model proposed, there are some real opportunities available to the north with respect to distributed learning. There are numerous examples of DL implementation projects that illustrate that one of the direct contributing factors of success of DL is the funding and policy commitments made to support it (Latchem & Hanna, 2001). The north has the potential to support the implementation of the holistic design model and associated DL components in an integrated, thoughtful manner. Jurisdictions that have not had this opportunity to thoughtfully consider the implementation of DL have experienced limited success.

Based on the experience of this project, the data, and the literature informing best practices in DL (Driscoll, 2002; Moore & Kearsley, 2005; Oblinger & Hawkins, 2006), the next steps to be taken in order to support further opportunities for DL in the north include the following:

1. Apply the holistic design model to guide policy, fund program development and ensure implementation planning for DL in the north.
2. Move from e-learning to distributed learning (DL). Lever the experience of this project, the policy, and the technical infrastructure into more opportunities to bridge the gap from e-learning to distributed learning and foster the creation of multiple technology mediated learning environments within both online and regular classrooms.
3. Lever the existing infrastructure which includes: (1) the LOR (Sirluaq), (2) the LMS (Moodle), (3) the synchronous tool (Elluminate) and, (4) the increasing bandwidth opportunities within the educational system to implement DL across the north.
4. Explore collaborative content development opportunities between the northern K-12 and post-secondary systems using common toolsets (Sirluaq, Moodle, Elluminate).
5. Ensure IQ and critical pedagogy continue to inform any future content development.
6. Create a mentored, supported, facilitated experience for the current online workshops to proof the model
   a. Have facilitated, synchronous opportunities for educators to engage with the online workshops created in this project.
7. Create the opportunity for content creation and sharing.
   a. Develop a new online workshop that focuses on the blended learning approach within the regular classroom and discusses how to create and use technology mediated learning environments effectively with learners. The workshop will focus on the use of the LOR (Sirluaq) as a central access tool for content creation, delivery and repurposing as well as the other components of the common toolset described above.
   b. Include all current T@D online workshops in the Sirluaq learning repository. W1 and W2 for Nunavut students and W3, 4 and 5 in the Professional Growth section of the LOR. The Sirluaq will fully display the IMS content package version of the workshops in a similar way to how Moodle displays the workshops.
8. Develop facilitated, supportive online learning communities that support the work of all stakeholders and act as the connection between these group (learners, educators (k-post-secondary, DEAs).

Based on the data and experiences of participants in the Together at a Distance project, the mode of learning is one that the majority of participants found useful and there is a general motivation and interest to participate in further online learning experiences. Using the holistic design model guide policy, fund program development and ensure implementation planning for DL in the north is the first step to building on the momentum generated by this project.

“I just like the idea of e-learning, this way in the future people can stay in their home communities and take e-learning to educate others” (Survey Respondent, 2009/10).

“I hope this will be used here at the college in the future because I hate leaving my mother in law who needs our support, this way e-learning will be useful for people like me who are family helpers and need to stay home to do work” (Survey Respondent, 2009/10).
References


1. Title of Submission  
   A Blended Model for Capacity Building: Framework Agreement First Nations Lands Governance Directors

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6. Abstract and/or full paper  
   **Abstract:**  
   The Framework Agreement (FA) First Nations Virtual Resource Centre(VRC) is a national initiative to move the capacity building, training and development associated with First Nations Lands Governance under the Framework Agreement into the online environment and as a result, make it more accessible for all. The Virtual Resource Centre is one component of the larger Capacity Building, Training and Professional Development Strategy (CBTPD) that has been ratified by all 61 signatory FA First Nations in Canada. This workshop will introduce participants to the CBTPD Strategy and its supporting components including the Virtual Resource Centre and associated certificate program in Lands Governance. Workshop participants will be able to examine the certification program and associated online courses, explore the various tools, resources and online social networking capabilities of the VRC and discuss its Year 1 implementation.

   By way of background, in signing the Framework Agreement on First Nations Land Management (Framework Agreement) legislation in February of 1996, the signatories – Canada and 13 originating First Nations (FN) - could not have imagined the challenges posed by their commitment to support training
and capacity development for First Nation signatories. Subsequent to the Framework Agreement taking effect, as First Nation communities ratified and implemented their Land Codes, they quickly realized that existing land management training strategies were inadequate. Little emphasis on the needs arising out of “governance” responsibilities, for example, was given in existing training, with no consideration for Chiefs and Councils and their communities. As part of a well-rounded, comprehensive and inclusive CBTPD strategy, the FA FN Lands Advisory Board’s Resource Centre launched the Virtual Resource Centre (VRC) in 2009. It is a completely customizable online learning environment for Framework Agreement First Nations across Canada and is comprised of a series of online tools, courses and resources as well as a socially networked online community that aim to support Lands Governance Directors as they work with their FN through the Land Code process and into the operational stage of managing their own FN lands. The result of the VRC is an interesting mix of a Web 2.0 personalized “it’s all about you” learning environment filled with online tools, resources, content and links, together with an active online community fostering discussion and dialogue across Canada for Framework Agreement First Nations Lands Governance Directors, their Chiefs and Council and their Communities. Effective implementation strategies and data on end user uptake and usage of the VRC will be discussed. In addition to the VRC, work has now begun on the Level 1 online courses for Lands Governance Directors as part of the certification program for the FA FN in Lands Governance and initial course design decisions and implementation considerations will be examined with workshop participants.
1. TITLE:
Geauxheart Baton Rouge: Implementing Internships And Service Learning Through A Community Service Research Grant Targeting At-Risk Populations

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6. ABSTRACT:

**Background/Purpose:**
The purpose of this project, funded by Edwards Lifesciences, was to develop and implement a collaborative community service outreach program. The aim was to promote healthy lifestyle changes and reduce health disparities in communities with populations at higher risk for cardiovascular disease (CVD) with limited financial means to seek preventative care. The research-service learning activities associated with this project were carried out in two phases over five semesters (18 months). In Phase I, 16 health fairs targeting underserved populations were conducted in faith-based, community, and Council on Aging centers in the Greater Baton Rouge area. As a result 544 individuals received preliminary CVD health-risk screenings, including a medical history evaluation, vital sign checks, glucose and cholesterol measures and body composition assessments. In addition, an educational presentation based on the American Heart
Methods:
Prior to participating in the project, all students were required to complete in-service trainings and provide appropriate documentation related to professional procedures and ethical issues surrounding research data collection, patient medical records, administration of clinical tests, medical emergency response and dissemination of healthy lifestyle information. The trainings and certifications included: NIH Office of Extramural Research Certification, OSHA blood borne pathogens training and proof of Hepatitis B vaccination, CPR certification and AHA ambassador training. In addition, students received advanced training for skill proficiency in clinical test administration which included: a Bruce protocol treadmill stress test, 12-lead ECG monitoring, ABI, vital sign checks (HR, BP), total cholesterol and glucose measures, body mass index, and obtaining accurate medical and family health history information. Students were required to submit reflection papers on their internship and service learning experience at the end of each semester.

Results:
This project contributed to the academic and professional development of graduate and undergraduate kinesiology students. As a result, two graduate students received full-time funded assistantships and were able to complete their master’s degree with thesis. Two full-time undergraduate internships were supported that resulted in employment with renowned clinical facilities; one as a research study coordinator at a biomedical research center and the other in cardiac and vascular ultrasound at a women’s medical center. Across four semesters, a total of 32 undergraduate students that were enrolled in an independent research-service learning course participated in one or both phases of the project. An additional 38 undergraduate students had the opportunity to participate as part of their service learning component in their required kinesiology courses. Of those, the students enrolled in Introduction to Health Promotion (n = 27) were primarily engaged in Phase I, while students in Exercise Testing and Prescription (n = 11) participated in the Phase II clinical exercise testing. Reflection papers submitted by the students upon completion of their internship and service learning experience will be presented and discussed.

Conclusion:
Students developed critical thinking and problem solving skills, increased their scientific knowledge base and improved their ability to disseminate health information to at-risk populations in diverse settings. Students also learned to coordinate and access community resources and the importance of community engagement for at-risk populations. Moreover, current medical-based evidence and clinical skills were applied in a real-world setting. This project supports the research indicating that service learning and
community internships can enhance individual student knowledge and skills, strengthen an entire educational program while providing a valuable community service.
Title of the Submission: Relationship of perceived parenting styles, attributions for math achievement, and math performance among Taiwanese elementary school students

Topic Area of the Submission: Educational Psychology

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Relationship of perceived parenting styles, attributions for math achievement, and math performance among Taiwanese elementary school students

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Abstract

Acknowledging the importance of parental influence on pupils’ academic motivation and achievement, this study aims to examine the relationships among pupils’ perceived parenting styles, attributions for math achievement, and math performance. The survey participants were 363 fourth to sixth graders from six elementary schools in southern Taiwan. They completed scales to assess their perceived parenting styles and attributions for math achievement. Subsequently, their grades for the upcoming math exam were also collected. Path analysis indicated that: (1) paternal demandingness, maternal demandingness, and maternal responsiveness had direct effects on pupils’ attributions for math achievement; (2) pupils’ luck attributions for success and failure had direct effects on their math performance; and (3) maternal demandingness had direct and indirect effects on pupils’ math performance, while paternal demandingness had an indirect effect on it. The implications of this study, based on the results, are subsequently discussed.

Keywords: perceived parenting styles, attributions for math achievement, math performance
1. **Title**

   *Comparison of Characters with Disabilities Displayed in Korean Folk Tales and Korean Contemporary Picture books*

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Comparison of Characters with Disabilities Displayed
in Korean Folk Tales and Korean Contemporary Picture books

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The view of the general public has on disabilities or minorities has always changed with the times. Thus, commonly notions about disabilities vary not only depending on the era but also according a nation's political, economical, social and cultural conditions. Postmodernism, which first appeared in the 1960's and attaches great importance to the issues of difference and diversity, sparked a change in negative judgments on individuals with disabilities, women, minority races.

Since literature is an important medium by which the author shows his/her socio-cultural values and the current attitude of the public, literature has socio-cultural value in itself (Nodelman, 2001). Thus, even if it is not a quantitative measure, looking into and analyzing literature, which reflects society and contains socio-cultural values, can be a way to understand macro-systems such as socio-cultural values or social phenomena. While folk tale picture books reflect everyday life in traditional Korea, the settings of contemporary picture books give a description of contemporary. As a result, we can compare how folk tale picture books and how contemporary picture books depict characters with disabilities.

Through the use of content analysis, this study explored the interaction between characters with disabilities and characters without disabilities in Korean Folk tales and contemporary picture books. hoping to contribute to the selection of appropriate picture books for an understanding of disabilities in kindergartens and child care centers.

First, Unlike in Korean Folk tales, contemporary picture books displayed that characters with mental and physical disabilities interacted with friends, in addition to their families and village people.
Second, two type of characters with disabilities in contemporary picture books displayed more positive interactions than negative interactions compared to Korean Folk tales. While positive interactions was displayed 'helping' to characters with mental and physical disabilities in contemporary picture books, displayed 'receiving help' from characters with physical disabilities in Korean Folk tales. As negative interaction, Korean Folk tales picture books displayed 'hitting and expressing anger'. contemporary picture books displayed 'ignoring', 'ridiculing' to two type of characters with disabilities.

Third, compared to Korean Folk tales, two type of characters with disabilities maintained a more positive relationship with other characters in contemporary picture books. Consequently, it can be seen that expression of characters with disabilities are more positive and more desirable in contemporary picture books than in Korean Folk tales picture books. Clearly the fact that interaction in folk tale and contemporary picture books was different indicates the change of socio-cultural values in Korean society. It was partially due to two act of "The Special Education Promotion Act" and Special Education Act for the Disabled which was enacted in 1994, 2007 in Korea. Those represents the establishment of a friendlier atmosphere for individuals with disabilities in our society and this in turn has brought characters with better images to Korean contemporary picture books.

**Key words:** folk tales picture books, contemporary picture books, character with disabilities, understanding of disabilities
Clash of Theatre Training in Thailand

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ABSTRACT

Currently there are two genres of Thai theatre existed in the kingdom. While the former is the traditional performing arts category which has been established in the country for more than 500 years, the latter is the imported Western modern theatre which has just arrived less than 100 years ago. On the one hand, the Thai original typed theatre is taught, passed on and preserved as a national heritage through the Ministry of Fine Arts and Thai monarch’s co-operation, on the other hand, the modern Western theatre is taught and practice in the university educational level and well-received among Thai middle-class.

As an art education, these two categories of theatre have possessed extreme opposite methods in philosophy of learning and teaching, art appreciation, and more importantly characteristics and attitudes on life and art from their artists.

This paper is an investigation of differences in philosophy of learning and teaching, and practice of Thai contemporary performing arts as an art education that reveals the various problematic facets of its artist, work of art and above all its ideology of education.
Clash of Theatre Training in Thailand

In the contemporary Thai theatre scenes, there is the encounter of two extreme opposite categories of theatre. The former is the traditional “presentational” style of dance-drama which is well-received from the majority of local Thais all over the country. The latter is the imported modern Western “naturalist” spoken theatre which is popular among the urban intellectual middle-class who receives the Western style of education. The confrontation of these two genres of theatre practice reveals the clash of theatrical ideologies, the performance training and art education. The traditional dance-drama although enjoys popularity among local Thais, is claimed to possess the “pause” in its development due to the lack of major transformation to the current globalized period. It seems old-fashioned and with the immense training methods of memorization and following the master techniques. It gives no space for new invention and creativity which is the core belief in the modern education. Hence, the traditional theatre presentation and its knowledge transfer is regarded as inferior to the imported theatre of realism type from the point of view of Thai urban middle-class who although possess the minority in numbers of population but with their excessive power in media and finance of the kingdom make them the most powerful group of members of the country.

This research is therefore to investigate into the characteristic of each theatre genres, their different methods and philosophies in training and presentation. It is an attempt to clarify the function of the specific knowledge transmission of each culture so as to portray the better understanding of the current clash and how theatre goers could go to each theatre presentation and enjoy both aesthetics equally without discrimination due to the apprehension of each theatrical world views and functions.

Thai classical and traditional dance-drama was influenced and originated from the adaptation of the “Nattayasastra” of the Indian classical tradition in which the basic dance alphabets were introduced by Indian dancers since the Ayudhaya period (500-700 years ago). This theatre practice is underlined by the belief of Theraveda Buddhism assimilated with Brahmanism-Hinduism and indigenous animism resulted in the three contemporary traditional theatre categories i.e. the popular local theatres, the court forms and the village animistic-influenced dance-drama respectively. Stories of performance are taken from the jataka (tales of a previous life of Buddha before attained Buddha hood), local histories, legendary tales and Sanskrit literatures (mainly
for the classical court theatres). Although there are few types of dance-drama in Thai traditional theatre, nevertheless, these performances share some unique common characteristics.

There are the well-rounded qualification of the actors, the usage of stock character, the form of presentation and the performance training. Firstly, in the traditional dance-drama only the classical court forms that much of the text is sung by the offstage professional singers so as to allow the performers to focus only on the refined dance movements, while the clowns of every theatrical type must be able to improvise witty dialogue spontaneously. Hence, it can be said that, the actors of traditional Thai theatres must possess various dimensional quality of the performer e.g. singing, reciting, dancing and improvising in which to be skillful and able to master these techniques require long-term training from an early age similar to ballet and sport training in the West rather than the modern Western theatre. Secondly, in terms of the usage of a set of characters, the three-person configuration is the principal source of the role types that dominate Thai traditional performance i.e. male (a hero), female (a heroine), and ogre or monkey or clown. The massive influence of the usage of three-stock characters can be found in the current practice of Thai television game shows whereas the employments of three masters of ceremony i.e. male, female, and comic personas are operated popularly. Thirdly, the presentational approaches is the foremost form of presentation in Thai traditional dance-drama in which graceful and sophisticated surreal dance gestures, exquisite and glittering costumes, and delicate singing are the key success of any troupes.

Last but not least, it is the most significant issue in this paper, the performance training. The survival of Thai traditional performance is a result of the successful and continuous line of teaching, training and the knowledge transmission from generation to generation. When Thai classical dance-drama was firstly originated, it was in the hand and supervised by the royal court. Later on, with the change of Thai political system from the absolute to the constitutional monarchy, there is the establishment of the College of Dance and Music under the government Department of Fine Arts. Currently, there are several branches of the College of dance and Music sprung up all over the country. The curriculum is designed to train and groom students to play one of the three major roles professionally and the process can start as early as at the secondary school level.
At first, student-actors spend at least half day in every weekdays in dance and music training in which the practice of the 66 basic gestures of the classical dance techniques are studied carefully. Each dance alphabet is related to either the gestures or movements of the gods or mythological beings e.g. “Thep Phanom” (gods in a worshipping gesture), “Phrom Si Na” (Brahman with four-faces). Correspondingly, students have to learn the basic drilling dance which are the slow dance movement (phleng cha) and the rapid dance movement (phleng reo). In order to be a professional actor, they have to master these two dances and repeat them daily in which even the current leading actors have to go through these drills to keep fit.

Next, students are selected for character roles on the basis of their physical appearance for example the role of male requires a dancer with a slender, tall and graceful figure, while the role of female requires a short, feminine and round figure, and the role of ogre requires a tall, strong, majestic and muscular body, or the role of monkey or clown requires a short, quick, round and lively figure. These special selected student-actors will receive further training by experts in these roles. Thai traditional dance-drama knowledge transmission is interplay between the teacher who demonstrated each movement and gesture, and the student who imitates the teacher as closely, accurately and carefully as possible. The key success of this performance training is to keep rehearsing and correcting every single detail of each dance movements as much as possible until it reaches perfection. Thus, the training is very strenuous and strict in which long hours of drilling sessions are being repeated everyday. In the final process when rehearsing for the new production, the leading actors would then be trained for the particular episode and learn how to interpret their stock character roles through the dance and gestures.

Unlike the notion of modern Western theatre, it seems that originality and creativity of an individual performer is completely ignored in Thai traditional theatre while the emphasis is on the mastery of dancing movement which is the complex codified use of the body. According to Brook, this is a characteristic of a “holy theatre” in which the ritual practice are its foundation and the connection with spirituality is over-empowered and dominated the main ideology (Brook in Allain 2006:131). Hence, the continuation of tradition is the primary achievement rather than the originality attainment.

The imported modern Western spoken drama arrived in Thailand 100 years ago by the Western-educated aristocracy, King Rama VI. At first it remained a
singly elitist enterprise, however, with the change of Thai political system and the founding of universities for higher educational purpose in the era of democracy, the Western modern theatre courses were gradually offered in several academic departments since the 1960s e.g. the performing arts, the fine and applied arts, and the English literature depending on its concentration of theatre practice. As a result, the major audiences, actors and theater troupe members are the educated urban Thai middle-class whom with the modern Western style of education they received in the university; they possess the search of individuality, freedom, creativity and originality as their stream of consciousness. Unlike the local Thais whose communality, group collectivity and tradition perpetuation is their core beliefs. Consequently, the modern Western theatre remains remote from the Thai national consciousness.

The modern Thai theatre is operated under the concept of theatrical realism in which the main performance training emphasizes on the psychological and emotional life of the character, justified motivations and the subtext. The psychological based acting system is developed by the Russian actor and director, Constantine Stanislavsky. He created a system of acting called “the Method of Physical Actions” (the Method), as a way to invent believable characters on stage on the basic concept of the actors transforming into another being before the audience’ eyes. His system element include the Magic “If”, the Given Circumstance, Imagination, Concentration, Truth and Belief, Communion, Adaptation, Tempo and Rhythm, and Emotional Memory. His primary aim is to make the actor as a “naturally creative” and “imaginative being” (Allain 2006:69). Stanislavsky’s acting process begins with the “self” of the actors in which they have to search into their own sub consciousness (emotional memory techniques) for a personal experience similar to what the character must conduct on stage. They, then use the ‘Magic If” to both wholly believe in all given circumstances the characters encounter on stage and to suspend from disbelief. In terms of the interpretation, in order to find the believable actions of the characters, one must find the true emotional motivation that stimulated inside the character’s minds. This method is to compartmentalize text into units and find the character’s objective for each unit. Nevertheless, these segmentations must be reconstructed and overridden by the character’s super objective providing a consistent “through-line”. This process is equivalent to the Western literature analysis course.

Currently, actor training in the Euro-American culture and Thai modern theatre focuses on 4 areas i.e. acting, voice, speech and movement. Training classes
are designed to encourage students to relax physically, vocally and psychologically so as to free body and mind instrument. With this full relaxation and complete consciousness, the transformation into the being of a character will be created as a result of the success of magic if.

It seems that the modern Thai theatre employs the super imaginative and intuitive sides of acting as its core knowledge transmission in performance training. In short, it focuses on psychology and the inner process of transforming into a character. The training style aims to create individual creativity in which student-actor centered is the compulsory format of education.

Taking the above into consideration, it seems that while the modern Thai theatre is on the Aristotelian model of acting based on mimesis and realism, the traditional dance-drama is on the presentational approaches where the theatrical illusion is the primary aim in its presentation. Such presentation focuses on the essentialism of “appearance” in which the surface does matter. Under the presentational approach, the core Buddhist teaching is revealed, since the impermanence governs the existence of all beings, “the central concept of theatrical presentation is, therefore, to manifest the illusion to the audience so as to reveal the “illusory” as an aspiration of art towards permanence” (Chetana in Polachan 2010:108). The presentation of surrealistic mode of theatre i.e. beauty of romance, worldly desires and senses are but illusory. It is to constantly remind the truth of impermanence to the audience and communal community, so as for them to detach emotionally from the event and thus their human emotional indulgence is limited and eliminated.

Under this circumstance, the usage of aesthetic idealism in traditional theatre as oppose to the theatrical realism in modern theatre serve totally different purposes to each of their audience. While the former is concerned with the sustainable being and longevity of the community and tradition in which spirituality as of the holy theatre is the core content which lies beyond and above the presentation. The latter is the naturalist theatre in which human psychological interpretation is its main concern due to the influence of modernity and individualism, and the central content can be found within the text in presentation. Thus, it is for the theatre practitioners, audiences, disciples and students to understand each concept of training and presentation prior to their involvement into each theatrical event. This is as each genre serve different purpose and stands on totally opposite working ground; the understanding of the
concept will eliminate discrimination and reveals the new acceptance of this encounter as the “variety” which presents different facets of Thai theatres.

REFERENCE


Polachan, Wankwan (2010), Postmodernism and Thai Theatre, Ethical Encounters: Boundaries of Theatre, Performance and Philosophy, Newcastle upon Tyne: Cambridge Scholars Publishing.

Rutnin, Mattani. (1993), Dance, Drama and Theatre in, Tokyo: The Centre for East SIAN Cultural Studies for UNESCO, the Toyo Bunko.

Reading Strategy Use for Taiwanese EFL Students: A Case Study

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Abstract

The purpose of this study is to investigate reading strategies of English as a foreign language (EFL) learners who arrive to the United States to pursue higher education when their first language is set. The subjects are two international graduate students from Taiwan. Several assessments, such as reading attitude interview, analysis of oral reading miscue, and observations of reading behaviors were administered to identify their reading strategies and needs. The result shows that the participants successfully adopted several useful reading strategies, such as applying their prior knowledge, predicting, and self-monitoring. However, they both ignored the expression and fluency as they read. In addition, they repeatedly made grammar errors, which are related to their first language experience. This research not only explored Taiwanese students’ strength and needs in learning English, but also provided useful suggestions for education in the field of TEFL.
**Introduction**

In today’s schools in the United States, the number of EFL student is steadily growing. In state like California, it is common to have students from more than seven countries in one classroom. Hwang (2001) indicates that many EFL students arrive to the States to pursue higher education when their first language is set. These students might be required to take International Students English Exam (ISE), a combination of conversational speaking, writing and English knowledge, if their TOEFL score is below 250. The result of ISE decides whether EFL classes are required. However, it is found that there is a missing link between EFL classes and regular academic classes. In order to successfully merge this ESL population into the mainstreaming setting, teachers need to understand these learners better, including their linguistic and cultural background information, beliefs in reading, and their reading strategies.

In this paper, we chose two international graduate students, Rose and Julia to administer reading attitude interview and miscue analysis. The two subjects were enrolled in a private university in California while the study was conducted. This activity investigated their reading behaviors and attitude through interview, reading aloud and our observation. The rationales of this reading activity are:

1. **Metacognition**

Rhodes and Shanklin (1993) specify that assessing metacognition help teachers to discover students’ perceptions of themselves as readers and the strategies they employ to solve the problems they encounter in reading. Research supports the important role of metacognition play in the reading instruction, especially for struggling readers.

2. **Miscues: windows into the reading process**
Wilde (2000) indicates the reason to learn miscue analysis is to better understand what readers are doing, which then help inform instruction. More specifically, miscues analysis help teachers understand what strategies readers are using and how effective those strategies are. Most importantly, reader’s miscues provide insight into how they integrate the language cueing systems during the reading process in order to construct meaning. The four cueing systems comprise of semantics, syntax, graphophonics and pragmatics. The quality of readers’ ongoing comprehending depends on their ability to use the four language cueing systems in an integrated way. Therefore, through miscues analysis, we will understand readers better.

3. Assessment in oral reading

Johnston (1997) suggests oral reading can be used to assess the kind of language processes taking place in the head of the reader. Although oral reading and silent reading are not the same thing, there is a sufficient similarity between the two to make analyzing students’ oral reading a usefully way to understand the way they process language when they read.

We believe that this oral reading activity helps reader to assess their metacognition and the process of reading in their head. It is valuable information for teachers to access students’ strengths and needs. Teachers can use it to plan instruction based on readers’ strengths. In the following section, we will explain the subjects and procedure in details.

Method

1. About the Subjects

In this case study, we assessed two international students’ oral reading. In the time of conducting this case study, Rose and Julia just recently arrived in the United States. They both enrolled in master’s program majoring in Computer Science. Before coming to the
States, they have studied English for more than 10 years in Taiwan. Like most international students, they were required to take ISE exam (International Student English Exam). They were taking ESL classes and regular graduate courses while this study was conducted. Through this activity, we examined Rose and Julia’s oral reading and drew their comments about their performance.

2. Process

a. Interview

At the beginning, we conducted an interview with Rose and Julia. The interview questions include their perceptions of themselves as readers and strategies they used in reading. Responses to these interview questions provide us profiles of the readers. Based on reader’s background, we chose two meaningful texts in adequate level, the first article is about China’s environmental issue and the second one is about parking problem around the university, which they attended.

b. Oral Reading Recording

We recorded Rose and Julia’s oral reading on these two articles separately. Before recording, we asked them to try their best to read and use their own ways to read when they encounter any difficulty. After reading, we asked them to talk about their comments of strategy used.

c. Miscue Analysis

We listened to what we recorded from Rose and Julia and coded their miscues. We then combined the data we have complied about their use of sentence structure, meaning, and phonics into a comprehensive portrait. This information helps us generalize about their strengths, strategies and needs. In the next section, we will discuss about what we found from Rose and Julia.
Results

In order to generalize Julia and Rose’s strengths, strategies, and possible future growth, we coded their miscues. In this section, we walked through the process of their reading and also made a comparison about their performance. Since the two articles are long, we coded only 40 sentences in first article, *Shrinking Treasures*. The following figures presented the data about their use of sentence structure, meaning, and phonics.

Figure 1. Julia’s result

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Figure 2. Rose’s result

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Question #3 (meaning)

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Graphic (visual similarity)

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Figure 3. Comparison of miscues for Julia and Rose

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<td>Yes</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td>No</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Question #2 – Semantic Acceptability - Percentages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>93%</td>
<td>98%</td>
</tr>
<tr>
<td>No</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Question #3 – Meaning Change - Percentages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>88%</td>
<td>98%</td>
</tr>
<tr>
<td>Partial</td>
<td>$2/40 = 5%$</td>
<td>0%</td>
</tr>
<tr>
<td>Yes</td>
<td>$3/40 = 7%$</td>
<td>2%</td>
</tr>
<tr>
<td>Graphic Similarity - Percentages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Some</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Julia and Rose are comfortable readers. Coding their sentences, we saw that they either have no miscues, that miscues were insignificant, or they self-corrected. Although we see that they both had 35% sentences that were unacceptable in terms of grammatical structure, it
did not mean they did not understand the meaning of the sentences. They made grammar mistakes because they ignored the plural form of words and the verb tense, for example:

5. It is a dragon that just happen\(\textcircled{\text{5}}\) to be cloak\(\textcircled{\text{5}}\) in one of China’s most dramatic and accessible glaciers.

9. A few venture gingerly onto the glacier\(\textcircled{\text{9}}\) outer slopes, to slip and slide for souvenir snapshot\(\textcircled{\text{9}}\).

These errors might be too minor a syntactic problem to make the sentence as a whole ungrammatical. However, after finding that they both repeatedly making the same grammar errors, we decided to adopt a strict standard to make judgments because these grammar errors are related to their first language experience. There is a different grammar system between English and their native language, Mandarin. In Mandarin, there is no rule for plural and verb tense. Julia and Rose are adult English learners. Before they came to the U.S.A., their first language is already set. Although they have studies English grammar through grammar-based and audiolingual approaches in the past, they still unconsciously ignored these rules when they were asked to read out loud an English article. This situation is similar to Krashen’s hypothesis “the fluency in a second tongue cannot be learned; that is, conscious mastery of grammar and vocabulary does not prepare us to use the language for communicative purposes” (Crawford, 1999, p.123).

In addition to their performance in the syntax acceptability, we compared their profiles to understand how they differ from one another. In Figure3, we see Julia is a less effective reader than Rose. Julia made more miscues that did not make sense or that partially changed the meaning of the passage. For example, in sentence 7 and sentence 22, Julia’s miscues
changed the height of the mountain and also confused with the number of people who were affected by water shortages.

7. At 12,000 feet, many visitors carry small canister\(\Rightarrow\) of oxygen to avoid altitude sickness.

22. He says water shortage\(\Rightarrow\) are certain to become more severe in the region, affecting 300 million people, and a third of China’s population.

Finally, we analyzed their strategies for using graphphonic system. In this section, we found that when a word was completely unknown to them, they tended to attempt it with phonics. Rose is an advanced reader. She only made 7 miscues in using high visual similarity to connect the print and the sound. Comparing to Rose, Julia is a less effective reader. Julia made 19 miscues in using high visual similarity to connect the print and the sound. Obviously, she heavily relies on phonics and cannot pronounce the word right. It is consistent with what Sandra Wilde said “Good ones use- but don’t overuse- phonics, while weaker ones may rely too much on it” (2000, p.84).

Discussion

In order to understand both subjects’ reading strategies, we held a short conference with them and discussed about their performance. They both felt these two articles are not difficult because there are only a few new vocabularies and it is easy for them to connect their prior knowledge to the context. During reading, they used several self-correction skills and also relied on phonics to deal with new words. In addition, they both felt very confident in understanding the content of these two articles. With the purpose of providing a more detailed picture about their reading performance, we analyze their reading strategies as the following:
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Prior knowledge</td>
<td>- They exhibited strong motivation in familiar content. They felt it is very helpful when she has background knowledge of the article.</td>
</tr>
<tr>
<td></td>
<td>- For example, the first article “Shrinking Treasures” is talking the global warming phenomenon in China. Although they were not familiar with the topic of global warming, the word “China” drew their attention. In addition, this article mentioned the movie “The Day After Tomorrow.” Since they saw this movie before, it was helpful for them to understand the context of the article.</td>
</tr>
<tr>
<td>II. Predicting</td>
<td>- Julia did not mention that she used this strategy before her oral reading.</td>
</tr>
<tr>
<td></td>
<td>- Rose told us that she is used to skim the topic sentences to find key words and predict the content before her reading out loud. It was helpful for her to understand the content and speed up her reading.</td>
</tr>
<tr>
<td>III. Self-monitoring</td>
<td>a. Skip over / Omission</td>
</tr>
<tr>
<td></td>
<td>- Yes, they both used this strategy, especially, when they met an unknown word. For example, they read “picture” instead of “picturesque” and omit “sque”</td>
</tr>
<tr>
<td></td>
<td>b. Sound it out</td>
</tr>
<tr>
<td></td>
<td>- Yes, they both rely on phonics to sound new words out. For example, when Julia saw the word “diasters,” she read “dizister.”</td>
</tr>
<tr>
<td></td>
<td>c. Substitution</td>
</tr>
<tr>
<td></td>
<td>- Yes, they both use the skill of substitution. For example, they both used “deep” to substitute for “depth.”</td>
</tr>
<tr>
<td>d. Reread / self-correction</td>
<td>Yes, for instance, when Julia saw the word “politicians,” she read “public, politic, polition.” When Rose saw “analyze,” she read, “ana, analyze.”</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>e. Insertion</td>
<td>Rose did not have this behavior, but Julia did it few times. For example, Julia inserted the word “and” before the comma of the sentence “affecting 300 million people, a third of china’s population.”</td>
</tr>
<tr>
<td>f. Transposition</td>
<td>They both did not have miscues in transposition.</td>
</tr>
<tr>
<td>g. Repetition</td>
<td>Julia seldom repeated her words or sentences.</td>
</tr>
<tr>
<td></td>
<td>Rose used this skill several times to check her reading.</td>
</tr>
<tr>
<td>h. Recognized high frequency words</td>
<td>Julia did not use this skill to help her reading.</td>
</tr>
<tr>
<td></td>
<td>Rose told us that she recognized high frequency words in context to clarify terminology.</td>
</tr>
<tr>
<td>Strategy</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>IV. Expression</strong></td>
<td>a. Voice quality (Tone and inflection)</td>
</tr>
<tr>
<td></td>
<td>• They both did not recognize the use of tone, inflection to attempt an expressive interpretation of the text.</td>
</tr>
<tr>
<td></td>
<td>• Their voice quality made little distinction for various characters and conveyed little feeling appropriate for the passage.</td>
</tr>
<tr>
<td></td>
<td>b. Speed, pace or rate</td>
</tr>
<tr>
<td></td>
<td>• About Julia’s reading, her pace is uneven with a mixture of conversational and slowed rate. Her rate does not correspond to the meaning</td>
</tr>
<tr>
<td></td>
<td>of the passage, and sometimes a monotone or excessively hurried speed is the result. Therefore, sometimes the meaning is impeded.</td>
</tr>
<tr>
<td></td>
<td>• About Rose’s reading, her pace is more consistent. However, she did not correspond her reading pace to the meaning of the text.</td>
</tr>
<tr>
<td><strong>V. Fluency</strong></td>
<td>The flow of their delivery</td>
</tr>
<tr>
<td></td>
<td>• Basically, they read with some appropriate pauses, stops, starts, and signals for transitions, although they sometimes paid little</td>
</tr>
<tr>
<td></td>
<td>attention to punctuation.</td>
</tr>
<tr>
<td></td>
<td>• Comparing to Rose, Julia’s reading contained more noticeable choppiness with pauses and breaks at unexpected time. Meaning and</td>
</tr>
<tr>
<td></td>
<td>expression were affected.</td>
</tr>
</tbody>
</table>

**Conclusion**

According to transactional theory, reading is the process of constructing meaning through the interaction among a reader’s existing knowledge, the information suggested by the print on the page, and the social context (Lenski & Nierstheimer, 2004). It involves mapping the available information onto an appropriate schema which is already stored in a reader’s memory. Readers’ background knowledge, interests, linguistic abilities, and abilities to apply reading strategies are all important ingredients that will affect the outcome of the
reading event (Lenski & Nierstheimer, 2004). A successful reader should be able to use the textual clues to derive these schemata from his/her past experience to construct meaning. He/she should also have the ability to apply strategies to control over what and how he/she read.

Therefore, based on the theory and our findings, we would like to conclude Rose and Julia are both comfortable independent ESL readers because they adopted several useful strategies, such as applying their prior knowledge, predicting, and self-monitoring. Among these strategies, prior knowledge and predicting are particularly important for ESL learners because the strategies can help them to integrate new information into their existing conceptual framework of their native language, cultural background, and knowledge of texts.

In addition, they showed evidence of integrating three sets of cues (syntax, semantics, and meaning) and graphophonetic system. During the reading process, they predicted, confirmed and self-corrected. As an ESL adult learner, pronunciation could be a problem for reading out loud. We found they were able to rely primarily on phonics to pronounce the unknown words and kept going ahead. Sometimes their pronunciation might not be correct, for instance, Julia usually created non-words for unfamiliar words. However it still worked in the context of the sentence. We also have noticed that Rose and Julia kept making grammar errors of using plural and verb tense. The interesting point is that they were both unconscious of these errors and did not make any correction. This result might be due to the influence of their first language.

Finally, we found they both ignored the expression and fluency as they read. Tone, inflection, speed, pace, and punctuation are important elements of oral reading. While a
reader pays attention to these elements, it is usually easier for them to catch the meaning of the context. We encouraged them using these strategies to enhance their comprehension.

Julia and Rose both have just arrived in the U.S. for two months for the time of this case study. Some studies suggest older ESL learners may have phonological problems and they also might experience a long, gradual decline in their aptitude for acquiring other aspects of language (Crawford, 1999). However, based on our results, both of them are already strategic ESL readers. We believe if they can keep self-monitoring their reading behaviors and improving their reading strategies, ultimately they will be successfully merged into the U.S. classroom setting soon.
References


Comparing Preservice Teachers View of the Importance of Understanding Fractions With Their Ability to Adequately Explain Solutions to Word Problems Involving Fractions

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*University of Nevada, Las Vegas*

Melfried Olson  
*University of Hawai‘i at Mānoa*

**Introduction**

This paper builds upon work conducted with students in grades 5 – 8 and preservice elementary, middle and high school teachers (Olson & Olson, 2010; Sjostrom, Olson & Olson, 2010) concerning reasoning and explanations provided for fraction word problems. It was observed that fifth-grade students, while lacking knowledge of algebraic computational strategies including the ability to use ratio and proportion, still were able to solve word problems involving fraction concepts related to such computational strategies. These fifth-grade students made use of models and the meaning of the words and structures within the problem to arrive at appropriate solutions. However, students in grades 6 – 8, even after more formal instruction in fractions and ratios did not apply their knowledge successfully on these same problems. (Olson, Slovin, and Zenigami, 2009; Olson, Zenigami, and Slovin, 2008; Slovin, Olson & Zenigami, 2007.)

The results associated with examining preservice teachers’ facility with these problems are mixed (Olson & Olson, 2010; Sjostrom, Olson & Olson, 2010). The preservice teachers were given the same questions with the added condition to explain their reasoning as they would to someone who would struggle with algebraic methods. In other words, they were to explain the solution to the problem in a manner that would be effective in the context of working with fifth-grade students. Most preservice elementary teachers were not able to actually solve the problems, much less provide a satisfactory explanation. In general, preservice secondary teachers were able to solve the problems, but their ability to explain without algebraic symbolism did not appear to be consistent with their ability to solve the problems.

**Theoretical Perspectives**

Ma (1999) documented the differences between the ability of elementary teachers in the United States and elementary teachers in China to either compute an answer to a division problem or to construct a representation, either verbal or visual, that was conceptually correct for a given division situation. In both cases, the teachers in the United States performed worse than teachers in China and worse in comparison on the second situation than the first.

When one examines the work completed in rational numbers and proportional reasoning, topics that are often discussed are mathematical analysis, notational systems used, clarifying constructs, distinctions between ratios and rates, and similarities and differences between fractions and rational numbers (Lamon, 2007). In particular, Lamon argues that studies in the field have come to a temporary standstill, and outlines a new research paradigm that includes reconsidering pedagogical content knowledge and continuing the conceptual analysis.
Specifically, Lamon (2005) provides insight into her view on research on rational number understanding and proportional reasoning as follows:

One of the most compelling tasks for researchers has been to discover how instruction can facilitate the joint development of rational number understanding and proportional reasoning. By deeply analyzing mathematical content, children’s thinking, and adult thinking, we have begun to understand some of the knowledge that contributes to the development of these critical concepts, operations, and ways of thinking. Helping children to develop a deep and broad understanding of the rational numbers as well as the ability to compute with them and to reason flexibly with them is not as easy as merely teaching a unit on each of the interpretations. It is much more complex than that! There are a number of central core ideas that must be addressed.” (p. 8).

Lamon lists these ideas with connections between every pair: reasoning up and down; rational number interpretations; measurement, quantities and covariation, relative thinking, sharing and comparing, and unitizing. Moreover, Lamon notes that these are a minimal set of topics for students to understand and engage in prior to high school. Furthermore, she indicates that “Research in which children were given the time to develop their reasoning for 4 years without being taught the standard algorithms for operating with fractions and ratios, produced a dramatic increase in students’ reasoning abilities, including their proportional reasoning” (p. 10).

In our experiences, when students and teachers attempt solutions for word problem involving fractions where the problems might involve multiplication, division, or ratios depending on the perspective one takes when attempting a solution, students and teachers are able to apply algorithms but cannot describe why such algorithms are conceptually sound. In their work, Cramer, Wyberg, and Leavitt (2007) offer support for experiences such as ours, “Many middle school students are able to apply the algorithm for multiplying fractions, but most are unable to describe the reasons why the algorithms work. Fewer are able to make sense of the division algorithm” (p. 533). Cramer, Wyberg, and Leavitt also note that while students are able to make connections between models, images, and symbols for addition and subtraction problems, “Developing mental images related to multiplication and division of fractions proved to be much more complex” (p. 535).

Furthermore, Kieran (2007) reports that, “Generating equations to represent the relationships found in typical word problems is well known to be an area of difficulty for algebra students” (p 271). However, there is little work done in examining how children make use of modeling to solve these problems if they cannot represent the ideas with algebraic notation, including the use of ratio and proportion relationships to solve these problems. Cramer, Wyberg, and Leavitt (2007) indicate that, “State and national assessments measuring fraction, decimal, and percent understanding has consistently shown that students struggle to learn these concepts in a meaningful way. Perhaps as educators we have underestimated the complexity underlying working with these numbers” (p. 534).

In her extensive look at teaching fractions and ratios for understanding, Lamon (2005) thoroughly outlines and categorized an immense collection of fraction and ratio problems. She discusses different structures related to multiplication, division, and ratio situations and thoroughly compares and contrasts the different representations. Yet in all the examples
provided, Lamon has few, if any, specific problem situations where the comparisons demand ratios involving fraction – to – fraction.

In the problems examined in this article, we focused on problems for which drawing a linear model could be helpful, although other models of even verbal reasoning could suffice. Although the fifth-grade students had used a curriculum rich in solving problems using a linear model, the choice to include these problems was made because a linear model was most often the model of choice from those fifth-grade students who could solve these problems. In framing strategies for solving problems, Ni (2000) discusses the use of number lines, including the difficulties students have in conceptually understanding the meaning and representation of a rational number. Specifically, Ni states that, “the graph representation of a given algebraic problem is not necessarily less abstract than the equation for the problem” (p. 140). In particular, we argue that it is necessary to understand the ways in which teachers view algebraic symbolism as inherently more abstract than other forms of abstractly representing a given algebra problem, similar to the point made by Ni. In other words, our guiding concern is that we argue that if secondary preservice teachers largely view algebraic symbolism as the pinnacle of intellectual capacity in algebra classrooms, then they need the facility to assist those students struggling with such abstractions as well as fraction concepts and computations in any way that fosters meaningful conceptual understanding. Consequently, the focus of this study revolves around attempting to arrive at an initial understanding of the way in which secondary preservice teachers alternatively conceive of fraction problems, without resorting to simple algebraic symbolic manipulations. This examination of preservice secondary teachers’ understandings is an area that we maintain has woeful lack of research on which teacher educators can provide meaningful interventions at both the preservice and in-service levels.

Gilbert and Coomes (2010), in discussing a problem similar to the ones discussed in this article offer the following argument:

Any reasonably numerate adult should come up with an answer to this task. Teachers, however, not only must be able to answer this question correctly; the tasks of teaching require that they must also understand and interpret multiple approaches to the same answer. (p. 421)

We suggest that in addition to the argument provided by Gilbert and Coomes, teachers must be able to conceptualize multiple ways to solve the problem so they can help students who might struggle with a formalized approach to a problem.

In this paper, we document both the work of preservice secondary teachers (PSSTs) on four fraction worded problems, compare their ratings of the effectiveness of their solutions to the rating of the explanations given by the authors, and also examine these preservice teachers’ ratings on five questions related to their beliefs regarding the importance of fraction computation, conceptual understanding of fractions, and use of models and representations when working with fraction problems. The research presented in this paper extends prior work in four ways: 1) it provides examinations of ratio and proportion situations through fraction word problems, 2) it provides examinations of the ways that these problems are done with models and reasoning rather than computation, 3) it provides for explorations related to how preservice teachers are able to explain solutions to these problems with models and reasoning, and 4) it draws comparisons between the ratings that PSSTs give to their explanations and the ratings of their explanations by the rubric we used.
Methodology

The same four problems from Olson and Olson (2010) were used, and the rationales, with a few modifications, underlying the choice for specific problems are as follows:

1) Problem 1 is referred to as a “common numerator” problem. We maintain that if a student understands the inherent 1-1 correspondence between the numerators, the problem can be reconciled simply by examining numerators. While common denominators are useful in solving problems, we often do not investigate problems where use of common numerators is helpful in determining a solution. Furthermore, the remaining problems can also be solved with a common numerator strategy.

2) Problems 2, 3, and 4 are similar in structure in two important ways. First, they each can be modeled algebraically as $a \cdot x = b$, or $a \cdot x = b \cdot y$ where $a$ and $b$ are known values described in the word problem. Second, the first fraction mentioned in each problem has 2 as a numerator. We were deliberate in using fractions with a numerator of 2 because children appear to use models to reach a solution more effectively when division by 2 is involved. We were interested if the prospective secondary teachers would be able to effectively model their solutions and felt these problems might be easiest to model.

Problem 3, while similar in structure to Problems 2 and 4, is more like the form $a \cdot x = b \cdot y$. Furthermore, the way the Question 3 is asked changes the thinking needed to find a solution. In Questions 2 and 4 the solution is requested for $a = 1$, while in Question 3 the solution is requested for $b = 1$.

3) The structure of Problems 2 and 4 seems to suggest that a linear model matches the actions of the words. If a number line is an effective way to understand fractions, then perhaps prospective teachers would be able to use a linear model to answer the question.

4) Explanations of models used to solve problems 2, 3, and 4, often use the idea that the first thing to be done to solve the problem with a model or reasoning is to divide by the numerator of one of the fractions and then multiply by the denominator of the same fraction. That is, effective modeling of the solution to these problems can help explain why “invert and multiply” makes sense when dividing fractions. (p. 88 – 89)

The same set of four problems from research conducted in the previous year was used with two modifications. To determine student beliefs related to understanding fractions, fraction computation, and being able to use models to explain reasoning when working with fractions, a survey with five questions was created. These questions were to be answered before the work on the problems and again after completing the work on the problems. The specific prompt and statements related to a Likert-type scale for this survey are presented in Table 1.

The four problems given to the PSSTs, as well as the directions are given in Table 2. The oral directions during administrating the problems emphasized the need to provide a solution by using models and sense making. Additionally, the written directions provided on the handout were as follows: Please do each page in sequential order, do not skip pages. The directions for providing your solution to the fraction problems will be at the top of Page 3. Please follow the
directions to the best of your abilities. Please make sure you provide your “effectiveness” rating at the bottom of each page after providing your solution to the problem on that page.

Table 1
Survey of Beliefs Related to Fraction Problems

<table>
<thead>
<tr>
<th>Belief Prompt</th>
<th>Belief Statements</th>
<th>Likert Statements</th>
<th>Likert Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>For each statement, please circle the number that best matches your belief.</td>
<td>1. An important aspect in understanding fractions is to possess computational fluency.</td>
<td>Strongly Agree</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2. An important aspect in understanding fractions is to possess conceptual understanding of what fractions “mean.”</td>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3. An important aspect in understanding fractions is to be able to accurately provide a model or representation for situations involving fractions</td>
<td>No Opinion</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4. An important aspect in computing fractions is to be able quickly arrive at the “correct” answer.</td>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>5. An important aspect in computing fractions is to be able to provide a model or representation for the way in which you completed your computation.</td>
<td>Strongly Disagree</td>
<td>1</td>
</tr>
</tbody>
</table>

Each problem was on a separate sheet of paper, with room to solve the problem. After answering each question, each PSST was asked to rate the effectiveness of their explanation. The rating was on a five-point Likert-like scale. The effectiveness rating data were obtained to gain information regarding PSSTs views on how they felt they responded to the prompt to engage a student who struggles with algebraic representations and symbolism. This information is presented in Table 3.

Data were gathered from PSSTs at two institutions of higher education in southwest United States. The PSSTs were enrolled in courses on the methods of teaching mathematics during the fall semester 2010. Forty-five minutes were allowed for the completion of the assessment, largely because we previously found that twenty minutes was sufficient for students.
in grades 6 – 8 to complete two problems. Importantly, as will be discussed later in this paper, the time we allotted was evidentially not adequate for many PSSTs to complete every aspect.

Table 2

<table>
<thead>
<tr>
<th>Written Instructions for Working Fraction Problems</th>
<th>Problem Number</th>
<th>Fraction Problems as Posed to Preservice Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>For each question, show how you would explain how to solve this problem to a student who does not understand, or is having difficulty understanding, how to solve it algebraically. That is, you are to provide your solution to the problem ‘according to how it is written’ by using models and sense making rather than direct computations and algebraic symbolism.</td>
<td>1</td>
<td>It takes 3/4 liter of paint to cover 3/5 m². How much paint is needed to paint 1 m²? Explain your reasoning and support your answer.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Macy had a distance to swim during practice. When she had gone two-thirds of what she was supposed to swim she had traveled one-half kilometer. What was the total distance Macy was to swim during practice? Explain your reasoning and support your answer.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>It took Brooke 2/3 of her advertising budget to buy 3/5 of a newspaper column. What part of the advertising budget is needed to buy a whole column? Explain your reasoning and support your answer.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Jonnine had a board. She cut and used 2/5 of the board for bracing. She measured the piece used for bracing and found it to be 3/4 foot long. How long was the original board? Explain your reasoning and support your answer.</td>
</tr>
</tbody>
</table>
### Table 3
**Effectiveness Ratings**

<table>
<thead>
<tr>
<th>Effectiveness Prompt</th>
<th>Likert Statements</th>
<th>Likert Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the scale of 1 to 5 below (please circle the appropriate number) – To engage a student who struggles with algebraic representations and symbolism, the solution method I demonstrated for this problem would be.</td>
<td>Highly Ineffective 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ineffective 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neither Ineffective or Effective 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Effective 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highly Effective 5</td>
<td></td>
</tr>
</tbody>
</table>

As in prior work, for each problem we examined the work for correctness of answer, type of model used, and explanation provided. The coding used for these components is described below:

- Explanations were coded using the explanation rubric from the State of Illinois extended response format (Illinois State Board of Education, n.d.). The explanations included written explanation of the rationales and steps of the solution process. Justifications of each step were examined. Though important, the length of the response, grammar, and syntax are not the critical elements of this dimension. The rubric used in coding explanations is given in Table 4 (see following page).

- Answers were coded 0-no response, 1-incorrect, 2-correct.

- Types of Models were coded 0-no model, 1-linear, 2-linear area, and 3-area model. While it is usually easy to classify a model as linear, classifying a model as area versus linear is not always so clear. We use linear area as a model that has components of area but for which we infer the thinking was linear. (Slovin, H., Olson, M., and Zenigami, F., 2007; Olson, Zenigami, and Slovin, 2007; and Olson, Slovin, Zenigami, and Okazaki, 2007)

The code linear was only used for line or line segment representations.

### Results

In this section we present and share observations related to the results of coding student answers, explanations, models used, and effectiveness ratings; discuss models used when correct answers and level 4 explanations were given; and compare answers and explanation levels to
### Table 4
**Codes for Explanation Ratings**

<table>
<thead>
<tr>
<th>Explanation Rating</th>
<th>Explanation Rubric Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Gives a complete written explanation of the solution process; clearly explains <em>what</em> was done and <em>why</em> it was done. May include a diagram with a complete explanation of all its elements.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Gives a nearly complete written explanation of the solution process; clearly explains <em>what</em> was done and begins to address <em>why</em> it was done. May include a diagram with most of its elements explained.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gives some written explanation of the solution process; either explains <em>what</em> was done or addresses <em>why</em> it was done. Explanation is vague, difficult to interpret, or does not completely match the solution process. May include a diagram with some of its elements explained.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Gives minimal written explanation of the solution process; may fail to explain <em>what</em> was done and <em>why</em> it was done. Explanation does not match presented solution process. May include minimal discussion of the elements in a diagram; explanation of significant elements is unclear</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>No written explanation of the solution process is provided.</td>
</tr>
</tbody>
</table>

those from prior research. A summary of the codes per question for answer, explanation, model, and effectiveness rating is given in Table 5.

### Table 5
**Codes Per Question Per Problem 2010**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Code</th>
<th>Answer</th>
<th>Explanation</th>
<th>Model</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>11</td>
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<tr>
<td>Problem</td>
<td>Code</td>
<td>Answer</td>
<td>Explanation</td>
<td>Model</td>
<td>Effectiveness</td>
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<tr>
<td>---------</td>
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<tr>
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<td>4</td>
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<td>--</td>
<td>--</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>2&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>3</td>
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<td>--</td>
<td>--</td>
<td>2</td>
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<tr>
<td>3&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>--</td>
<td>1</td>
</tr>
</tbody>
</table>
Note. Not all code numbers (i.e., 1, 2, 3, 4, 5) were used for each aspect of this table (i.e., Answer, Explanation, Model, and Effectiveness). Cells with non-applicable codes are denoted with “--".

a three students used two different models
b one student circled both 1 and 2
c only 16 students answered this question and only 10 provided an effectiveness rating
d only 12 students answered this question; one student used two different models, and only 10 completed the effectiveness rating.

Several observations are noteworthy from the data in Table 5:
1. No problem was answered correctly by every PSST.
2. Only on Problem 2 were more than 50% of the explanations at the highest level, 4.
3. The percent of level 4 explanations for Problem 3 was lower than for the other questions.
4. The effectiveness rating for Problems 3 and 4 were lower than for Problems 1 and 2. The effectiveness ratings for Problem 2 matched more closely the explanation code than in other problems.
5. The use of a model was less for Problems 1 and 3.
6. While not seen in the data above, there were only four PSSTs who correctly answered each problem and only one who answered correctly and received a 4 for explanation on each problem

The coding for models of those who answered correctly for each question is provided in Table 6. From these data, there are noteworthy observations. In particular, those answering correctly on Problem 1 used an area model most often. These PSSTs used both an area model for the paint and for the square meter but no one used a double number line model, which might have proven successful. Some manner of a linear model was used most often for Problem 2. However, this is not surprising given that the problem somewhat suggests distance in both uses of fractions. The use of models in Problem 2 might be one reason that the effectiveness rating for this problem matched the explanation rubric better than in the other Problems. The fact that only two people solved Problem 3 with an explanation rated as 4 likely indicates that the PSSTs could not conceive of how to model this problem.

Table 6
Models Used by PSSTs With Correct Answer and Explanation Rating of 4

<table>
<thead>
<tr>
<th>Problem Number</th>
<th>No model</th>
<th>Linear</th>
<th>Linear area</th>
<th>Area</th>
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<td>4</td>
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<td>1</td>
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</tbody>
</table>
Because the same questions were asked of a different group of students in 2009, we provide a comparison between the data from 2009 and 2010 in Table 7. In this table, percentages for each code per question are reported, and only of those who answered a question.

Table 7
Comparisons 2000 and 2010 by Percentage

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<td>58</td>
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</tr>
</tbody>
</table>

*Note.* Not all code numbers (i.e., 1, 2, 3, 4) were used for each aspect of this table (i.e., Answer, Explanation, and Model). Cells with non-applicable codes are denoted with “--”.

Observations that we arrived at through examining the data that are provided in Table 7 are as follows:

1. Students were most successful with Problems 2 and 4 (answer correctly with an explanation of 4) each year.
2. Students were least successful on Problems 3 and 1 (answer correctly with an explanation of 4) each year. The authors continue to be surprised at the difficulty PSSTs have in explaining the answer to Problem 1. The ‘natural 1 – 1 correspondence’ implied in the question would indicate that a solution for that problem could be quite easily explained, but the data do not support this.
3. Problem 3 is the most difficult problem each year in spite that Problems 2, 3, and 4 are similar with the numerator of one fraction being 2. However, in problem 3, any modeling involves operating on the other fraction. It was interesting that one student, who answered Problem 2 correctly with an explanation of 4, wrote that he/she should be able to solve Problem 3 the same way, but could not do so. However, he/she was able to solve Problem 4 in the same way.
4. The differences between the percentages who answered correctly and those who received an explanation of 4 were greater in 2010 than in 2009. This is most likely due to increased verbal emphasis to justify reasoning in 2010.

Due to several students not being able to work all problems, many did not complete the post survey. Average pre-rating, post-rating, and difference between post- and pre-rating are given in Table 8. While there was no meaningful difference in the averages on three of the question, the PSSTs did rate both prompts 3 and 4 much lower on the post-rating. That is, after working on the problems, PSSTs were more in agreement with the belief that it is important to be able to accurately provide a model or representation for situations involving fractions. It is also...
worth noting here, and elaborating on in the following section, that the PSSTs showed less disagreement with the importance of computing fractions quickly.

Table 8
_Averages From Survey Data_

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pre-Rating</th>
<th>Post-Rating</th>
<th>Difference Post – Pre</th>
</tr>
</thead>
<tbody>
<tr>
<td>An important aspect in understanding fractions is to possess computational fluency.</td>
<td>2.37</td>
<td>2.44</td>
<td>0.07</td>
</tr>
<tr>
<td>An important aspect in understanding fractions is to possess conceptual understanding of what fractions “mean.”</td>
<td>1.68</td>
<td>1.67</td>
<td>-0.01</td>
</tr>
<tr>
<td>An important aspect in understanding fractions is to be able to accurately provide a model or representation for situations involving fractions</td>
<td>1.79</td>
<td>1.44</td>
<td>-0.35</td>
</tr>
<tr>
<td>An important aspect in computing fractions is to be able quickly arrive at the “correct” answer.</td>
<td>3.89</td>
<td>3.22</td>
<td>-0.67</td>
</tr>
<tr>
<td>An important aspect in computing fractions is to be able to provide a model or representation for the way in which you completed your computation.</td>
<td>1.89</td>
<td>1.89</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Discussion**

The results given above have several implications for teacher education. The Common Core State Standards for Mathematics (2010) (CCSS) expect students to have computational competency, conceptual competency, and to employ standards of mathematical practices. In particular the authors of the CCSS provide a Grade 6 expectation for ratio and proportion in that students should be able to, “Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities” (p. 42).

Clearly then, an important question is, to what extent are teacher educators, and teacher education programs preparing teachers to help students meet these requirements, particularly in light of the compelling evidence presented in this paper that PSSTs have difficulty modeling the situations to help students who lack facility with algebraic symbolism and have difficulty obtaining a solution in situations involving fraction concepts and computation? We argue that it is imperative for preservice teacher education programs to challenge PSSTs to connect fraction computational competency and fraction conceptual understanding; that is, challenge PSSTs to
provide explanations that use modeling and wording of problems to scaffold students in developing solution strategies and conceptual understandings.

We maintain that working with PSSTs who often approach a fraction problem with algebraic symbolism and reasoning, rather than understanding the nature of and relationship between fractions in the problem, is crucial. The lack of facility to effectively, and with relative speed, represent fraction problems involving ratio, proportions, and unknown quantities becomes an issue when the students with whom PSSTs work in a 9th grade pre-algebra or algebra class have difficulty with solving algebra problems involving multiplication and division of fractions. Our current concern that underlies this study, as well as what we view as important avenues for future research, relates to whether PSSTs will be able to provide multiple representations that include modeling, or compare and contrast modeling and multiple representations to facilitate students learning of these mathematical concepts. We maintain that it is essential to prepare PSSTs to address these issues, which likely means that a more cooperative effort of those involved in the preparation of the PSSTs is necessary so PSSTs do not enter teacher education courses on the methods of teaching secondary mathematics with an inability to explain, model, and communicate their mathematical understandings at a higher level than demonstrated by the work outlined in this paper. In part, we strongly argue that the role of instruction in undergraduate mathematics classes must be adjusted to value, encourage, and emphasize deep mathematical thinking, connections, and reasoning that, along with methods courses, allow for PSSTs to develop more robust mathematical understandings related to facilitating the development of students’ mathematical knowledge at a higher level than solely algorithmic. As one PSST in our study noted in the space made available for comments, “I hope there is a class where I learn to teach this.” It is our firm conclusion that, although such discussions are important in methods courses, the deep mathematical knowledge needed for such discussions must occur in mathematics courses for PSSTs taken prior to such secondary methods classes.

References


Ni, Y. (2002). How valid is it to use number lines to measure children's conceptual knowledge about rational number? Educational Psychology, 20(2), 139-152.


Olson, T. A., & Olson, M. (2010). An examination of the methods, models, and reasoning used by prospective secondary teachers on fraction worded problems with regard to common numerator strategies. Proceedings of the 8th annual Hawaii International Conference on Education (pp. 84-101). Honolulu, HI: HICE.


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An Investigation on Preschool English Education in Southern Taiwan

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Abstract
Since English has become the global language, learning English in early childhood has, accordingly, become a prevalent trend in Taiwan. In order to examine the practice of preschool English education, the data on self-reported questionnaires were gathered from 192 registered preschools in southern Taiwan. The subjects of this study are preschool teachers and administers. Data obtained were analyzed using descriptive statistics. The main findings are discussed in the following areas:

1. The differences of English education in different preschool education models
2. The quality of early childhood English teachers
3. The quality of early childhood English textbooks and materials
4. The difficulties of conducting English education programs from preschool administers’ perspectives.

Suggestions based on the data analysis will be made as references for promoting qualified preschool language education.
Hawaii International Conference on Education 2011

1. Title of the submission
   Pedagogical Implications from Phonetic Characteristics of English Sentences Articulated by Japanese EFL Learners

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6. Abstract
   The production of English sentences constructed from multiple clauses by native/non-native speakers was examined in order to investigate how they realize the phonetic representation. We focused on complex sentences that contain syntactically ambiguous structure and need reanalysis for comprehension.

   Native speakers of English and Japanese students produced sentences under the following two conditions; (1) at the normal speed with the natural prosodic features for speakers, and (2) with the prosodic variation on speech speed, with pauses, voice intonation or pitch changes for easier comprehension.

   Some prosodic features that might lead to foreign accents or non-fluency reveal as follows: (a) Japanese student took much longer time and in the narrower pitch range to articulate English sentences than the native speakers. (b) While the native speakers tend to insert the pause either at the syntactic boundary or before the emphasized word, the Japanese EFL learners insert the pause by every word. The results derived through these comparisons suggest that further training in speaking for Japanese EFL learners would be necessary.

   Keywords: articulation by native/non-native speakers, phonological features, pause, foreign accentedness
Pedagogical Implications from Phonetic Characteristics of English Sentences Articulated by Japanese EFL Learners

Ai HIRAI* and Yuko IKUMA**
* Kyoto Seika University
** Osaka Kyoiku University

1. Introduction

Former researches investigated that the prosodic information affects native language (L1) sentence processing. The appropriate prosodic information enhances sentence processing such as accessibility to vocabulary, sentence comprehension or processing time at the first stage of listening (e.g., Cutler & Norris, 1988; Kjelgaard & Speer, 1999). In the second language (L2) sentence processing by Japanese learners of English as a foreign language (Japanese EFL learners), the prosodic information such as the existence of pause or intonation change played an important role as well as in L1 speech processing (e.g., Sugito, 1996, etc.). On the other hand, the data we obtained provided some evidence that Japanese EFL learners might not be able to utilize the prosodic information when processing English syntactic ambiguous sentences (Hirai, Ikuma, & Yokokawa, 2010).

The results from our previous research in Hirai et al. (2010) showed that the sentence processing by the EFL learners at the intermediate level might be constrained not only by the limited syntactic and semantic information, but also by the limited perceptual ability of phonological features, or that the EFL learners might fail to integrate information of “sound” and “script.” If Japanese EFL learners at the intermediate level fail to process syntactic and semantic information and acoustic clues in total, how do they realize the phonetic representation when they articulate English sentences? In what way is learners’ production acoustically different from those of native speakers? If learners could not take advantage of the phonetic clues when listening to L2 sentences, they may not perceive a natural manner of articulation for native speakers in the first place. If the acoustic features by native speakers of English, and the difference between the utterances by Japanese EFL learners and native speakers would be described experimentally, it can be beneficial for speech education in L2 instruction.
Purpose of the Present Study and Research Questions

The purpose of the current study is to examine how L1 and L2 speakers express some acoustic clues that they think facilitate the listeners’ processing. We focused on the production of English sentences constructed from multiple clauses, especially, complex sentences that contain syntactically ambiguous structure and need reanalysis for comprehension. Those are called syntactic garden path sentences. For instance, the sentence below is an example of syntactic garden path sentences.

*Whenever his aunt sings the songs are beautiful.*

*When written, a comma could be inserted between “sings” and “the songs” in order to avoid confusion.*

Listeners or readers can go syntactic processing for the subordinate clause starting with “whenever” through either “sings” or “the songs.” In the case when the first verb of the sentence “sings” is understood as an intransitive verb, the processing of the first clause (the subordinate clause starting with “whenever”) is complete at this point (“Whenever his aunt sings”), and the second clause (the main clause) starts from the noun phrase “the songs.”

On the other hand, in the case when the first verb “sings” is taken as a transitive verb, the processing of the subordinate clause continues until “the songs,” the object noun phrase of the verb “sings” (“Whenever his aunt sings the songs”). However, the rest of the sentence “are beautiful” cannot be a clause, and listeners or readers have to reanalyze the syntactic structure as the first clause is complete at the intransitive verb “sings”, and the noun phrase “the songs” is not the object of the verb but the subject of the second clause.

Syntactic garden path sentences may be articulated with some prosodic clues to avoid misunderstanding. In Hirai et al. (2010) it is found that Japanese EFL learners might not be able to utilize the prosodic information when processing English syntactic ambiguous sentences. However, the acquisition of the L2 phonetic information was not questioned.

In our study, the production of English sentences constructed from multiple clauses by Japanese EFL learners was examined to investigate how they realize the phonetic representation. The data produced by the native speakers of English were also collected to supply the baseline.
2. Methods

Materials

Five stimulus conditions are developed with the syntactic garden path sentence at the core; four target conditions and one group of filler sentences. Fifty-four sentences were used in total, and examples from each condition are shown in Table 1. See Appendix A for all the sentences used in the current study.

Table 1
Stimulus Conditions and Example Sentences

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Subordinate + Main clause</td>
<td>Whenever his aunt sings, the songs are beautiful.</td>
</tr>
<tr>
<td>with an intransitive verb</td>
<td>(early closure)</td>
</tr>
<tr>
<td>(b) Subordinate + Main clause</td>
<td>Whenever his aunt sings the songs, they are beautiful.</td>
</tr>
<tr>
<td>with a transitive verb</td>
<td>(late closure)</td>
</tr>
<tr>
<td>(c) Main + Subordinate clause</td>
<td>His aunt's songs are beautiful whenever she sings.</td>
</tr>
<tr>
<td>with an intransitive verb</td>
<td></td>
</tr>
<tr>
<td>(d) Main + Subordinate clause</td>
<td>His aunt's songs are beautiful whenever she sings them.</td>
</tr>
<tr>
<td>with a transitive verb</td>
<td></td>
</tr>
<tr>
<td>(e) Filler</td>
<td>(various sentences containing a relative clause, a contact clause, or a tag question)</td>
</tr>
<tr>
<td></td>
<td>A cute dog was what I wanted for my birthday.</td>
</tr>
<tr>
<td></td>
<td>A cute dog was the only thing I wanted for my birthday.</td>
</tr>
<tr>
<td></td>
<td>You lied about your age by seven years, didn't you?</td>
</tr>
</tbody>
</table>

Sentences in Condition (a) are syntactic garden path sentences, as they are called typically. In the syntactic explanation, the subordinate clause proceeds to the main clause, and the verb of the proceeding clause is intransitive and does not have an object noun phrase. Because the proceeding clause ends earlier than the case that has an object noun, it is also called “early closure.”

Sentences in Condition (b) are variations of the Condition (a). The difference between Condition (a) and (b) is the transitivity of the verb in the subordinate clause. In this condition, the verb needs the object noun phrase, and two noun phrases appear after the verb of the first clause, unlike Condition (a). Those sentences are called “late closure”
because the proceeding subordinate clause ends at last with the noun phrase after the verb. For this condition, the sentence structure does not cause any syntactic confusion, so listeners or readers do not need reanalysis.

A set of sentences in Condition (c) is another variation of Condition (a). In this condition, the main clause proceeds to the subordinate clause, and the subordinate clause has an intransitive verb. For this condition, again, syntactic reanalysis is not needed.

A set of sentences in Condition (d) is, too, another variation of Condition (a) in terms of the transitivity of the verb in the subordinate clause, and the order of the main and subordinate clause. In this condition, the main clause proceeds to the subordinate clause like Condition (c), on the other hand, the subordinate clause has a transitive verb unlike Condition (c). For this condition, syntactic reanalysis is also not needed.

Lastly, Condition (e) is a set of filler sentences that are not used for acoustic analysis. There are various sentences containing a relative clause, a contact clause, or a tag question, etc. that may result in all different acoustic production. We make sure all of the sentences do not need syntactical reanalysis.

Each sentence was made to be composed of an almost equal number of words, and even an equal number of syllables as well. The overall average of the number constituting a sentence was 9.20 words, and 12.0 syllables. The details are given in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Stimulus Conditions and Example Sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>(a)</td>
</tr>
<tr>
<td>(b)</td>
</tr>
<tr>
<td>(c)</td>
</tr>
<tr>
<td>(d)</td>
</tr>
<tr>
<td>(e)</td>
</tr>
<tr>
<td>(sum)</td>
</tr>
</tbody>
</table>

Participants

Twelve native speakers of American English (6 males and 6 females, ranging in
age from 19 to 21 years old) and thirteen Japanese university students (7 males and 6 females, ranging in age from 20 to 22 years old) were participated in this study. Native speakers were undergraduate students, and had never lived in Japan before. All of them came to Japan for about a few month as exchange students for Kyoto Seika University.

The Japanese students were undergraduate students or graduate students majoring in various areas such as English education, educational psychology, cultural studies, and so on. All of them were attending a lecture offered as one of the teacher training course for English education. Each was asked to answer a questionnaire on foreign language learning experiences, proficiency on English language, experiences living abroad, and so on.

**Procedure**

Native speakers of English and Japanese university students produced garden path sentences under the following two conditions; (1) at the normal speed with the prosodic features that speakers to be natural, and (2) with the prosodic variation on speech speed, making some pauses, voice intonation or pitch changes for easier comprehension. Speakers were instructed to utter sentences that clearly demonstrated each of these conditions. The detailed directions are in Appendix B.

We made four lists, and the order of total of 54 sentences randomized in each list. One participant reads one of the four lists.

Recordings were made in a quiet room individually, and utterances were digitized at 16-bit resolution and 44.1 kHz sampling frequency. In this study, selected 12 sentences from each participant were acoustically analyzed using SUGI Speech Analyzer.

**3. Results and Discussion**

The difference between phonetic characteristics produced by native speakers and those produced by Japanese EFL learners reveals some characteristic prosodic features that might lead to foreign accents or non-fluency. First of all, the ratio between Japanese and native speakers of English by length of the utterance was more than one (ranging from 1.35 to 1.41), that is, Japanese EFL learners took a much longer time to articulate English sentences than the native speakers (Figure 1). Also, the utterance by Japanese students turned out to be in a narrower pitch range.
Figure 1. Comparison: Length of utterance.
“Sub + Main” represents a group of complex sentences which subordinate clauses proceed to the main clauses.
“Main + Sub” represents a group of complex sentences which main clauses proceed to the subordinate clauses.

Table 3
Ratio of Pause Length to Whole Length of the Utterance:
Native Speakers of English (Percentage)

<table>
<thead>
<tr>
<th></th>
<th>baseline condition</th>
<th>cooperating condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub+Main</td>
<td>4.46</td>
<td>6.65</td>
</tr>
<tr>
<td>Main+Sub</td>
<td>0.25</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Table 4
Ratio of Pause Length to Whole Length of the Utterance:
Japanese EFL Learners (Percentage)

<table>
<thead>
<tr>
<th></th>
<th>baseline condition</th>
<th>cooperating condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub+Main</td>
<td>6.37</td>
<td>9.43</td>
</tr>
<tr>
<td>Main+Sub</td>
<td>3.14</td>
<td>5.24</td>
</tr>
</tbody>
</table>
Second, the duration of the pause at the syntactic boundary decreased or disappeared in the complex sentences whose main clause proceeded to the subordinate clause in native speakers (Table 3). Although the consistent downward trend was also obtained by the data of Japanese EFL learners, the pauses were not drastically diminished (Table 4).

Third, while the native speakers tend to insert the pause either at the syntactic boundary or before the emphasized word (Figure 2, or 3), the Japanese EFL learners insert the pause by every word (Figure 4). The data by one of the native speakers as shown in Figure 2 clearly demonstrate the expansion of the pause inserted. Some native speakers employed a different strategy to increase the intelligibility (Figure 3). Although the pause decreased or disappeared at the point of syntactic boundary under the cooperating condition, one particular word was articulated with some phonetic emphasis. However, Japanese EFL learners inserted several short pauses (Figure 4).

**Baseline condition**

**Cooperating condition**

*Figure 2. One of the characteristic features of native speakers: Under the cooperating condition, pauses are detected much more easily at the point of the syntactic boundary.*
Figure 3. One of the characteristic features of native speakers: Under the cooperating condition, one particular word (in this example, the word ‘beautiful’ at the end of the sentence) was pronounced with focus (marked broader pitch range and longer utterance length) and pauses are decreased or disappeared at the point of the syntactic boundary.

These results derived through these comparison suggest that there are some differences between native speakers of English and Japanese EFL learners in the realization of intelligibility for hearer, and that further training in speaking would be necessary for Japanese EFL learners in order to make their speech more natural.
Figure 4. Native speaker of English takes a clear pause between the main clause and the subordinate clause, however, Japanese EFL learners insert several short pauses, not only between clauses but also within the clause.

4. Conclusions and Pedagogical Implications

In this study, to examine the comprehension and articulation of the prosodic and phonetic features of English sentences by EFL learners, Japanese EFL learners and native speakers of English produced a variety of sentences in normal and in comprehensive style. In comparison with the native speakers’ articulations, some of the prosodic features of the Japanese might lead to foreign accentedness or non-fluency. First of all Japanese students took much longer time to articulate English sentences and did so in a narrower pitch range than the native speakers. The speed is one of the measurements in fluency (e.g. Riggenbach, 2000) and this might lead to foreign accents or non-fluency.

While the native speakers tend to insert the pause either at the syntactic boundary or before the emphasized word, the Japanese EFL learners insert the pause before every
word. For further studies, the characteristics of the unintelligibility by Japanese EFL learners will be figured out through listening experiments in which the native speakers of English were asked to judge the naturalness of the production of Japanese EFL learners. When it is revealed that the representations of intelligibility for hearers differ between native speakers of English and Japanese EFL learners, we, educators should know the reality and the characteristics, and can apply the result in an EFL teaching situation.

Acknowledgements

This paper is a revised and enhanced version of the authors’ oral presentation at the 50th Commemorative Conference of the Japan Association for Language Education & Technology held at Yokohama, Japan, on August 5th, 2010, and we are grateful to Professor Jun Arimoto (Kansai University of International Studies), Professor Junich Azuma (University of Marketing and Distribution Science), Associate Professor Katsumi Yamamoto (University of Marketing and Distribution Science), Dr. Midori Iba (Konan University), and Professor Tadayoshi Kaya (Gakushuin Women's College) for their constructive comments and suggestions.
References


Appendix A: Stimuli

Condition (a) Subordinate with an intransitive verb + Main clause (Early closure)
Whenever his aunt sings, the songs are beautiful.
Whenever Joe starts, these meetings are boring.
If Robert buys, those baseball tickets can be free.
If you study, these textbooks are relatively easy.
When David is babysitting, my children are happy.
Before the participant deals, the cards are shuffled.
When Mike fights, these boxers are always badly beaten.

Condition (b) Subordinate with a transitive verb + Main clause (Late closure)
Whenever his aunt sings the songs, they are beautiful.
Whenever Joe starts these meetings, they are boring.
If Robert buys those baseball tickets, they can be free.
If you study these textbooks, they are relatively easy.
When David is babysitting my children, they are happy.
Before the participant deals the cards, they are shuffled.
When Mike fights these boxers, they are always badly beaten.

Condition (c) Main + Subordinate clause with an intransitive verb
His aunt's songs are beautiful whenever she sings.
These meetings are boring whenever Joe starts.
Those baseball tickets can be free if Robert buys.
These textbooks are relatively easy if you study.
My children are happy when David is babysitting.
The cards are shuffled before the participant deals.
These boxers are always badly beaten when Mike fights.

Condition (d) Main + Subordinate clause with a transitive verb
His aunt's songs are beautiful whenever she sings them.
These meetings are boring whenever Joe starts them.
Those baseball tickets can be free if Robert buys them.
These textbooks are relatively easy if you study them.
My children are happy when David is babysitting them.
The cards are shuffled before the participant deals them.
These boxers are always badly beaten when Mike fights them.

Condition (e) Filler sentences

Suzan is the teacher whom my sister likes the best.
Nancy was the woman whom I talked to on the phone.
Japan is the country where he spent his childhood.
A cute dog was what I wanted for my birthday.
August is the month when a lot of people go abroad.
The teacher whom my sister likes the most is Suzan.
The woman whom I talked to on the phone was Nancy.
The country where he spent his childhood is Japan.
What I wanted for my birthday was a cute dog.
The month when a lot of people go abroad is August.
Susan is the teacher my sister likes the most.
Nancy was the woman I talked to on the phone.
Japan is the country he spent his childhood in.
A cute dog was the only thing I wanted for my birthday.
August is the month a lot of people go abroad.
The teacher my sister likes the most is Susan.
The woman I talked to on the phone was Nancy.
The country he spent his childhood in is Japan.
The only thing I wanted for my birthday was a cute dog.
The month a lot of people go abroad is August.
Which is the most crowded state in America?
Where did you go during the spring vacation?
You lied about your age by seven years, didn't you?
He is one of the greatest school counselors, isn't he?
Can your colleague manage to meet the deadline?
May I introduce you to Mister Jones right now?
Appendix B: Instruction for the participants

Pattern (1) Read aloud naturally first, intelligibly second.
   Step 1: Read the sentences silently and let me know if you do not know the meaning.
   Step 2: [Natural]
      Read each sentence aloud naturally at a self-selected normal speaking rate.
      If you mispronounce or misread, read that sentence from the top.
   Step 3: [Intelligible]
      Read each sentence aloud in the way that you think it is much intelligible for listeners.
      Do not read sentences simply slowly or insert pause word by word.
      Imagine the situation when a native speaker of English is asked to say the sentence again by a native speaker of English.

Pattern (2) Read aloud intelligibly first, naturally second.
   Step 1: Read the sentences silently and let me know if you do not know the meaning. (same as Step 1 in Pattern (1))
   Step 2: [Intelligible] (same as Step 3: [Intelligible] in Pattern (1))
   Step 3: [Natural] (same as Step 2: [Natural] in Pattern (1))
AN INVESTIGATION ON THE EFFECTS OF MOVEMENT IMPROVISATION ON EMOTION IN PEOPLE LIVING WITH HIV/AIDS

HSU, FONG-CHANG; LEE, SZU-HSIEN T.; WANG, YUNYU

ABSTRACT

Dance serves many purposes and has various beneficial effects including psychological benefits. The inclusion of dance as a subject into the arts and humanities field of the Grade 1-9 curriculum guidelines in the beginning of the 21st century provided opportunities for primary and secondary students in Taiwan to experience dance and enjoy the benefits of such. However, population outside of this boundary often have less resource and opportunity.

Psychological disturbances such as low mood, anxiety and isolation are frequently experienced by individuals living with human immunodeficiency virus (HIV). They have to constantly deal with the disturbance with limited support. Such circumstance has been complicated further due to the better understanding of and treatment for the illness, and hence the increased life expectancy of individuals living with HIV. Dance, which has a strong element of expression and social interaction, may serve as a media to assist individuals living with HIV in dealing with these perturbations.

The present study therefore proposes an investigation aimed at examining the effects of dance on emotion in individuals living with HIV. Specifically, a workshop has been planned and is scheduled to start in February 2011. Ten HIV positive volunteers will participate the workshop with written informed consent. Once a week for a total of 12 weeks, they will experience their body, explore themselves and interact with other volunteers through movement and dance. Both quantitative and qualitative data will be collected before and at the end of the workshop. In addition, participants’ CD4 count will be looked at. It is hoped that the outcome of the study will support the use of dance in this particular population, provide a guide and suggestions for professional dance teachers who may be interested in working with individuals living with HIV, and stimulate future research on teaching dance in people with disabilities and/or in the minority.

For relevance, teaching structure, contents and evaluation will be emphasized in this presentation.
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Title: Taiwanese mothers’ ideas about preschoolers learning English as a foreign language: Effects of maternal education

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Abstract
Over the last 10 years there has been increasing recognition of the significance of early childhood education for children’s academic achievement and long term wellbeing. This recognition has coincided in many Asian countries with a concern about English language learning and teaching. Issues include whether, and if so how, to teach English as a foreign language to children prior to formal schooling. Different Asian countries have approached these issues differently, depending on social and cultural beliefs and values, and ideas about how young children learn. It is sometimes assumed that Chinese parents prefer an explicit teaching
approach, in contrast to more Western child-centred approaches. The aim of this paper is to
investigate whether these often taken-for-granted assumptions do accurately reflect the views of
Taiwanese mothers of preschool aged children. In Taiwan, English learning has been emphasised
by the Taiwanese government in several ways but is prohibited in preschools and kindergartens.
This study investigated Taiwanese mothers’ ideas about when young children should commence
English language instruction, and the most appropriate ways to teach English as a foreign
language to children under 6 years. The sample consisted of 647 mothers of preschoolers in
Tainan, Taiwan. The mothers responded to a questionnaire which surveyed their ideas about
how young children best learn to speak and write in English. The results suggest that highly
educated Taiwanese mothers hold what may be characterized as an “emergent language and
literacy” perspective, while mothers with less education are more likely to endorse an explicit
teaching approach. The findings indicate that there is widespread support for English teaching in
early childhood centres but that views about the best ways to teach English to young children
diverge in relation to maternal education. The findings have implications for early childhood
teachers who wish to understand the social and cultural context for children in their centres.
Biographical learning of ethnic and cultural diversity in a post war society
Structural and subjective dimensions of learning to produce new cultural and social experiences

Abstract
In my presentation I want to show some results of an ongoing university project with students from 8 different countries in Kosovo. It is an attempt to attach the approaches of biographical research to the processes of social transformation. We try to connect theoretical, social and cultural learning processes in the work with the students. Collected empirical data helps to learn the principles of qualitative research methods and this work brings the processes and the results close to their own life-worlds. In reconstructing the dominant patterns in (auto-)biographical narratives we can see the different historical periods and different stages of societal and individual development. In that sense, these seminars have a huge impact on the democratization process and the transformation of this post war society. The goal is to find out something about the many small daily steps which must be done, to create a kind of “normality” after the terrible massacres of an ethnical-territorially defined nationalism in former Yugoslavia. These steps can be very well reconstructed by narrations, by life stories, because personal experiences are naturally linked with social orders.

Introduction
This project is an attempt to connect the approaches in oral history with the processes of social transformation in Kosova. It tries to bring theoretical issues and approaches from oral and life history work into adult education research and practice.

The first goal is to establish a Life Course Archive in Kosova. Students of different faculties will do recordings of life-stories in different levels of the Kosovarian society. These interviews will secondly be transcribed and collected. In arrangement with the local partners at the university and at KODI (Kosovar Research and Documentation Institute) some of the interviews will be translated into English to use them as learning materials for the processes of interpretation with different groups. In these interpretation groups (with Kosovarian students and others from all over Europe) we try to (re-)construct the experiences and meanings of social changes from the perspective of life course, which can help to understand the individual possibilities in creating one's life in new social structures. The main points in this work are:

- How could Kosova people manage the many risky status-passages in their lives after the war?
• What kinds of transformation processes take place and what processes of memory and forgetting are necessary to manage these changes?

• What happens in these processes of „life-trajectories in social space“?  

The archived data material is at the moment used by students to learn the principles of qualitative research methods. It can also be served as a "pathfinder," or as a "store of ideas" in preparation for newly-planned investigations. The analysis of data which has already been collected may be carried out in the form of historical and culturally-related comparative studies. This archive should finally be a resource base for humanitarian and research projects to analyze the conditions and possibilities of social change. In reconstructing the dominant patterns in (auto-)biographical narratives we can see the different historical periods and different stages of societal development. In that sense, biographical research has a huge impact on the democratization process and the transformation of this post war society.

To understand the problems and the background of this ethnicity it is crucial to know something about this country. With the declarations of independence of Croatia and Slovenia in 1991 the breakdown of Yugoslavia began, 1993-1994 there was a war between Croatia and Muslims, 1998 the battles in Kososva started. After the air raids of NATO in 1999 Milosevic resigned in 2000 and since that year UN troops secure the peace in the country, which is still a part of Yugoslavia. Kosovo is under United Nations and NATO administration since 1999. The political status is still unclear and the economic situation is very bad. In recent days the European Union has sent clear signals that it is willing to grant eventual membership to western Balkan countries provided they comply with EU standards of democracy and human rights.

In all my activities in this country it is the goal to find out something about the many small daily steps which must be done, to create a kind of “normality” after the terrible massacres of an ethnical-territorially defined nationalism in former Yugoslavia. These steps can be very well reconstructed by narrations, by life stories, because personal experiences are naturally linked with social orders. Each individual story is connected with further stories, in which the collective history will be negotiated and reflected. The view on the biographical narration opens the possibility to analyze the concreteness of the “individual case” in the complexity of collective history. Life stories contain thereby a kind of a transition character, that’s why they can be used for the reconstruction of periods of political transformation. For example: In the individual story we can find very clear the national or mythological character of the Albanian people in Kosova. The collected narrations can also be read as narrative lines in relation to the (re)-interpretation of the past, in which lived life is fixed into history in the so-called collective memory in Kosova.

The Archive

Approximately 80 interview texts (all in Albanian, 34 in English) have been made anonymous, documented and deposited into a digital archive.  

Due to the sensitive nature of qualitative data, we prepared a detailed concept of anonymity and data protection (see Witzel 2004). The strategies of anonymization are based on the rule, that person-related details like names, addresses or places are erased when the interviews are transcribed in order to prevent the re-identification of the interviewee concerned. But there is still a big problem. Special analyses of interviews are hardly possible without an awareness of biographical details, and as a rule it is necessary to know the whole context since the structure of the narration forms a basic requirement for text interpretation. There remains the question of clarifying under which conditions qualitative data can be given to other researchers or interested persons for the purpose of their specific use. The following points should be agreed upon in a written contract (Witzel 2004):

• data may only be used for learning, research and humanitarian purposes

• data must not be passed on to a third party and must be stored in such a way that a third party cannot gain access,

• data must remain anonymous,

• person-related details may not be quoted or published, and

• notification of the end of the research project must be given and the data which has been made available must be erased.
The archive must check the process of making data anonymous by the researchers, but regrettably, we cannot formulate any general solutions for making qualitative data anonymous because such data is extremely heterogeneous in terms of the themes and areas of life already mentioned. The other question is under which conditions qualitative data can be given to other researchers for the purpose of secondary and re-analysis. The use of archived data for (re-)analysis and secondary analysis has many methodological and methodic advantages which have partially been put forward in connection with the tradition of quantitative methods (see Thompson 2000).

Stories and structures

Oral history projects want to look to recover the voices from below, the stories of individuals and communities whose lives have been hidden from history. Beyond these democratic aspirations and methods and the criticisms by traditional documentary historians is always a crucial methodological question, why individuals compose their memories in particular ways, and how the processes of remembering could be a key to understand the ways in which certain individual and collective versions of the past are active in the present. There is strong multivalence of individual memory and the plurality of versions of the past provided by different speakers (as well as different documentary sources). But the ‘distortions’ of memory could be a resource as much as a problem.

In recent years oral historians have become more interested in exploring the relationships between memory and subjectivity, and between collective memory and the processes of remembering. We are now more self-conscious about the distinctive character of oral testimony, and assert the theoretical and methodological values of the qualitative approach in oral history research.

Biographical self-reflections are attempts to find and make up stories, in which one can rediscover oneself and with which one can live. Creating an acceptable autobiography is part of the continuously ongoing process of identity building throughout life and up to death. This happens both in everyday life and in the process of learning and acting. Dealing with the subject’s world means in a constructivist view, that people are narrative constructors of their world. This focus does – firstly – not include that the ‘real world’ has no influence on this constructions, and, it does – secondly – not mean that our constructions have no impact on the ‘real world’. ‘Stories’ and ‘structures’ are dialectically inter-twinned and the way they need each other makes the world changing.

There is indeed a great deal to suggest that we spend a considerable part of our everyday’s existence within the horizon of ‘stories’. Stories constitute the unity of our individuality, but they are also intersubjective in character. Stories create the social contexts without which we could not live. Even historical description is essentially narrative because it conceives of historical events as elements within chains of events, in a quite unpretentious sense as ‘stories’. The future exists only within the horizon of expectations. To that extent, every successful historian is a ‘narrator’ – even if (s)he prefers (as a follower of the ‘école d’annales’) to deal with structural historical issues. The everyday narrator is also a ‘historian’. Even his/her ‘story’ is part of that universalist narrative that sets modernity apart from everything that went before. The everyday narrator, precisely in his function as a narrator, is a bearer of ‘structures’, because the narrative networks him with the social and historical lifeworld in which he takes part. Narrators need a kind of “lay concept” of the world in the sense of the everyday world or lifeworld, i.e. they cannot make use of narrative forms of description without referring at least intuitively to collectively available knowledge. ‘Stories and structures’ cannot be separated from each other (see Alheit/Dausien 2000, Egger 1995). Narrations are much more than mere subjective reconstructions of the ‘real world’. Methodologically spoken, they are the king’s way to understand reality, because the disposition to tell a story (or to interpret history) is always the perspective of the actor.

There is no other way to describe history, and particularly life history, apart from the form of a narrative. Paul Ricoeur has powerfully argued this in his books Time and Narrative (1984). However, this does, of course, not mean that the narrative is identical with real actions, events and things having ‘happened’ in the past. It says, there is a characteristic relationship, a structural similarity between things happening in the ‘real world’ and those that are told in a story. Even more complicated: the told story itself is, as you might say, a ‘physical’ part of the real world and has a certain impact on it. So again, and a bit more dialectical: As ‘history’ is not
understandable save in the form of a narrative, the narration as such ‘makes’ history. This relation will be clear and more concrete in the presentation of the findings of our project on biographies. Narrations are used in that context in much more than mere subjective reconstructions of the ‘real world’.

In the work with the interpretation groups it becomes transparent that the frame of reference which a narrative reconstruction of social reality represents, does not just imply a ‘system of rules’, but a biographical action perspective. Any remembering of an experience or event that must necessarily precede the narrative situation opens up not only a narrower or wider horizon, but also refers back to changes in the narrator’s self. An event worth to be remembered is obviously one that has left traces; it has marked the narrator and left behind an ‘impression’, altering the structure of his experience to a greater or lesser degree. “Any impromptu narration of one’s own experience is also a new remembering of this more or less unnoticeable process of change” (Schütze 1984, p. 82). This statement is of definite theoretical significance, because that each has to ratify this narrative plan in his narration. How these consequences unfold as a ‘cognitive frame of reference’ for narration in impromptu autobiographical narrative has been described detailed by Fritz Schütze. Schütze (1984) points out the ‘cognitive figures of impromptu autobiographic narrative’, with which he associated the following four phenomena: “Personifications of biography and events, in addition to the social relations existing or changing between them; chaining of event and experience; situations, life milieus, and social worlds as the conditional and orientational framework for social processes; and the total design of the life history.” (1984, p. 81)

Having said this, the narrator also needs, according to Schütze (1984, pp. 88ff), to select specific ‘linkage forms’ that condense to procedures (ibid., p. 88) - in addition to the presentation of himself and other important actors in her/his biography. Schütze considers four 'experiential attitudes' towards life history processes to be of particular theoretical relevance; these can be characterized as "systematic elementary aggregate conditions of the linkage of events in experience" (ibid., p. 93):

1. Biographical action schemes,
2. institutional patterns for life course procedure,
3. life ‘trajectories’ and
4. transformation processes (Schütze 1984, p. 92).

The collection of memories

To the conditions of human life belongs the organization of the past, the linkage of our being in the context of a history. We (re-)arrange ourselves, our experiences, within an “inner value map” which is in motion. This procedure of the development of values knowledge (Urteilsvermögen) can also be called education. Hans Joas describes the emergence of the values in his book “The Genesis of Values” (2001) thereby convincingly, how our value system doesn’t arise from rational-argumentative justifications, but from experiences, in which we were forced to leave normal conditions behind us and in those in which subjective experiences appear evidently as the good.

My remarks want to clarify how such self education potentials can be productive in the handling of crisis-experiences in the sense of biographical-orientated concepts. Even in educational contexts such learning processes are crucial (i.e. in the relation to the history of mentalities, to collective experiences or to culture). We have to deal with the different meanings of history, of life-stories (individually and collectively) because the “collection of memories”, of events, doesn’t produce meaning in itself. The “red line” of a story can be build by different “stones” of (what we call) memory. The space, in which memory can filled up with meaning is a highly stressed area, in which meaning is produced by different “voices” of culture, mythology or race and gender. These processes of “negotiation” are linked biographical educational processes in their historical, cultural and social contexts. In the reconstruction of these we can also find out, how our roots fix the possibilities of our routes into the future and also into the past. It is tremendous in the situation of Kosova, how these processes are underlined by the so-called collective memory in this country. Even all the historical suffering of this “fate community”, which is still alive in this country, produces extremely long memory cycles. The degradations and also the requirements from periods of long term repressions, make this memory-work so painful for everybody.

In our work with the students we try to widen the interpretation-possibilities of the past in a methodological-
ruled way. We work on different levels, e.g. in the concrete life story of a biography-holder, but we are also focused on the story of the Albanian people and the forms of their traditional memories. Our leading questions (among other things) are: How do the processes of the reference to the past reach into the production of the present? Which forms of memory produces which kind of present and future?

Narration was thereby never only used as reproduction of the past but also as production of new plots, new areas of historical experience and the horizons of expectation. In the concrete work with the interviews (and in many discussions in and outside of the university) we always came to the same question, how to cope with history and how to create and develop new possibilities and resources to handle the past. For almost every Kosovarian (students or interviewee) the same demands were important. They declare:

1. We want that the hidden truth of our suffering comes to the daylight. We want that everybody sees, what has been done to the Albanian people in Kosova for decades.
2. We want that there is a form of justice, which punishes the aggressors or at least gives them their responsibility for the done. We want an apology.
3. We finally want to have the right to live in a free country.

Many other points could be stated here, but these are the basic demands. In all the phases of our work we noticed again and again, how strong memory is linked to the structures of guilt and racism, of smashed and destroyed goals, which appear in no archives. And behind the collective and the individual suffering there lay obviously the economic tragedy which comes out of the inequality for many decades.

The empirical work

The following considerations are also linked to the possibilities of biographical learning in a project at a university. It concerns not only individual learning of isolated individuals, but also learning as transformation of experiences, knowledge and action structures in the life-course and in the context of the life-world. I call these therefore biographical learning in the sense of a phenomenological learning term. 25 students participated in the starting course at the university of Pristina (participants from in- and outside of Kosova; NL, USA, BUL, SLO, SLK, A, MOL). The main work was to learn the methodology of qualitative empirical social research (the technique of the narrative interview) and to establish several interpretation groups for the structural analysis of life stories.

After an expanded introduction into the principles of biographical research (see Schütze 1984, Egger 1995) and the Grounded Theory (Strauss/Corbin 1996) the students have been assigned to look for interview partners. The problem with the transcripts was arranged in that way, that in a first round all Albanian texts were translated (with the aid of a professional translator) into English to have a common basis for the work. Most of the students have not been familiar with the possibilities and the conditions of qualitative social research, so I had to figure out some points for the process of interpretation. One of the FAQs was about the truth of the story and the relationship between the story and the culture. I developed a small, easily understandable system which differentiates between the different text levels.
Texts can “produce” meaning on all these levels:

- The event and experience level represents the framework of the selected events in the narration. All the experiences and stories are used as constituent and essential parts of the live-story in the interview.
- On the level of individual interpretation it is the perspective of narrator, his/her language, the “inner landscape” of a person that characterizes the story.
- All these narratives are formed by institutionalized interpretation practices, which are grounded in cultural traditional and normative social orientations.

In the work with biographies the question about the truth, the actual correctness of told story emerged in every interpretation process persistently. Did the events, the narrated situations, the experiences actually take place how they were presented in the interview, or are they just a kind of fiction, half lied or expression of a permanent image management, which the biography-holder offers out of a special reason? This question about the truth can also be analyzed on different levels:

On the WHAT-level (it actually concerns the told events) this question can be answered quite pragmatically, because we can find out the events in the life process that actually happened, and this can usually be proofed on the basis of other narrations, other people or with the help of historical sources.

On the HOW-level it is quite different, because the production of the “inner landscape” doesn’t only depend on the external events, but also on the meaning of these actions and situations in the eye of the narrator. On this level it is important to reconstruct the “mechanism” of this “map”. So truth means here the subjective side of the facts, the individual structure of the story and not the historical truth.

On the traditional, cultural level, we have to find out the links between the individual story and the structural, the social area. The question about truth cannot be placed itself in classical correct or wrong patterns. It has to be seen as an intermediate form between the individual story and the social structure, between the social world and ideology. (a good example concerning these processes gives the novel 1984 by G. Orwell, in which he stresses the structure of reality. Things, feelings, which have no linguistic counterpart, doesn’t really exist). So our language is also a pool of words, terms and phrases in a cultural context.
These distinctions have a great impact on the processes of interpretation of life stories, because we want to analyze and reconstruct the relevance-system of the subjects. We want to see, how experiences in biographies are linked to the social structure. In a narrative interview the interviewees have to construct the horizon of the possible narrations for themselves. They have to decide, which topics or themes should (selectively) be narrated in which way. That’s why we have to follow these processes in the analysis of the texts. The hidden working control mechanism of the total view, the mechanisms of the selection of stories, as well as the topic frame of the narrator are significant for a single event. In the interpretation phase we work with abductive conclusions (see Peirce 1991). In the course of a sequential analysis we systematically follow the inherent sense of the narration. In a line by line analysis we open the text and find out categories, indicators, dimensions like Glaser and Strauss mentioned (see Strauss/Corbin 1996) in their coding procedure. In the following short cuts out of an interview I’ll present some interpretations out of our first workshop.

**Puzzles from an analyzed interview**

The interview begins with the words (lines 4 to 11):

> My name is V. H., I am from Pristina and I was born 1977. Life, what is life for a young man? I will start with the first steps of my childhood, speaking of my grandfather H. H., from whom I learned a lot in 1981 when I was 4-5 years old. I don’t forget the first Albanian riots. I remember as it was today when he told me about the Serbs. And later that how the Serbian conquest had come to its end and a war would be opened pretty soon I don’t forget that we were living a modest life with our father working to maintain the whole family.

The interview begins with a formal introduction in the sense of “normal-biography” of a young man. What is the life for a young man in Kosova? Which ways does he have to go? How are the individual and the political situations for a young man in generally? Which goals are regarded as worthy?

The interviewee finds his reference in the presentation of his grandfather, whom he designates with its full name. Not only the family relationship is here important, but also his relationship to a traditional old-established family in the region which he comes from. The fact that he mentioned the full name of his grandfather is for the students from Kosova an honest testify to the respect to his position in a cultural linked genealogy. At the same time he mentions the history of the Kosovarian people in general. The story of his childhood is related to the historical continuum of suffering and fear. The crucial words are: *I remember as it was today when he told me about the Serbs*. In this short sequence it is clear that he is tangled in an old story about the Serbian conquest and his role in the beginning of a new war. He connects his own experiences with the courageously history and the mythological conditions of Kosovarian citizens. There is a high emotional participation of the interviewee in this narrative. He describes a specific form of his enculturation with the grandfather’s message (that is in a way an
underlying subtext), which can have several meanings. On the one hand it is a kind of prophecy, which determines the way of the Kosovarian people in the Serbian culture of suppression. This prophecy could be regarded as a certain form of a social-historical concept for the conditions and possibilities of the individuals in this state.

At the same time encloses this “concept” also different recommendations for his actions in the future. The words of the grandfather become also as burden, which is also given to the young man on his own way, because he has to fight for the freedom of his nation. He has to fulfill the historical task, the historical mission of each Albanian linked to all levels of the mythology, genealogy and family. In the discussion of these interpretations with the students we work out the processes of this production of history and try to explain the different roles (like the graphic elaboration can show).

For the Albanian students it was very clear, that he could act just in one way to find out something about his role. He had to take over the role of a fighter, because enculturation means to carry the burden and to fulfill the story.

Similarly we proceeded with the second segment (lines 12 to 18):

My education was following it’s normally course until 1989 or 1990, when the protest started. Then I remember when the curfew began to be imposed, I remember that in front of our house just one minute past the curfew time, a neighbor of us killed a one right before our eyes. I don’t know how he could do it, he has been a retired member of at Serbian MUP but he killed a man.

Again the narrator begins with his orientation at the folio of normality, with a formal statement. The crucial date for the ending of his general education is linked to the deprivation of the living conditions of Kosovarian People. The curfews are finally the visible last step in the exclusion of normal life, the end of freedom of movement in society. The story of the murder is temporally settled one minute after the entry of such a curfew, which shows, how strictly and in inhuman the exclusion practices were handled in the eye of the interviewee. At the same time still another incident became painfully visible for him, because it was a neighbor that killed a man before his eyes, like it was nothing. For a long time we discussed this event in the group and we looked for interpretation folios. Finally the point that explains the act was reconstructed on several levels.

- First of all is the level of civil right, of the legally basis which determines the responsibility and the justification. This includes the topics of the state and the juridical system, the ideology in the political system.
- Secondly there is the part on the actor’s-roles which the students divided into four ranges: The ethnical part (the Serbian aggressor), the state function (the policeman), the human, ethical being and the social function (the neighbor).

For the Kosovarian students it was clear that the crime was committed in the sense of an ethnical cleansing. There was a big discussion with all the others about this interpretation. In this debate students could learn a lot
about the correlation between the concepts we have in our head and our acting in daily life, between the
dominant inherent concepts and our way to explain our daily life. If we think in ethnical concepts, we see
everywhere ethnical coded actions. In addition, Kosova is not only a post-Serbian but also a post-communist
society, but the fact of 40 years communism in this country doesn’t play any role in all the discussions. In the
analysis of this interview we finally tried to create different modes in interpreting this scene - at least
theoretically. The resistance of the Albanian students against this interpretation work was enormous, but in this
confrontation all students opened up a substantial learning field in handling own experiences in the processes of
understanding history. In this discussion about different historical folios of explanation the students came to the
question, when history actually begins. From which step in an ongoing story do I take my pictures to develop an
explanation? In these hours we had the possibility to expand a lot of insights in concreting and interpreting
history. In the processes of interpreting and in the discussion of the statements, the students got some important
emotional and also cognitive experiences, how history is “produced” and associated with a special kind of future.
This particularly comprehensible way could show the structure of the differences which make a difference in
looking to history. With this work we also had a good insight in the ethnical view of the Balkans states and the
“inner logic” of these communities.

That’s history. So what? Subjective dimensions of learning to produce new cultural and social experiences

These small pieces of our done work present the reconstruction of forms and meanings of ethnical and cultural
identity in the processes of a united Europe. We found on an empirical level the well known explosive field of
“national identity”. History, and the narration of one’s life story, could help to understand the dominating values
and goods of society. We learned to understand how our values and goals are linked to a superior story (called
mythology or ethnicity) and how they have to be “translated” and comprehend. What we call history is always an
interpretation of the past and the future, and can only be understood and reconstructed in the process of constant
translation between desires, conceptions, ideas, and scripts of people’s possibilities in their concrete life. From
Schleiermacher we can learn that this interpretation is an endlessly turning hermeneutic circle, which looks for
new ways, and which recognizes, that the given sense (however) is just a guide and no fixed point.
The work in creating this archive and the interpreting courses in Kosova has just began, but maybe it could
contribute to the fact that this hermeneutic circle doesn’t end and that the interpretation of our world will always
be open to discussion. For most of the involved foreign students it was clear, that the strong reference to
“concepts” (of ethnicity, gender, religion or also mythology) can be used strategically by regimes. In the
(ongoing) discussions the students found out, that their thinking is "cultural produced" in socio-historical
conditions. The scientific discourse in the research groups with its open debates and mutual criticism could help
to undertake the work of "objectivation of the subject who objectivizes". Out of this perspective we also
discussed, how the routes into the future could be build up without denying the roots of our living. This is a very
hard task to do. The processes of interpretation can help to show, that cultural differences are never only there,
where we believe to see them - they are already written into that point of view, from which we look into the
world. The reconstruction of the visible and invisible structures could sensitize the students for the linkage of the
individual story with the larger, structural perspective in society and ideology. Therefore this work of collecting
and interpreting stories in Kosova has always to do with one’s own perspective. Science is in that way not only
analysis of data and relations, but also a process, which helps to understand contexts, in which cultural, national,
ethnical or social styles unfold their meaning. Data and its relation to the real world are substantial, that’s why
the interpretation folios we worked out could try to comprehend also the special roles of social scientists. This
combination of sociological, oral historical and educational aspects become more and more important in the
processes of understanding how the analyzed narrations represent the conditions for the nowadays political
transformation in society. This work could outline these differences as a form of new possibilities in references
to the past. On the level of biographical experience such analytic distinctions can be combined with experiences.
Peter Alheit is fixing such processes in the term of biographicity (see Alheit 1993; Alheit/Dausien 2000). This
means a subjective dimension of learning which can produce new cultural and social experience. Biographic
learning can be successful in the linkage of social structures and cultural interpretation contexts. Educational processes like the one described here have also a personal, biographic sense apart from the strategic aspect. The mode of the treatment is however again culturally conditioned, which also could be seen clear in the workshop. There is a huge difference in the comparison between American and Southeast-European colleagues and students. Just a short example: If the American say, That’s history’, they mean usually that something is gone, which does not count any longer. If South-East Europeans define something as history they mean that it became now an absolutely important and indelible fact. Both aspects (or should I say coping strategies) of handling history have different and specific ways to deal with the past. The “So- What?"-Strategy of the Americans fades out the past of the present, only the view forward, the constant reference to the present and the future is here the driving force. The unavoidable view into the hard and violent paths of the past of the South-East Europeans narrows the view on the other hand on specific modes of the production of present. Both are in the long run forms of ideologies which structures history and connect present and future in a special way.

Stressing these topics with the Kosovarian students, again and again we always came back to the question about truth. In looking for other interpretations they always asked: How widely could the interpretation folio be stretched? How can the aspect of historical justice have its place in the interpretation? If everything is only a matter of interpretation, how can we talk about truth? Which consequences can be shown from the interpretations actually for the political changes in Kosova? And finally: How can this “scientific reconstructed truth” be able to avoid future disasters?

The answers to these questions are not lying only in the empirical data; they are also a part of the normative relations of these stories to the issues of nation, society, gender etc. The interpretation of these narrations could help to understand the fact that history is always written with a “structural ink”. Social science can help to understand these processes, but acting is quite a different thing.

The work to establish this archive is in progress. There is some work for an extension of this small data archive even with international co-operation to integrate experiences from other institutions and to bring together existing resources in Kosova. But it is not easy to create an archive which does not offer the services of data consultation, schooling, network and information provision for qualitative social research and qualitative management. The last six months we didn’t hear anything from the Albanian partners. The work with the students is fine, but the connection with the university stuff and the local authorities is often very strange and full of resistance. But: Social Change is, like the ethnologist Clifford Geertz mentioned, not a parade, which one can watches passing by. In the opposite: It’s a fight for Law and history, obedience and memory

References


An Analysis of “ISP” Items in Evaluations of Social Welfare Institutions for The Disable in Taiwan

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The qualities of services of social welfare institutions for the disable are some good, some bad in Taiwan. One of improvements for the issue is evaluation. Because the clients of these institutions are people with disabilities, special education and service are related closely with the operation of these institutions.

I was one of members of the consultant committee for institutions at one county in the south of Taiwan. The committee’s consultant work includes five categories and I was responsible for “Professional Services.”

According to the above, this article will explore the sub-category of “Professional Services” – Individualized Service Plan (ISP), one area close to special education mostly. Firstly, I will discuss the meaning of ISP for the disable in the institutions. Besides, from both social work and special education viewpoints, the items for evaluation (consultation) will be reviewed. The contents of ISP for evaluation include basic format, parental involvements, service contents and assessment. At the end, the appropriation of the evaluation indicators and the practical difficulties will be analyzed.

Keywords: people with disabilities, institutional evaluation, ISP, IEP
The rights and benefits of people with disabilities are getting attention. More and more institutions offer services for people with disabilities. The qualities of the services are some bad, so consultation (evaluation) can be a good way to get better qualities. The services and training these institutions offer are to reduce the influence of disabilities to the disable in daily life. Furthermore, it is expected that these people can have a normal life and even contribute to our society. Nevertheless, due to the deficits and heterogeneity of these people, special education is needed and closely related to operation of these institutions. Because of differentiation of the authorities concerned, it is not easy for these institutions to offer appropriate special education to the disable. Under these circumstances, the provision of special education may be insufficient, so the whole operational system is worthy to contemplate.

I was one of the members of consultant committee for these institutions at one county in the south of Taiwan, whose services needed to be improved according to the previous evaluation results, or which had not got evaluated because the institutions had not founded more than two years. Most of clients in these institutions were mental retarded (about 90%-100%), except one had 79% and another had 82%. Besides mental retardation, some clients were multiple disabled, physical disabled or psychological ill.

According to the above, clients in these institutions were older people, and their disabilities were somewhat complicated. The opportunity for them to go back the mainstream society was very little. Because of their severity of disabilities, it was hard for families to take care of. Thus, they needed professional cares and equipment.

The consultation aimed to help these institutions improve their service qualities based on their strength and weakness. There were five categories for the consultation, and I was responsible for “Professional Services.”

Based on this, this article focuses on analysis of items on the “Individualized Service Plan” (ISP) in the “Professional Services.” An ISP is similar to an individualized educational plan (IEP) in the special education area, but it is not mentioned very often in related social welfare or special education laws in Taiwan. This article begins with discussion of the meaning of ISPs for the disable in these institutions. Besides, from both social work and special education viewpoints, the items for evaluation (consultation) will be reviewed. The contents of ISPs for evaluation include basic format, parental involvements, service contents and assessment. At the end, the appropriation of the evaluation indicators and the practical difficulties will be analyzed.
I. Individualized Related Service Plans for People with Disabilities

The definition of disability is physical or mental ill, and it needs medical care or therapy. As the time passes, it emphasizes on self-consciousness, life qualities and social supports for people with disabilities instead nowadays (Gathiram, 2006: 252~255). The services and demands of people with disabilities have become diverse. Providing effective and appropriate services and training for the disable and families are necessary. Thus, an ISP is established to fulfill this goal.

The origin of ISPs is from the case of Pennsylvania Association for Retarded Citizens v. Commonwealth of Pennsylvania in 1971. Also, in 1972 the case of Mills v. District of Columbia Board of Education expanded the Pennsylvania decision to include all children with disabilities (Hardman, Drew, Egan, 1999: 20). These two lawsuits forced American government to claim three principles for institutions servicing people with disabilities as the following:

1. Establishing objective assessment standards
2. Providing appropriate placement
3. Developing service plans based on individual demands

Amendments to the Individuals with Disabilities Education Act (IDEA) 1997 also pays attention on accountability, that is stressing on training effects in ISP (Hardman, Drew, Egan, 1999: 20~39). In Taiwan, the Rights Protection for People with Disabilities Act (2007) is written that individualized professional service system should be developed, and after assessment by professionals, the services should be provided based on the demands of people with disabilities.

Besides, Public Law 94-142(PL 94-142) also requires institutions or schools to include an individualized transition program (ITP) in the IEP for students no later than age 16 (Hardman, Drew, Egan, 1999: 23). In Taiwan, the Rights Protection for People with Disabilities Act (2007) and Special Education Act (2009) have requirements for ITPs, too.

The Individual Family Service Plan (IFSP) focuses primarily on children with early intervention (Minke & Scott, 1995). In Taiwan, referral centers or case management centers are responsible for intervention and other related services for the needed children and families.

The Individual Habilitation Plan (IHP) is related to IFSPs. An IHP is a service plan which aims to fulfill ISPs and IEPs, so it tries to integrate and coordinate institutions and professionals to promote services (Chou, 2000:236). According to this, the main function of IHPs is to coordinate different professionals toward services for people with disabilities. It is an indirect service rather than direct services to the needed. In Taiwan, although it is getting progressive, cooperation and coordination among different institutions and professionals still need more efforts today. So, IHPs
still cannot be put in practice very well in Taiwan because of lack of models of cooperation of institutions (Chou, Yang, Kao, Kuo, Wu, Liu, & Chen, 2000).

The Individualized educational plan (IEP), the most important individualized plan in special education, derives from PL 94-142 in 1975. The law stipulates that every student with special needs has an individualized plan. In Taiwan, the IEP has been required for students with special needs in the Special Education Act since 1997. Afterward, every student with special needs has his/her own lesson plans, which are protected by law.

Yet, what is the relationship between an IEP and ISP discussed in this article? The relationship is unclear. It is written in assessment comments from the social department of Ministry of Interior in Taiwan: “IEPs and ISPs should have accurate definitions according to their clients, clients’ age and training/learning targets (Social department of Ministry of Interior, 2002: 313). According to this, IEPs and ISPs have different concepts. Besides, the social department of Ministry of Interior in Taiwan also requires the unification of IEPs (ISPs and ITPs). ISPs and ITPs should not be separated from IEPs (Social department of Ministry of Interior, 2002: 300). An ISP is different from an IEP, but there are some overlaps between an IEP and ISP. However, the ISP is one of subcategories of “Professional Services” and there is no talk about IEP in evaluation standards. Is the purpose of the two comments for IEPs to criticize ISPs or imply that “Professional Services” also includes the IEP concepts? It is still an unknown question.

Either an ISP or IEP is made by a professional team. It is a kind of service or lesson plans made for people with special needs and based on their unique characteristics and demands. So these two plans are similar in nature. IEPs are for students at school, and school is the service center. Unlike IEPs, ISPs may include all types of learning, life care, medical services and so on. The client population of ISPs is bigger than that of IEP. No matter people with disabilities are going to school or not, they can receive related services under the ISP.

In Taiwan, the IEP is under the category of special education. It is a lesson plan for students with special needs at school. On the other hand, the ISP is under the category of social work. It is a care or lesson plan for the clients in the social welfare institutions for the disable.

In practice, the function of an IEP is mainly for evaluation of school, rather than teaching. Many teachers have a hard time to teach students according to their IEPs (Lee, 2002; Huefner, 2000: 195). An ISP provides guidelines for the teaching and services for the clients in the institutions. In practice, ISPs still cannot be fulfilled very well, either. There are many written documents for IEPs which can be good reference resources for ISPs.
II. An analysis of Consultation for Social Welfare Institutions for The Disable in Taiwan

There are five categories for the consultation, including: organization management, facilities and equipment, professional services, right protection, as well as improvement and creativity. There are also some subcategories under these categories. For example, the subject of this article—the ISP is one of subcategories of “Professional Services” as showing in figure 1.

As showing in figure 1, there were fourteen items in the ISP. The divided items were convenient for evaluation, but they were so complicated that it is hard for the teachers or social workers to work on ISPs as a whole. Rather, teachers or social workers tended to focus on individual items during the daily ISP process and self-evaluation. Lack of a systematic view of ISP process would result in difficulties of self-adjustment for these institutions. If workers in these institutions can have a whole picture in mind, the problem may be resolved.

There are some important concepts for the ISP process. Firstly an ISP is developed based on individual client’s demands. Every plan has its basic requirements and format which can be followed by workers in these institutions. Basic format of written document can be an assessment standard of the operation for these institutions. Besides, the core of an ISP is the content of service which relates to the learning and rights of clients in these institutions. To understand the abilities of clients and training effectiveness, assessment is necessary and it can also help teachers develop learning objectives and goals for the clients (Schopler, 19995: 8–9).

I try to make the ISP process clearer and easier for workers in these institutions to implement an ISP, so I divide fourteen items of ISP into four categories: Parental involvement, service content, assessment and basic format. As showing in figure 2, the left column is for parental involvement, the middle is for service content, and the right one is for assessment. Because every step will produce written documents, basic format is covered through the whole process.

We can classify fourteen items into four categories as following:

1. Basic format: “Develop ISP for very client every year”, “ISP is made and signed by the supervisor and all related professions”, and “Completeness of ISP”.

2. Service content: “Daily schedules follow the service plans of every client”, “Comprehensive transition (or referral) services for clients”, “Comprehensive transition (or referral) services for clients”, “Providing direct or indirect training and service based on the demands of clients”, and “Service plans include completed developmental area”.

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3. Assessment: “Have observations and records of clients before using formal assessment”, “Modify goals in ISP based on evidence and modification is signed by the supervisor/ notify parents or client about the modification” (also includes in “parental involvement”), “Adjust training strategies and goals based on the performance of clients”, and “Assess and modify objectives in ISP periodically”.

4. Parental involvement: “Parents or clients participate the discussion of ISP”, “Collect families’ expectation toward clients and develop the service plan based on this”, and “Modify goals in ISP based on evidence and modification is signed by the supervisor/ notify parents or client about the modification” (also includes in “assessment”),

The following are comments during the consultation according to the four categories:

(I) Basic format:
1. One of evaluation indicators was “Develop IEP for very client every year” and this indicator was based on the percentage of ISP development. Yet, what was the percentage? Did it refer to the number of ISP had been developed (for example: there were 20 clients in an institution, but only 15 ISPs were made. So the percentage would be 75%), the development of ISP items (for example: there should be five items made in an ISP, but only four items had been made. The percentage then would be 80%), or time span for ISP (for example: ISP for one year got better points than two years)? The standard was very confusing.

To solve this problem, the administrative agency can convey the related information through different seminars or workshops. Besides, evaluation committee may have viewed the percentage in various ways. Thus, before the formal evaluation, some seminars or workshops for the evaluation committee to promote important knowledge of evaluation are necessary.

2. One of restrictions for schools to implement IEP is some teachers do not know how to write IEPs (Fu, 2006). In theory, teachers should be familiar with development of IEP, but in practice, even some special education teachers have a hard time to develop IEPs.

One the other hand, According to Tao (2003: 39~53), many nursing and educational workers in these institutions in Taiwan are senior high school graduated, about 40%, and their specialty were diverse. The proportion for social or education major is not high, only about 37% in private management of public established institutions. The condition for the private institutions can be worse. So many nursing
Figure 1. Items in consultation (evaluations) of social welfare institutions for the disable in Taiwan

- Develop ISP for every client every year
- Daily schedules follow the service plans of every client
- Periodical meetings for teaching, case, and administration
- Comprehensive transition (or referral) services for clients
- ISP is made and signed by the supervisor and all related professions
- Completeness of ISP
- Professional provide direct or indirect training and service based on the demands of clients
- Have observations and records of clients before using formal assessment
- Parents or clients participate the discussion of ISP
- Service plans include completed developmental areas
- Collect families’ expectation toward clients and develop the service plan based on this
- Modify goals in ISP based on evidence and modification is signed by the supervisor, notify parents or client about the modification
- Adjust training strategies and goals based on the performance of clients
- Assess and modify objectives in ISP periodically

Issues to be discussed in this article
ISP process for clients in social welfare institutions for the disable in Taiwan
and educational workers in these institutions may not have related knowledge required. They may encounter the similar difficulties some special education teachers face.

These workers usually get related knowledge most from working experiences, pre-job or on-job training, which lacks of systematic knowledge and training. “What happens in public school classrooms is directly related to how well prepared a teachers to make a difference in a child’s life” (Linek, Raine, Fleener, Klakamp & Fazio, 2003:87). Besides enthusiasm, professional knowledge and abilities of nursing or educational workers in these institutions are essential. If the workers’ competence is questionable, the services and training of clients will also be impacted.

During consultation, I found the knowledge for ISPs of teachers in these institutions needed to be enhanced. Many of them had no idea on how to develop ISPs. Besides, some teachers in these institutions did not know how to performance assessment and set objectives and goals for the clients by ecological assessment. Therefore, teachers set up the objectives and goals by themselves regardless the abilities and demands of the clients. Although some teachers designed and performed ecological assessment for their clients, they did not set the ISP objectives and goals based on the results of assessment. ISPs usually did not correspond with the assessment, and ecological assessment lost its functions.

Most institutions would arrange pre-job and on-job training for nursing and educational workers (we also call them “teacher”) of their institutions. However, more than one teacher of these institutions said that the training was so theoretical, that they did not know how to apply it in practice. Besides, clients were highly heterogeneous. Sometime they did not know how to deal with different affairs of their clients. When these teachers got problems, they did not know whom they could ask for. Pre-job or on-job training should take these workers’ opinions into account. Training can be more practical rather than theoretical, and meet theses workers’ demands.

In addition to the content of training, geographic location is another issue. Institutions in cities have more resources than in rural areas. Therefore, workers of these institutions in different cities or areas may have different needs toward their work. Location of institutions should be considered while designing training for workers.

3. Another ISP indicator was “ISP is developed by the supervisor and related professionals and get signatures of them.” Institutions had high demands for medical services which was severely insufficient at the same time. Because short of budget, those institutions seldom had full-time medical professionals (such as doctors, occupational therapists or physical therapists), and many of them worked as
volunteers. These professionals were very busy and usually served these institutions on weekly or monthly basis. There were many clients who needed related medical care in these institutions, so the ratio for medical professional-client was very high. Because they did not go to these institutions and had to serve many clients, so these professionals might not be very familiar with every client in these institutions. How could they give proper advice for ISPs of these clients?

Furthermore, it was very difficult for various professionals to get together and discuss the condition for every client. Reviewing some ISPs of these clients, some of them did not have signatures of these professionals. Even though some ISPs had “completed” signatures of these professionals, according to a teacher’s narration, most of them were not signed on ISP meetings because these professionals did not have time to attend the meetings.

If it is possible, there should be someone to do the recording when these (medical) professionals (especially for doctors) are doing their job. Once the recorder gets problems, he or she can communicate with the professionals immediately. Afterward, these records can be a part of an ISP. Later, the information can be brought into discussion in ISP meetings. Then the professionals can review and modify the meeting report, and finally get it signed. This method may really meet the purpose to get these professionals to sign ISPs.

(II) Service content:
1. In practice, “Daily schedules follow the service plans of every client” may be a debatable issue. Activities designed for clients in these institutions could be classified as whole class, small group and individual. Teachers noted that some evaluation committee criticized that whole class and small group activities did not correspond with individual ISPs of clients.

   However, clients’ characteristics are various. It is hard to cover all individuals’ demands into a whole class or small group activity, but it still can have some leisure and entertainment functions. Furthermore, these activities can have long-term benefits to develop some skills of clients.

   In addition, to take individual demands into account, teachers can assign clients with similar abilities or ISP objectives into the same group. The lesson plans can be designed based on groups. Clients’ individual skills can be enhanced in an activity, too. For example, in a language art class, one client can concentrate on spelling, another can practice writing and the others can focus on other skills.

2. Teachers also talked about the difficulties on fulfillment of ISP objectives and goals. This may be improved by promoting teaching skills of teachers. Another problem is
“development of goals and objectives”. Most clients were old and severely disabled, so it was very hard for them to learn new skills. Besides, some clients had some challenging behaviors, such as disrupt in the class and reject to eat any food. Too many objectives and goals were not necessary for the clients. Yet, one teacher said: “If I don’t have many objectives and goals, the evaluation committee will think I don’t do my work well.” Another teacher also stated: “The supervisor in our institution also questions about our working attitude because the objectives are not many.” According to the above, it implied that some teachers, supervisors of these institutions or even evaluation committee agree that more ISPs were better. Is that really good for the clients? We should pay more attention on how much and what the clients have learned rather than the numbers of goals listed in ISP.

On the other hand, I also found that on goal or objective development, teachers often ignored the importance of enhancing skills of the clients. Schopler (1995:9) presents that enhancing the skills people have learned is an effective way for both children and adults to learn. Therefore, when developing ISP goals, teachers can choose from the skills the client familiar with but not proficient first.

3. Another reason for fulfillment difficulties of ISPs is loading of teachers. Because of tight budget and limited salary for workers, institutions usually do not have enough labors. So, the working hours of these workers are long and loading is heavy (Tao, 2003). During the consultation, I found teachers needed to do a lot of additional paper work besides taking care and teaching the clients. I also found some paper work was not necessary. For example, it was written in a record: “**(a client) was happy to go to a park today.” I asked the teacher why they did such paper work. According to the answer of the president of an institution, some institutions did such paper work, and they were afraid to lose points in the evaluation if they did not do this.

I can understand the reason the president said. Yet, if teachers need to take a lot of time to do paper work for evaluation, the time they spend for the clients will decrease. Is this the intention for evaluation? I think the answer is definitely “NO”. To avoid too much paper work that impacts the teaching and caring for the clients, it is a responsibility for the administrative agency to regulate the paper work the institutions need to do for the clients and evaluation.

(III) Assessment
1. Usually, institutions will design ecological assessment which becomes the basis of assessment and teaching as well as caring for their clients. Moreover, because of different demands and abilities of clients, some items in ecological assessment were
not fit with some of clients. Therefore, the evaluation committee would think the teachers did not do their work well or did not develop comprehensive lesson plans for the clients. Dressing oneself, for example, may not be necessary for a severe retarded client in bed all day. Under these circumstances, this issue can be brought into discussion in ISP meetings and recorded in the ISP.

2. To promote clients’ learning and make sure the performance, teachers usually use task analysis for teaching and assessment. In these institutions, teachers usually used this technique, but many related information and records were made by handwriting. Because management of records was not very well, teachers had to do many repeated work while developing ISPs. It is suggested to use computer and information systems to develop ISP, which can be very convenient and save a lot of time for teachers.

(IV) Parental involvement

This issue stressed on that parents participate in both development and modification of ISP. Many institutions replaced families as the “home” for the clients. Some parents might pick up their children to participate family activities for one or two days, but they were forced to send their children back to the institutions because of emotional problems. During the consultation, many teachers pointed out that parental involvement was disappointed. Some parents even though that their responsibilities were over after getting their children into the institutions. When the institutions tried to contact with parents, sometimes they would say that they had paid the fee, and did not want “disturbance” from the institution. Some “parents” were just relatives of clients, and they even expressed: “It is my bad luck because he (the client) only has me.” Some workers in institutions had tried very hard to persuade parental involvement in the ISP meetings, but the willingness of “parents” was still low.

Mostly, parents are the closest people for their children. The purpose of parental involvement is to promote correspondence of ISP to the client (Erwin & Schreiber, 1999). For many clients in these institutions, especially for the severe and extremely severe ones, they even did not have capacities to take care of themselves in daily life. Therefore, the institution becomes the real home, which they live, work and joint various activities. Even though they may go back their origin homes during some holidays, families are not close to and familiar with them. People know the clients best are workers in the institutions, not the family members.

Under these circumstances, what is the meaning to compel parents to participate in ISP meetings or other activities. Accordingly, it is considerable to replace that parents involve in and sign ISP to “inform parents and respect their willingness.”
IV. Conclusion and suggestions

Stufflebeam, D. L., an expert of assessment says: “The purpose of assessment is to improve not to blame.” Assessment is to find out the weakness of these institutions and try to get it improved. That is to say, is the improvement for these institutions (being evaluated) or other authorities (such as government)?

Documentation is always an important aspect in evaluation. The evaluated basis is from evaluation indicators which not have clear regulations for documentation. Workers in an institution may ask works in other institutions for reference. At the end, workers in this kind of institutions do a lot of paper work, not because it is necessary, but workers in other institutions do it and they are afraid of losing points because of that. It wastes much time of workers in these institutions and influence the qualities of training and caring for clients. As said before, it is the responsibilities for the authorities to set up the documentation or other regulations for evaluation, hold workshops to explain the format and expectations for documentation as well as regulations, and post them on related website for reference.
Reference


The Causal Relationship of Organizational Performance of Thailand Private Higher Education Institutions  
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School of Communication Arts. Bangkok University

ABSTRACT

This paper was to study the influence of the transformational leadership, organizational culture, and knowledge management on organizational performance of Thailand private higher education institutions. The proposed causal model showed that relationship among transformational leadership, organizational culture, knowledge management, and organizational performance. A sample of 389 was randomly drawn from instructors of private higher education institutions under office of the Higher Education Commission. Data were collected by using questionnaires with reliability 0.98. Data analysis was descriptive statistics, and Linear Structure Relationship (LISREL) analysis.

The results indicated that transformational leadership, organizational culture, and knowledge management had direct influence on organizational performance, and transformational leadership, organizational culture have indirect influence on organizational performance through a mediating function of knowledge management; and the causal relationship model agreed with the empirical data. The model validation indicated that the causal model was fit to the empirical data with the goodness of fit statistics: chi-square = 28.68; df = 48; p = 0.99; RMSEA = 0.000; GFI = 1.00; AGFI = 1.00; RMR = 0.015 and LSR = 0.90 by the Unweighted Least Square method (ULS). This model could explain 55.00 percent of the organizational performance variance.

Keywords: causal model, organizational performance, private higher education
INTRODUCTION

Thai higher education has the clear direction to promote higher quality, efficiency, and effectiveness and to enhance national competitiveness in the regional and global arenas. Government has conducted a comprehensive retrospective of higher education performance and has laid out a new vision in the Second 15-Year Long Range Plan for Higher Education (2008-2022). This plan for higher education transformation covers all key aspects of higher education management, including administrative systems, teaching and learning, research promotion and higher education finance. Its main aim is providing citizens with the skills and capabilities necessary to raise national competitiveness.

The private higher education’s outcome tries to highlight changes in management paradigm, and the rise of strategic management which both can help education managers improve their organizational performance. While a knowledge-based revolution is taking place, it comes in a matching concept: knowledge management for organizations and the knowledge-based economy for Thailand. Both are part of a major evolutionary economic movement which is beginning to reshape the global economic structure, and knowledge management should be seen as one of the most concrete and important set of practices and policies than an organization can adopt, marking a significant step in an institution’s evolution toward becoming a global, learning organization that can survive in the knowledge based economy. This paper, therefore, is to study the relationship between educators’ leadership, knowledge management, and organizational culture and organizational performance of Thailand Private Higher Education Institution.

LITERATURE REVIEWS

The original formulation of transformational leadership theory comes from Burns (1978). At the core of transformational leadership is the concept of transformation, or change of the organization. According to Bass & Avolio (1998), they added that transformational leadership best reflects this change management and make clear the leaders’ characteristics. The first characteristic is that followers are driven by a moral need, the need to be champion, or the need to take a higher moral stance on an issue. Followers like to feel that a higher organizational spiritual mission guides their motives. The second need is a paradoxical drive for consistency and conflict. Transforming leaders must help followers make sense out of inconsistency. Conflict is necessary to create alternatives and to make change possible. The process of transformation is founded on idealized influence, inspirational motivation, intellectual
stimulation, and individualized consideration. The transformational leaders must attach a high value to knowledge, encourage questioning and experimentation through empowerment, build trust, collaboration and organization learning. Moreover, leaders need to focus on organizational culture that can be viewed as the sum total of beliefs, values, attitudes, and assumptions shared among its members. Organizational culture deals with planned change and transformation, and understanding its process has become extremely important in all institutions including colleges and universities (Keup, Walker, Astin, & Lindholm, 2001; Bollinger and Smith, 2001; Lee & Choi, 2003). Thus, organizational culture is then considered more important in the private higher educations institutions.

A process of knowledge management is based on the ability of all members of the organization to add value to the basic business processes through the creation, communication, codification, and coordination of both explicit and tacit knowledge stores (Nonaka & Takeuchi, 1995). Specifically, Nonaka and Takeuchi (1995) theorized that the flow of knowledge transitions from socialization to externalization, to combination, and to internalization, basically from the raw experience to understanding, then to categorization, and finally to the creation of personal mental models that transcend the experience. This link simply provides basis from which to grow new theories of leadership to help educators of the new knowledge organization turn implicit knowledge into significant organizational performance (Lee & Kim, 2001; Lee & Choi, 2003; Migdadi, M. 2005; Brachos et al. 2007; Lyons, 2008; Ho, C.T. 2009).


(Figure 1)
METHODOLOGY

Participants: This study was based on 389 samples who were randomly drawn from instructors of private higher education institutions under The Office of the Higher Education Commission. This study used multi-step sampling.

The research instrument was a questionnaire constructed from the adapted research. Once created, the instrument was checked by five education experts (IOC = 0.93). Next, the instrument was administered to a try out sample (N = 60) for the purpose of establishing reliability estimates (0.98).

The research instrument attributes used five-point Likert scales ranging from strongly agree to strongly disagree in 90 items.

Data were analyzed through descriptive statistics, correlation coefficient analysis, exploratory factor analysis, confirmatory factor analysis, and structural equation model analysis.
RESEARCH RESULTS

The mean of change leadership and organizational culture of private higher education institutions is high level. The mean of transformational leadership is high in terms of idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation respectively, and the mean of organizational culture is high in terms of collaboration, learning, and trust consecutively. The mean of knowledge management and implemented results and organizational performance is moderate level. The mean of internalization is highest level, and socialization, combination, and externalization are at the consecutive level. (Table 1)

Table 1. General Statistics of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>X</th>
<th>S.D.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEADER: Transformational Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIL: Idealized influence Leadership</td>
<td>3.65</td>
<td>0.74</td>
<td>-0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>IML: Inspiration Motivation Leadership</td>
<td>3.61</td>
<td>0.76</td>
<td>-0.72</td>
<td>0.53</td>
</tr>
<tr>
<td>ISL: Intellectual Stimulation Leadership</td>
<td>3.50</td>
<td>0.57</td>
<td>-0.62</td>
<td>0.67</td>
</tr>
<tr>
<td>ICL: Individualized Consideration Leadership</td>
<td>3.56</td>
<td>0.70</td>
<td>-0.82</td>
<td>1.05</td>
</tr>
<tr>
<td>CULTURE: Organizational Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRUST: Trust</td>
<td>3.48</td>
<td>0.41</td>
<td>-0.40</td>
<td>0.59</td>
</tr>
<tr>
<td>COLLA: Collaboration</td>
<td>3.57</td>
<td>0.36</td>
<td>-0.89</td>
<td>1.54</td>
</tr>
<tr>
<td>LEARN: Learn</td>
<td>3.53</td>
<td>0.37</td>
<td>-0.48</td>
<td>0.14</td>
</tr>
<tr>
<td>KM: Knowledge Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCIAL: Socialization</td>
<td>3.32</td>
<td>0.41</td>
<td>-0.22</td>
<td>-0.35</td>
</tr>
<tr>
<td>INTER: Internalization</td>
<td>3.26</td>
<td>0.42</td>
<td>-0.28</td>
<td>0.23</td>
</tr>
<tr>
<td>COMB: Combination</td>
<td>3.32</td>
<td>0.37</td>
<td>-0.06</td>
<td>-0.14</td>
</tr>
<tr>
<td>EXTER: Externalization</td>
<td>3.36</td>
<td>0.31</td>
<td>-0.32</td>
<td>0.13</td>
</tr>
<tr>
<td>OPP: Organizational Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CREAT: Creativity</td>
<td>3.30</td>
<td>0.40</td>
<td>-0.28</td>
<td>-0.03</td>
</tr>
<tr>
<td>OP: Organizational Performance</td>
<td>3.25</td>
<td>0.34</td>
<td>-0.31</td>
<td>0.01</td>
</tr>
</tbody>
</table>

(n = 398)

The results indicated the model influence of causal relationship that the validity testing in the causal relationship equation of transformational leadership, organizational culture, knowledge management, and organizational performance in the private higher education institutions were fit to the empirical data chi-square = 28.68; df = 48; p = 0.99; RMSEA = 0.000; GFI = 1.00; AGFI = 1.00; RMR = 0.015 and LSR = 0.90 by the ULS method. The researcher adjusted the relationship
model to fit the medication indices according to the computer program from maximum likelihood method (ML) to unweighted least square (ULS). (Table 2)

Table 2. Result of Lisrel Analysis Step

<table>
<thead>
<tr>
<th>Lisrel analysis process</th>
<th>Goodness of fit statistics</th>
<th>Chi-Square</th>
<th>df/p-value</th>
<th>RMSEA</th>
<th>RMR</th>
<th>CFI</th>
<th>GFI</th>
<th>AGFI</th>
<th>LSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisrel analysis step 1</td>
<td></td>
<td>$\chi^2 = 201.28$</td>
<td>df=59/p=0.00</td>
<td>0.078</td>
<td>0.059</td>
<td>0.99</td>
<td>0.93</td>
<td>0.89</td>
<td>9.44</td>
</tr>
<tr>
<td>Lisrel analysis step 2</td>
<td>modification indices: ML</td>
<td>$\chi^2 = 59.31$</td>
<td>df=48/p=0.13</td>
<td>0.024</td>
<td>0.017</td>
<td>1.00</td>
<td>0.98</td>
<td>0.96</td>
<td>3.28</td>
</tr>
<tr>
<td>Lisrel analysis step 3</td>
<td>modification indices: ULS</td>
<td>$\chi^2 = 28.68$</td>
<td>df=48/p=0.99</td>
<td>0.000</td>
<td>0.015</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>0.90</td>
</tr>
</tbody>
</table>

To conclude, the causal relationship among transformational leadership, organizational culture, knowledge management, and organizational performance in the private higher education institutions showed that the organizational performance variance can explain 55%, knowledge management is the mediating variable and has the positive relationship to organizational performance ($r = 0.79$). This analysis of structural equation modeling: SEM is fit to the empirical data. (Figure 2)

![Figure 2. The Causal Relationship Model: Path Analysis](image)
Result of hypothesis tests indicated that transformational leadership, organizational culture and knowledge management have direct influence on organizational performance. Transformational leadership and organizational culture have indirect influence on organizational performance through a mediating function of knowledge management. Also, causal structural relationship model among transformational leadership, organizational culture, knowledge management and organizational performance of Thailand Private Higher Education Institutions was conformed to empirical data with the goodness of fit statistics. This model could explain 55.00 percent of the organizational performance variance. The results supported the knowledge management researchers (Nonaka & Takeuchi, 1995, 1998, 2004; Davenport & Prusak, 1998; Lee & Choi, 2003; Deaedge et al., 1993; Migdadi, M. 2005, Tasmin & Woods, 2007) who emphasized that the concept of knowledge management in the organization can help develop organizational performance and increase organizational effectiveness in a concrete and sustainable way with the supporting factors to knowledge management process such as leadership, organizational culture, organizational structure, and information technology.

DISCUSSION AND RECOMMENDATION

Knowledge management is the educators’ tool that helps develop the decision making (Lyons et al., 2008) and organizational effectiveness by managing knowledge to be intelligent capital (explicit and tacit knowledge) and develop human’s potential according to Senge’s five disciplines of learning organization concepts (1990) which consisted of systems thinking, personal mastery, mental models, building shared vision, and team learning. The discipline is accordance to Nonaka & Takeuchi (2004) which stressed on dialogue and discussion that can lead to sharing, learning organization and eventually become the best practice of organizational performance which highlighted on four missions: students’ qualities, quality of research, academic services, and art and cultural maintenance.

Furthermore, leaders in the private higher education institutions have to work with various attributes such as strategic management, internal and external policies, life-long education, internationalization, new communications technologies, new functions involving with the development of knowledge-based society.
REFERENCES


Abstract

The purpose of this study is to examine how personal relationship (friendship and romantic relationship) is developed, to identify factors that affect friendship and romantic relationship, and to examine how friendship and romantic relationship can explain living behaviors shared with closed friends and romantic friends.

The present study undertakes a quantitative research of university students’ living behaviors in the private residence, Prathumthani, Thailand. A survey questionnaire was employed in this study with three hundred and eighty-four students living in the private residence nearby their universities.

The major issue investigated is the variables that aimed to scrutinize university students’ living behaviors in the private residence. Five variables (students’ lifestyles, friendship, romantic relationship, living behaviors shared with closed friends, and living behaviors shared with romantic friends) were studied. The researcher tested significance by using Pearson’s Product Moment Correlation Coefficient.

Finally, research findings revealed that friendship was likely to develop to romantic relationship, and there were positive relationship between students’ lifestyle and friendship, and students’ lifestyle and romantic relationship. Moreover, different types of personal relationship (friendship and romantic relationship) may not be able to explain the different living behaviors shared with closed friends and romantic friends.

Key words: friendship, romantic relationship, social penetration theory, participation

Introduction

The demand of students who wanted to study in the university increased while many universities in the city in Thailand were not able to serve all new students anymore. It was crucial for universities to expand their campus to other provinces not too far from the city. Due to the expansion, students themselves found some difficulties to go back and forth every day because the distance was farther, and the traffic was congested. They had to wake up earlier in the morning and come back home late. Also, they paid more expenses for their transportation. They were very tired, and parents started to worry about their children’s security and inconvenience. To alleviate their worries, parents began to look for the nearest accommodation which was the dormitory in the university or private residence outside the university. Many universities provided the dormitory, but it was still not sufficient while some did not. As a result, a lot of students had to stay in the private residence. Staying in the private residence could bring both advantages and disadvantages. Since students had more freedom after getting away from parents, and they met both same-sex and different-sex friends and communicated in terms of many topics. In terms of interpersonal communication, when they became friends, they were closer, and their relationship later could be changed. Social psychologists Irwin Altman and Dalmas Taylor (1973) initiated the relationship theory called “social penetration
theory.” The central idea of this theory is that every relationship – whether with a friend, a family member, a lover, or a co-worker- is in terms of two concepts: breadth and depth. Breadth has to do with how many topics are discussed with the other person. Depth has to do with how central the topics are to self-concept and how much topics are revealed. Relationships begin with relatively narrow breadth (few topics are spoken about) and shallow depth and progress over time in intensity and intimacy as both breadth and depth increase. Thus relationships develop incrementally as few to many topics, and superficial topics to intensely personal topics are discussed.

Students were at the age of teenagers who were excited to meet new challenges that might bring both desirable and undesirable behaviors. If they were close with opposite sex until the relationship was changed into romantic relationship, they would privately choose to live in their own world. According to communication privacy management theory (Petronio, 2003), it focuses on the establishment of the boundaries and borders that people decide others may or may not cross. For each relationship, people compute a “mental calculus” to guide them in deciding whether to share information with another person or keep it private, avoiding disclosure by engaging in the deliberate withholding of information. As a result, it is possible that students in the private residence will perform what they want to do even negative behaviors: hanging out until late night, drinking alcohol, taking drugs, having sexuality, etc. that might lead them to absenteeism, low responsibility, low attentiveness, low achievement, or incomplete study due to being retired, dead, or disabled.

**Objectives of the Study**

This study aimed to:

1. study the relationship development of students after having stayed in the private residence.
2. study the relationship between students’ lifestyles and friendship.
3. study the relationship between students’ lifestyles and romantic relationship.
4. study the relationship between friendship and students” living behaviors shared with closed friends.
5. study the relationship between romantic relationship and students” living behaviors shared with romantic friends.

**Hypotheses**

From the foregoing discussion, the following hypotheses are formed:

1. Students begin with friendship and gradually develop to romantic relationship after having stayed in the private residence.
2. Students” lifestyles in the private residence has a positive relationship with friendship.
3. Students” lifestyles in the private residence has a positive relationship with romantic relationship.
4. Friendship has a positive relationship with living behaviors shared with closed friends.
   Romantic relationship has no relationship with living behaviors shared with closed friends.
5. Friendship has no relationship with living behaviors shared with romantic friends.
   Romantic relationship has a positive relationship with living behaviors shared with romantic friends.
Significance of the Study
1. To stimulate university role of giving closer look at students in the private residence.
2. To encourage university to put an emphasis on communication network and communication activities with the private residence.

Definition of Terms
1. Private residence refers to the accommodation nearby the universities where the students rent and pay their fees.
2. Students’ lifestyles refers to individuals’ daily activities such as time to wake up and time to bed, days of staying in the private residence, number of closed friends, sex of closed friends, frequency of friends’ visit, group meeting, activities done during spare time, types of friends: same-sex and/or different-sex friends, activities doing with friends.
3. Friendship refers to the stages of how friendship was developed: role-limited interaction, friendly relations, moving toward friendship, nascent friendship, stabilized friendship, waning friendship, and repaired friendship.
4. Romantic relationship refers to stages of how romantic relationship was developed: individuals with particular needs, goals, and qualities that affect what we look for in romantic relationship, invitational communication, explorational communication, intensifying communication, revising communication, intimate bonding, and navigating communication.
5. Living behaviors shared with closed friends refers to helping each other to do homework or activities, revising textbook together, etc.
6. Living behaviors shared with romantic friends refers to hanging out in the late night, playing online game until late night, having sexuality, taking drugs and drinking alcohol, etc.

Limitations of the Study
The researcher collected questionnaires from the students in the private residence living nearby their universities, Prathumthani, Thailand. Students were studying in the second year to the fourth year. The first year students were not the sample in this study, and they had to live in the private residence at least one semester because they were adjusting themselves to study in the university. Also, at the time the researcher collected the data, students were still living in their private residence.

Methodology

Subjects
The subjects of this study were three hundred and eighty-four students who stayed in the private residence, Prathumthani, Thailand. In this study, the researcher got the sample from one hundred and two private residences.

Research Tool
Questionnaire was made by researching concepts and document to cover the studied variables. Extra care and caution was applied in constructing the questionnaire. The researcher made the closed-ended questionnaire which consisted of six parts which are 1) demographic data such as sex, faculty, and present year of study 2) student’s lifestyles in the private residence 3) friendship 4) romantic relationship 5) living behaviors shared with closed friends 6) living behaviors shared with romantic friends.
The Test Instrument
To ensure that the test had content validity, the questionnaire was checked and corrected by the research mentor. The researcher conducted the pre-test with fifty students in the private residence, and correction was made. Reliability of the questionnaire was tested by Coefficient Alpha of Cronbach. The result of reliability (α) was 0.93.

Research Procedure
The questionnaire which was administered with three hundred and eighty-four students in the private residence contained six sections.

The first section is the demographic data of the respondents: sex, faculty, present year of study.

The second section is students’ lifestyles in the private residence consisting of 14 items with 5-point Likert scale: frequently portray students’ lifestyles, often portray students’ lifestyles, sometimes portray students’ lifestyles, hardly portray students’ lifestyles, and never portray students’ lifestyles.

The third section is friendship consisting of 23 items with 5-point Likert scale: frequently have relationship with closed friends, often have relationship with closed friends, sometimes have relationship with closed friends, hardly have relationship with closed friends, and never have relationship with closed friends. Friendship development was developed by interpersonal communication researcher Bill Rawlins (1981, 1994).

The fourth section is romantic relationship consisting of 17 items with 5-point Likert scale: frequently have romantic relationship, often have romantic relationship, sometimes have romantic relationship, hardly have romantic relationship, and never have romantic relationship. Romantic relationship development was developed by interpersonal communication researcher Bill Rawlins (1981, 1994).

The fifth section is living behaviors shared with closed friends consisting of 7 items with 5-point Likert scale: frequently, often, sometimes, hardly, and never.

The sixth section is living behaviors shared with romantic friends 10 items with 5-point Likert scale: frequently, often, sometimes, hardly, and never.

Data Analysis
The collected data were analyzed using SPSS (Statistical Package for Social Science). Pearson’s Product Moment Correlation Coefficient was performed. The acceptable statistical significance level was set at .01 and .05.

To test Hypothesis One, the researcher used Pearson’s Product Moment Correlation Coefficient to investigate the relationship of independent variable (romantic relationship).

To test Hypothesis Two, the researcher used Pearson’s Product Moment Correlation Coefficient to investigate the relationship of independent variable (friendship).

To test Hypothesis Three, the researcher used Pearson’s Product Moment Correlation Coefficient to investigate the relationship of independent variable (romantic relationship).

To test Hypothesis Four, the researcher used Pearson’s Product Moment Correlation Coefficient to investigate the relationship of independent variable (living behaviors shared with closed friends).

To test Hypothesis Five, the researcher used Pearson’s Product Moment Correlation Coefficient to investigate the relationship of independent variable (living behaviors shared with romantic friends).
Research Findings

**Hypothesis One** predicted that students begin with friendship and gradually develop to romantic relationship after having stayed in the private residence. The hypothesis was supported. (Table 1)

Table 1: Pearson’s Product Moment Correlation Coefficient Between Friendship and Romantic Relationship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Romantic Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship</td>
<td>.231**</td>
</tr>
</tbody>
</table>

**Sig 0.01

The results revealed a significant difference exists. There is a positive relationship at a low level (r = .231, p < .01). That means friendship of students in the private residence is likely to develop to romantic relationship.

**Hypothesis Two** predicted that students’ lifestyles in the private residence has positive relationship with friendship. The hypothesis was supported. (Table 2)

Table 2: Pearson’s Product Moment Correlation Coefficient Between Students’ Lifestyle and Friendship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Friendship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Lifestyles</td>
<td>.305**</td>
</tr>
</tbody>
</table>

**Sig 0.01

The results revealed a significant difference exists. There is a positive relationship at a low level (r = .305, p < .01). That means students’ lifestyles in the private residence is likely to have the effect on friendship.

**Hypothesis Three** predicted that students’ lifestyles in the private residence has positive relationship with romantic relationship. The hypothesis was supported. (Table 3)

Table 3: Pearson’s Product Moment Correlation Coefficient Between Students’ Lifestyle and Romantic relationship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Romantic Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Lifestyles</td>
<td>.109*</td>
</tr>
</tbody>
</table>

*Sig 0.05

The results revealed a significant difference exists. There is a positive relationship at a low level (r = .109, p < .05). That means students’ lifestyles in the private residence is likely to have the effect on romantic relationship.

**Hypothesis Four** predicted that friendship has a positive relationship with living behaviors shared with closed friends. The hypothesis was supported. Romantic
relationship has no relationship with living behaviors shared with closed friends. The hypothesis was rejected. (Table 4)

**Table 4: Pearson’s Product Moment Correlation Coefficient Between Friendship And Living Behaviors Shared With Closed Friends And Between Romantic Relationship and Living Behaviors Shared With Closed Friends**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Friendship</th>
<th>Romantic Relationship</th>
<th>Living Behaviors Shared With Closed Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romantic Relationship</td>
<td>.231**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Behaviors Shared With Closed Friends</td>
<td>.334**</td>
<td>.351**</td>
<td></td>
</tr>
</tbody>
</table>

**Sig0.01

The results revealed a significant difference exists. There is a positive relationship at a low level (r = .334, p < .01) between friendship and living behaviors shared with closed friends. That means friendship and living behaviors shared with closed friends have the relationship in the same direction.

There is a positive relationship at a low level (r = .351, p < .01) between romantic relationship and living behaviors shared with closed friends. That means romantic relationship and living behaviors shared with closed friends have the relationship in the same direction.

**Hypothesis Five** predicted that friendship has no relationship with living behaviors shared with romantic friends. The hypothesis was accepted. Romantic relationship has a positive relationship with living behaviors shared with romantic friends. The hypothesis was rejected. (Table 5)

**Table 5: Pearson’s Product Moment Correlation Coefficient Between Friendship And Living Behaviors Shared With Romantic Friends And Between Romantic Relationship and Living Behaviors Shared With Romantic Friends**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Friendship</th>
<th>Romantic Relationship</th>
<th>Living Behaviors Shared With Romantic Friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romantic Relationship</td>
<td>.231**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Behaviors Shared With Romantic Friends</td>
<td>-.010</td>
<td>-.528**</td>
<td></td>
</tr>
</tbody>
</table>

**Sig0.01

The results revealed no significant difference exists between friendship and living behaviors shared with romantic friends (r = -.010). That means friendship doesn’t lead to living behaviors shared with romantic friends.

On the other hand, the results indicated a significant difference exists between romantic relationship and living behaviors shared with romantic friends. There is a
negative relationship at a moderate level ($r = -0.528, p < .01$) between romantic relationship and living behaviors shared with romantic friends. That means romantic relationship can lead to living behaviors shared with romantic friends in opposite direction.

**Conclusions and Recommendations**

The researcher intends to conduct a quantitative research concerning students’ lifestyles, personal relationship (friendship or romantic), living behaviors shared with closed friends, and living behaviors shared with romantic friends. As the results have shown, students’ lifestyles in the private residence can be the factor to develop students in the private residence from friendship to romantic relationship. The reason that they meet and do activities together, they are then easy to close to one another. As Wood (2008) mentioned that the two greatest influences on initial attraction are proximity or physical nearness and similarity. Also, Wood (2008) emphasized that the stages of relationship evolution do not just happen automatically. Rather, particular experiences and events cause relationships to become more or less intimate.

The result also revealed that different types of personal relationship (friendship and romantic relationship) do not lead to different living behaviors shared with closed friends and with romantic friends. To illustrate, friendship has a positive relationship with living behaviors shared with closed friends, and romantic relationship has a positive relationship with living behaviors shared with closed friends in the same direction. In this case, it can be explained that since romantic relationship is formed after friendship has been developed to a certain point. Then, friendship can become romantic relationship. Another result is that romantic relationship can lead to living behaviors shared with romantic friends in opposite direction, while friendship has no relationship with living behaviors shared with closed friends. This can be explained that the stages in romantic relationship are individual communication, explorational communication, intensifying communication, revising communication, and intimate bonding. At each stage moves, the relationship is gaining depth as the increasing amount of intimacy and happiness it typically embodies. They spend more or more time together, and they rely less on external structure such as movies or parties.

The results from the research can be applied to urge universities to give a closer look on students’ living behaviors in the private residence. Private residence is the environment which is the external factor that can have great influence on the students positively and negatively. In this case, different sex of students stays together in the same private residence, therefore, without knowing, it can probably bring misunderstanding and misperceptions in their communication. Communication of both sides may come from different backgrounds such as countries, ages, and organizational position (Coupland, Wiemann, & Giles, 1991) and gender (Maltz, & Borker, 1982).

Finally, the researcher would like to suggest universities to take the role as a facilitator to work proactively with the private residence by using communication network to build mutual understanding. Universities may often have meeting with owners of private residence near universities to share problems and solutions and do activities together. Meeting and doing activities can be two-way communication, that is, universities join with owners of the private residence, and owners of private residence join with universities. To sum up, universities and owners of the private residence can work successfully because of participation. Participation can be fulfilled because of cooperation, coordination, and responsibility. Participation is the heart of working together; cooperation is individuals’ intention to work together to accomplish the group goal; coordination is the time and sequential events which help activities or jobs finish
effectively; and responsibility is the commitment to work and build trust. The benefits will go to every party: universities, owners of the private residence, and community as a whole.

References


Elementary teachers must be resilient. They have to be. Elementary students almost unconditionally hold negative attitudes toward social studies and rarely understand the importance of social studies or its relevance to their lives (Zhao & Hoge, 2005). In addition, in the present era of accountability, high stakes testing, multiple lingual settings, and a growing diversity in their classrooms, elementary teachers have to be flexible, creative, and welcome change. They will try anything to get their students to learn, especially in a content area like social studies that gets such limited support as a result of little or no standardized accountability on the district, state, and national levels (Burstein, Hutton & Curtis, 2006; Hutton & Burstein, 2008; Smith, 2008; VanFossen, 2003).

This article discusses the importance of using the arts as an access strategy to help students learn social studies. Although the study and use of the arts in elementary school curriculum has been shown to increase academic achievement overall (Brouillette, 2010; Darby & Catterall, 1994; Eisner, 1999, 2000; Holzer, 2009), the arts in general have all but disappeared from the elementary school curriculum. Short of some cutting and pasting and working with construction paper, a disciplined, purposeful use of the visual and performing arts, from a standards-based perspective, is illusive at best to most elementary school teachers. Volk (1998) has demonstrated the multicultural links made by an intentional arts education. Eisner (2000) and others (Damm, 2006; Grallert, 2009; Holzer, 2009; Raymond & Broderick, 2007) continue to demonstrate the need for a comprehensive arts education, but teachers face the practical reality of accountability and assessment in curriculum other than the arts, suggesting that they ignore and ‘leave behind’ the arts altogether.

This article builds upon the work of Mishook & Kornhaber (2006) and Bresler (1995) who discuss the need for co-equal arts integration, where the arts and content area curriculum are taught for equally measured outcomes. In this way, the social studies and arts curricula that are being left on the shelves can be effectively taught in an integrated manner to enhance student learning and reclaim content that is being left behind (Burstein & Knotts, 2010). Mishook & Kornhaber and Bresler also discuss a subservient arts integration model, where the arts are used only as an access strategy for the content area curriculum that is the focus of assessed outcomes. Although they argue that a comprehensive, coequal arts education is clearly preferred over one that uses the arts solely as an access strategy to other content, we argue that any use of the arts can and does only enhance students’ understanding of the social studies content that it serves. Zhao & Hoge state “students have the greatest difficulty with abstract concepts related to time and place” (2005, p.219). So while we urge teachers to strive for a co-equal integration and equal assessment of both the social studies and arts curricula, we believe
that the use of the visual and performing arts in studying social studies content can only
enhance student learning, make concepts more real and relevant, and enliven engagement
and motivation in the elementary classroom (Jones, 2005). The use of the arts makes
those social studies concepts real and concrete; when students can see, hear, and touch
something from another time and place, or even merely representative of that time and
place, it helps to make their learning fun and challenging, but also concrete and context-
driven, and ultimately, more relevant to their daily lives.

Benefits of Aligning the Arts and Social Studies

The social studies curriculum is comprised of several social sciences including
economics, political science, history, cultural anthropology, philosophy, sociology, and
geography (National Council of the Social Studies, 1996). Of those, cultural
anthropology best lends itself to the integration of the arts. Many cultures express their
cultural norms through the visual-performing arts allowing a multifaceted view of inside
that culture. Culture, especially visual culture is “inherently interdisciplinary and
increasingly multimodal” (Freedman, 2003, p. 2). By integrating the visual-performing
arts, teachers tap into several strategies to help students make their own meaning of
socio-historical events. Using arts strategies can encourage open-ended thinking, “risk-
taking, critical thinking, and diligence” (Gullat, 2008, p.14). To encourage teachers to use
the arts with social studies, the elementary curriculum should be taught with a
multidisciplinary focus rather than piecemeal by subject area or time slot during the
school day. In the real world, concepts and skills are not used as discrete bits of
information but used as an integrative approach to solving real world problems.
Educators need to teach and model these integrative strategies with our children using an
approach they will likely use as adults in the workforce.

As part of a multidisciplinary approach, critical thinking skills are essential in helping
students analyze open-ended problems and situations in the social studies curriculum.
The visual-performing arts help enhance critical thinking skills by providing visual and
kinesthetic problems to consider from multiple vantage points. In the visual arts, several
researchers promote the use of aesthetic and critical inquiry to promote critical thinking
(Burton, Horowitz & Abeles, 2000; Housen, 2001; Lampert, 2006). While aesthetic
inquiry focuses on the exploration of the general nature of art, critical inquiry is more
specific to analyzing one piece of art (Lampert, 2006). Both inquiries propose to assist
students to use multiple strategies to solve and evaluate open-ended problems and to
consider various alternatives and multiple vantage points (Lampert, 2006). When
examining the social studies curriculum, these strategies in the arts are aligned with
similar strategies used in social studies inquiry. In fact, Levstik and Barton (2005)
advocate using observation, analysis, open-ended problems, and multiple perspectives in
learning history that aligns nicely with the same skills in aesthetic inquiry.

The following section outlines the use of the four visual and performing arts, discusses
cognitive and classroom benefits of each art form, as well as practical applications and
eamples for the elementary classroom.
Integrating the Visual-Performing Arts

Drama

Elementary teachers have noted a variety of benefits for their students after using various art forms to enhance the presentation of social studies curriculum. When students use drama and character portrayal to demonstrate their knowledge and skills, they develop self-confidence and gain a better understanding of the events they are enacting (Morris, 2001). Obenchain and Morris (2001) also found that the use of melodrama engages students in learning content, while addressing multiple perspectives, and making historical connections across time and space. This use of drama and melodrama allows students to engage with major historical figures that are representative of the period, as well as giving voice to the poor, women, and the disenfranchised in ways that social studies texts do not often offer (Hutton & Burstein, 2008; Morris, 2001).

Using the dramatic arts also provide students a multi-sensory approach to learning social studies content. Students must use imagination, risk-taking, and critical thinking in using all five senses to create a character within a historical time period or cultural context. Gullatt (2008) states, “dramatic activities provide opportunities to see, hear and create learning opportunities” (p.19). Therefore, students are using multiple intelligences to make sense of content. In fact, McMaster (1998) describes the benefits of using drama because it employs metacognitive strategies such as analysis and evaluation during the acting process. Using this process to make sense of complicated events such as the American Revolution provides students multiple ways and perspectives to make meaning of this historic period. For instance, students could act out what it might be like to sign the Declaration of Independence, knowing that to do so, to stand up for a potentially unpopular belief, might make them the target of hate and violence. This practical application to modern-day bullying and hate crimes has overwhelming relevance in modeling how to effectively participate in democratic dialogue in grade- and age-appropriate ways, and is developmentally appropriate way to get students critically engaged with the concrete and relevant issues of their time.

Music

Teachers use music in the classroom to raise awareness of multiple historical perspectives, and enhance understanding of history and culture (Taylor, 2008). The use of music has been found to enhance student understanding of folktales, fairytales, and building meaningful context (Kite, 1994). Music is multicultural and can be used to compare cultures across time and place (Elliot, 1995; Volk 1998). This consciousness-raising about the multiplicity of culture(s) allows students to value the customs, behaviors, and traditions of “others” (Waterbury, 1993).
In addition to raising awareness and providing context, the arts including music provides an alternative communication system for students to express what they know and feel. Multiple sign systems are alternative modes of communication used to construct meaning about new information (Berghoff, 1998; Gullatt, 2008). When children learn difficult concepts in social studies, music can provide one pathway to communicate their understanding besides the more traditional forms of speaking and writing. Creating and singing a song about the life of a child during the Gold Rush uses creativity as well as multiple intelligences to show content understanding. In this way, students gain a concrete understanding of what life was like in an alternate time period and make real and relevant connections to their daily lives.

Dance

Just as in music, dance employs an alternative communication system by using the non-verbal forms; the human body and facial expressions to make sense of content. Dance allows students to express emotions through use of their body while placing themselves in the context of a character, historical figure or everyday person. Dance, by nature, is interdisciplinary with the inclusion of rhythm, movement, music, dramatic arts, and even visual arts through use of line, shape, and form (Nunn, 2002; Volk, 1998). Students have the opportunity to use the creative processes while also attaching emotion to situations or events within the social studies curriculum. By using all senses, intellectual, emotional, and physical, the use of dance makes curriculum come alive in a unique way (Nunn, 2002).

In addition to communicating through the body, dance is multicultural. Every culture has movement or dance that represents a history or ideals about that culture. By learning dances of various cultures, students are expressing and practicing how that culture comes alive in physical form (Rovegno & Gregg, 2007). They can express how these cultures live and pass on their traditions, mythology, and folklore. Dance is one more lens students can use to understand social construction and values within various societies studied in the elementary social studies curriculum. Using dance and movement to enact the Westward Expansion, for instance, is one way that students can immerse themselves in content. Students can create dance movements to show the common daily activities of cowboys, families in wagon trains, and Native Americans and compile them in a ballet to demonstrate the events of people moving West in the 1800’s. This higher order task embeds social studies concepts in unique and specific ways (Brouillette, 2010; Holzer, 2009).

Visual Arts

Teachers also use various forms of the visual arts to enhance the teaching of social studies. In an extensive standards-based curriculum using the art of Rembrandt, Smith (2008) found the use of Rembrandt’s art helped to enhance learning about the National Council for the Social Studies (NCSS) themes of culture, and continuity and change. In addition, inquiry based lessons using Rembrandt’s art also raised issues and questions
about the relationship between the public and private lives of artists, making the learning much more higher order and context driven. The use of primary sources, artifacts, and hands-on objects has long been seen to enhance student learning by illustrating the stories of individuals and groups, offering relevance and context, and asking students to practice the processes of a historian (Morris, 2000; Raymond & Broderick, 2007). Beyond the text of children’s literature, well-chosen illustrations can also be used to make learning more intriguing and comprehensible to students (McGowan & Guzzetti, 1991).

The use of the visual arts in studying social studies content is a concrete and explicit tool to gaining multicultural perspectives (Volk, 1998). Using the visual art of a particular culture (i.e. masks, painting, pottery) brings that culture into the classroom in a visceral and tangible way that the text leaves in only two dimensions (Grallert, 2009). Having children engage with the art of a particular people or time period adds an element of context that allows them to ‘see’ the people through their own eyes. It is easy to use the benefit of technology and almost any museum’s website to bring art into the classroom. Many museums even have an artifacts lending program so that teachers can bring pots, baskets, jewelry and other cultural artifacts into a classroom. In this way, for instance, students can use the arts of a local Native American tribe to deconstruct what that culture might have been like (Why were the pots shaped in this way? What did the designs on baskets and/or the painting on pots attempt to represent for the people of that time?). Teachers can even use two dimensional reproductions of art from local museum sites, or reproductions of newspapers, or statuary from recent or ancient times to provide an opportunity for students to engage with the art of a period so that they might reconstruct what was important to people of the time period. In this way, students could compare ads from a modern day newspaper with ads form a newspaper from the turn of the 20th century to compare and contrast economic demands of the local area. This higher order task using concrete artifacts lends relevance to students as they see some of the same economic concerns transcend time and place.

**Conclusion**

“Social studies teachers should be encouraged, and provided with more opportunities, to learn new skills, methods, and teaching resources to engage students in life-related activities” (Zhao & Hoge, 2005, p. 220). The use of arts integration in the social studies curriculum is just such a method (Taylor, 2008). The use of the arts as a tool to study social studies concepts, helps students make connections, find more relevance to their daily lives, and enhances their understanding of major historical figures, as well as those more marginalized and disenfranchised communities throughout time and place.

The use of the arts as an additional pathway to social studies content helps better develop student understanding. Using the arts develops student understanding by providing concrete tools and access strategies, and often asks students to enact with or even create a tangible product; this connects students to the content in real, explicit, and relevant ways. Students can use the arts as a tool to demonstrate how they make sense of concepts, vocabulary, and content in social studies. Students make tangible gains in academic achievement (Brouillette, 2010; Darby & Catterall, 1994; Eisner, 1999, 2000; Holzer,
2009), and also make strides in critical thinking, open-ended problem-solving, and developing an appreciation for the perspective of others.

We urge teachers to strive for a co-equal integration and equal assessment of both the social studies and arts curricula (Bresler, 1995); in this way elementary teachers can reclaim social studies teaching that is being lost in the present era of high stakes testing and accountability of curriculum other than social studies. But we believe that any use of the visual and performing arts in studying social studies content can only enhance student learning, make concepts more real and relevant, and enliven engagement and motivation in the elementary classroom. The examples we provide here demonstrate that the use of the arts makes those social studies concepts real and concrete; students not only gain content knowledge, but also gain conceptual knowledge like perspective taking, problem-solving, and multi-sensory approaches to open-ended and critical thinking (Jones, 2005). When students can engage with an artifact, a song, a tool, or artwork from another time and place, or even merely representative of that time and place, it helps to make their learning fun and challenging, but also concrete and context-driven, and ultimately, more relevant to their daily lives.
References


Burstein, J. & Knotts, G. (2010). From disconnected to connected: Using the visual-performing arts to enhance social studies content and concepts. *Social Studies and the Young Learner, 23*(1).


VanFossen, P.J. (2003). Reading and math take so much of the time…: An overview of social studies instruction in elementary classrooms in Indiana. Paper presented at the College and University Faculty Assembly of the National Council for the Social Studies, Chicago, IL, November 12.


Abstract

This study explored relationships among Play, Social Competence according to Leadership type of preschool children. Instruments were the Korea-preschool leadership scale (Lee & Choe, 2008), Korea-preschool creativity scale (Lee, Kim & Shin, 2002), Korea-preschool play inventory (Chi, 2007), Korea-preschool social competence scale (Pak & Lee, 2001) constructed by the researcher. Participants were 99 (boy 59, girl 40) form 214 kindergartners, in Seoul of Korea. Data were analyzed by correlation and ANOVA (post Scheffe analysis). These quadrants can be described as high leadership/high creativity (creative leader; popular child), high leadership/low creativity (independent leader; stubborn child), low leadership/high creativity (eccentric leader; inventive child), low leadership/low creativity (deficient leader; non-popular child).

Major results showed there were First; positive correlations among leadership of preschool children and creativity of preschool children (r=.54, p<.01). Second; Leadership type significant group differences were found in the play (F=86.94, p<.001); post-analysis results showed high scores of creative leader (popular child) and eccentric leader (inventive child) than independent leader and deficient leader scores. Third; Leadership type significant group differences were found in the social competence (F=35.98, p<.001); post-analysis results showed high scores of creative leader (popular child) than eccentric leader, independent leader and deficient leader scores.

In conclusion, this study creative leader (popular child) was better than the other leaders to play and social competence.
Title of the submission:
Relationship among the Preschool Children's Self-Regulation and Multiple Intelligences

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Abstract

The purpose of this study was to explore the relationship among self-regulation and multiple intelligences of preschool children. Instruments were the Korea-preschool self-regulation scale (Lee, 2003), Korea-preschool multiple intelligences scale (Choe & Choe, 2003) constructed by the researcher. The Participants were 173 children (boy 86, girl 87) between the ages 4, 5, 6 and their mothers from kindergarten in Ulsan of Korea. The collected data were analyzed by t-test, ANOVA and regression analyzed.

The major results of this study were as follows; first, it showed that children's self-regulation ability was related with the sex difference, not with age. Second, there was sex difference in children's multiple-intelligence. Girls were higher in overall intelligences. Third, only interpersonal intelligence ($\beta=.503$, $p<.001$), spatial intelligence ($\beta=.210$, $p<.05$) and linguistic intelligence ($\beta=.216$, $p<.05$) were significant predictors on children's self-regulation ability.

These results could be used as stepping stone in developing preschool children's self-regulation program in near future.
ABSTRACT FOR CONFERENCE PROCEEDINGS

Using Targeted Professional Development to Improve Middle School Mathematics Achievement

The need to improve student achievement in mathematics, especially at the middle school level, remains a significant challenge for educational leaders and policymakers. Available research indicates effective math curricula must be coherent, emphasize essential math concepts, and be vertically and horizontally articulated and aligned. Implementing a standards-based approach to mathematics instruction is generally believed to be a key component in increasing student performance in mathematics.

The role of the teacher in implementing a standards-based approach to mathematics is paramount. Unfortunately, many of the individuals in the current teaching force did not receive the training and preparation needed to teach in a standards-based context where the focus is on the use of critical thinking, problem solving and inquiry. We cannot expect teachers to teach what they do not know and to use instructional models they do not understand. Consequently, the continuing professional development of our experienced teachers is a critical element in the transition to standards-based mathematics and, ultimately, the improvement of student performance.

In February 2009, Marshall University’s Graduate School of Education and Professional Development was awarded a $159,699 USOE Improving Teacher Quality Grant. This grant was designed to provide targeted professional development in standards-based mathematics for fifty teachers in grades 6-8 in six local school districts in rural central West Virginia. The professional development model included an intense summer institute in 2009, formal follow-up sessions held during the 2009-10 school year, and classroom follow-up visits and observations.

This paper will provide an overview of the project objectives, describe project implementation, and provide an analysis of the project evaluation model. Data on teacher performance, including changes in math concept knowledge and understanding of standards-based teaching strategies, will be provided. Student achievement data will also be provided. Finally, lessons learned will be presented and discussed.

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Physical Education Teachers’ Epistemological Beliefs about Motor Learning in Japan

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Numerous attempts had been made by scholars to clarify teachers’ epistemological beliefs about knowledge and knowing. However, only few attempts had so far been made at physical education teachers’ beliefs about motor learning in Japan. That’s why the purpose of this study was to investigate teachers’ epistemological beliefs about motor learning. Two physical education teachers (1 junior high school teacher and 1 high school teacher) served as the participants for this study. In-depth, open-ended, semi-structured interviews were used to gather data. Interviews were focused on epistemological beliefs comprised five beliefs (Schommer, 1990), including source of knowledge, certainty of knowledge, organization of knowledge, control of learning, and speed of learning. Interviews were recorded and transcribed immediately after each interview. The interview data was regrouped using an inductive procedure for analyzing unstructured qualitative data. As a result, three categories emerged from the analysis consisted of 1) improving knowledge, 2) encouraging students to reflect collaboratively, and 3) developing responsive communities. Participants believed that knowledge was evolving. Therefore they always tried to improve their knowledge and adapt their knowledge to students’ knowledge. It was useful for them to develop responsive communities so that students could reflect on action collaboratively. In conclusion, Japanese physical education teachers believed that knowledge was complex, uncertain and students could construct knowledge by themselves through reflecting on action collaboratively.

REFERENCE


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EFL Taiwanese College Students’ Approaches to Vocabulary Learning and their Relationship to Success.

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This study explores how the vocabulary learning approaches Taiwanese college students adopt relate to their EFL reading comprehension performance as measured by the TOEFL test and vocabulary knowledge as measured by the VLT. 55 EFL Taiwanese college students participated in this study. Instruments of this study included a Vocabulary Levels Test (VLT), a Vocabulary Learning Strategies Questionnaire (VLSQ) and the TOEFL reading comprehension test. Statistical Package for Social Sciences (SPSS) was used to analyze the collected quantitative data and a focus group interview with 6 college students was conducted to cross-validate the quantitative results and to develop more in-depth insights into the quantitative data.

The result shows that there was a close relationship between the amount of strategy use and levels of success in language learning and that metacognitive strategies use and time were two most crucial factors which are strongly correlated with the two sets of
scores. The results suggest that metacognitive strategies, and some context-related strategies may be related to both vocabulary size and reading comprehension. Some mnemonic strategies, though they are related to a larger vocabulary size, seem to show minimal correlation with reading comprehension. Recommendations for more effective EFL reading instruction and vocabulary acquisition will be presented based on the findings.
A Study on Education on Intellectual Property from Economic and Ethical Perspectives

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Abstract

Educating the consumer so that he or she understands the concept of intellectual property is important in order to protect intellectual property. Intellectual property is converted into a concrete form as a product. The manufacturer of a product has to bear variable costs based on the cost required to produce the product. On the other hand, the manufacturer of a product has to bear fixed costs based on the forecasted amount of sales of the product. In order to lower the price, the expected amount of sales of the products must be high. The price comprises the profit obtained by the manufacturer in addition to such variable costs and fixed costs. The consumer has to understand that the profit realized by the manufacturer serves as the capital for producing a subsequent new product. If the manufacturer does not obtain the required profit, the manufacturer may have insufficient capital for developing subsequent new products. In addition, educating consumers about the ethical aspects of intellectual property is also important.
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Paper Proposal

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Impact of State and National Policy on School Leadership Theory and Practice: Global Research on School Leaders in the US, UK, and China

As today’s technologies and communications systems allow the world to flatten and shrink before our eyes, we must reflect on our goals of schooling, especially tasks required and skills needed by school leaders to achieve those goals. The three-year research study underpinning this paper focused on current roles of school leaders, and the impact of state and national policy on school leaders and educator preparation faculties in the United States, the United Kingdom, and China. We reported these findings in order to highlight challenges facing educator preparation faculty, as we endeavor to develop educators who will be equipped with knowledge, skills, and dispositions needed to achieve goals of schools in a global society.

The researchers who conducted this study employed a two-phase design, consisting of both qualitative and quantitative research methods. In phase one, two investigators traveled to China, the UK, and schools in the US to gather data from practitioners and policy makers. The data were analyzed to identify international school renewal/reform best practices and their applicability. The investigators of the first phase of the study also aimed to define and describe the effectiveness of major educational reform policies from effective schools/systems in China, the UK, and the US.

In phase two of the study, the goal was to identify current roles and responsibilities of the assistant principal/deputy headteacher (AP) in China, the UK, and the US, as well as the preparation of AP’s to assume the future role of principal/headteacher. The researchers in this phase of the study used a researcher-designed questionnaire, which was distributed to administrators in China, the UK, and the
US. The sample for the study included 81 practicing principals/headteachers and assistant principals/deputy headteachers, who provided a unique perspective into current roles, responsibilities, and challenges of the assistant principal/deputy headteacher.

**Phase I: Global Policy and Practices Impacting Practitioners**

In phase one of the research project, the investigators gathered data relative to educational policies and practices to identify *best practices* in the US, UK, and China. *Best practices* were defined as those that practitioners and policy makers agree have resulted in positive school renewal/improvement, including student academic success and access to higher education, global competitiveness of students, recruitment and retention of teachers, impact of state/national testing schemes, and financing of schools.

The researchers used multiple data-gathering methods to examine a fundamental, commonly held strategy that is perceived critical for enhanced academic achievement at all levels—to simultaneously renew the schools and the education of educators with a focus on the increased educational demands required for successful 21st century citizens. To meet these demands, educators at all levels must ensure that policies and practices support a significant increase in the numbers and quality of students entering higher education. To carry out this renewal, improvements are required in a number of conditions in both schools and educator-preparation institutions.

The specific purpose of this phase of the study was to:

1. Identify international school renewal/reform *best practices* and their applicability.
2. Define and describe the effectiveness of major educational reform policies from effective schools/systems in the United States, the United Kingdom, and China.

The researchers conducted classroom observations in schools, conducted semi-structured interviews of state/national policy makers; and conducted focus groups of teachers, principals/headteachers, and teacher preparation faculty. These were conducted at multiple sites in the United States, England, Wales, and China. One major finding of the study was that all three countries are deeply involved in “school and educator preparation reform” based on the changing needs of students for the 21st century. Some of the many differences in process and policy are listed in the following findings from phase one of the investigation:

**Classroom Observations:**

- UK and US schools reflected primarily ‘student-centered’ instruction and curriculum models.
- China schools reflected primarily ‘teacher-centered’ instruction and curriculum models.

**Interviews and Focus Groups:**

- US schools reflected a ‘compliance culture’ driven by external mandates—NCLB along with other external policies/mandates govern behavior.
- UK Schools, that have adopted recent school autonomy polices, reflected a professional ownership and positive results for professionals and students.
China school/university personnel could verbalize the clear external broad education goals; however, they could not delineate external mandates related to ‘governing school/university leaders/teachers’ in their roles to meet the goals.

**Professional Voice:**

- UK and US school/university teachers and leaders expressed concerns that their voices are not being heard at the policy-making levels.
- China school/university teachers and leaders explained that they were valued as professionals and were allowed the flexibility to reach the broad educational goals set externally.

**Leadership Roles:**

- US school leaders perceived that their roles were ‘defined by their title/position.’
- China and UK schools perceived their roles are defined by their expertise and interest, with little attention to their titles.

The phase one findings, especially those related to professional voice and leadership roles, prompted the research to embark on phase two of the study.

**Phase II: Current Roles of Administrators in the US, UK, and China**

The goal of phase two of the research project was to identify current roles and responsibilities of the assistant principal/deputy headteacher in the US, UK, and China, as well as their preparation to assume the future role of principal/headteacher. A review of the literature indicated that assistant principals are often underutilized and undervalued in many schools. The literature review also indicated that the profession lacks a common understanding of how to best prepare and utilize assistant principals/deputy headteachers, as role ambiguity plagues the position. Because roles of the assistant leaders vary across
schools, leadership preparation faculty face many challenges in training and developing assistant principals who will be equipped with knowledge, skills, and dispositions needed to achieve goals of schools in a global society.

Roles, responsibilities, challenges, and preparation of all educators have never been more crucial to the success of education than in the 21st century flat world. In this current age of school accountability in the US with a focus on instructional leadership, one may assume that school principals/headteachers have moved to a more distributed model of leadership in which they share responsibilities with assistant principals. However, the question of whether assistant principals/deputy headteachers are sharing/assuming leadership roles in schools or merely performing management duties far removed from instructional leadership of schools is a valid one.

A search of the literature relative to the assistant principal/deputy headteacher produced scant results for US schools, and even less in the UK and China. This dearth of literature led to the creation of a researcher-designed instrument for the purpose of capturing the perspectives of assistant principals/deputy headteachers in the US, UK, and China relative to their roles, responsibilities, challenges, and preparation. The self-report instrument consisted of 11 items and a request for demographic information. The items required both open-ended and forced responses. For the US and UK assistant principals/deputy headteachers, the instrument was administered through SurveyMonkey©; however, due to language issues, for the Chinese deputy headteachers, the instrument was translated into Mandarin, distributed by a graduate assistant in China, and responses were translated back to English by the graduate assistant. The response of
81 assistant principals/deputy headteachers represented 36 assistant principals from the US, five deputy headteachers from the UK, and 40 deputy head teachers from China.

**Primary Roles and Responsibilities**

Undoubtedly, the assistant principals/deputy headteachers who participated indicated a wide range of roles and responsibilities. However, it was not surprising that almost half of the US participants (46.9%) listed one of their primary roles and responsibilities as student discipline, which is consistent with the literature. Of the US and UK participants, 92.6% reported being responsible for student discipline; however, no participant from China listed that responsibility. Other prevalent roles and responsibilities included the following: faculty/staff supervision; special programs coordination; and, student assessment and progress.

To provide insight into the roles, respondents were asked to indicate the frequency with which they participated in a number of leadership functions and responsibilities. From data analysis across all responses, the researchers found that assistant principals/deputy headteachers are provided opportunities to lead in critical areas, including planning, relationship development, and curriculum and instruction. However, leadership experience appears to be quite varied, with assistant principals/deputy headteachers having little leadership experience in budgeting/finance and politics.

**Time Allocation**

It was interesting that participants viewed the majority of their roles and responsibilities as being within the realm of leadership. However, when they were asked what percentage of their time was allocated for teaching, management, and leadership
duties, results contradicted this perception. US participants reported that 35% of their
time was dedicated to leadership responsibilities, while UK deputy headteachers reported
spending 42.5% of their time on these duties. In contrast, China deputy headteachers
allocated only 17.8% of their time to leadership.

In the area of management, assistant principals in the US reported spending 55%
of their time on management duties, while UK deputy headteachers reported spending
30%, and Chinese deputy headteachers reported spending 36.4% of their time on these
duties. On average, assistant principals in the US spend only 10% of their time with
teaching responsibilities, while deputy headteachers in the UK report spend 27.5% of
their time in the classroom. In contrast, deputy headteachers in China reported dedicating
the majority of their time, 45.8%, to teaching responsibilities.

Leadership Roles

Overall, there appeared to be a great deal of commonality in the roles,
responsibilities, and preparation among the US and UK assistant principals/deputy
headteachers; however, there was a vast difference in the two groups’ perceptions of their
role in the leadership of the school. Deputy headteachers in the UK generally perceived
their roles and responsibilities as being part of the leadership team and having a say in
decision making, especially as it pertained to their contributions. This may be due to the
manner in which their roles and responsibilities are determined. It was clear from the UK
participants that their roles and responsibilities were arrived at through a democratic
process and in collaboration with the headteacher, while assistant principals in the US
indicated that they were assigned duties. In the US, school governance is managed
through a more bureaucratic structure, with roles and responsibilities often dictated by the
school district with little input from the principal, and much less input from the assistant principal. What we did discover was that there is a great deal of ambiguity in the roles and responsibility of the US AP; specifically, ambiguity exists in how AP roles and responsibilities are defined, who defines them, and how they are being monitored. Unfortunately, there were no useful responses from Chinese participants, which may have been due to misunderstanding of the question, an unintended language translation barrier.

Challenges

In order to identify further the challenges faced by assistant principals/deputy headteachers, we asked participants how they could be better utilized in the leadership of their schools. Of the 34 US and four UK assistant principals/deputy headteachers who responded to this question, 14 (41%) indicated that they are being appropriately utilized in the leadership of their schools. Of the remaining 24 (63.1%), more than one third (34.3%) discussed the need to be more actively involved in instructional leadership. Additional factors were identified as being challenges. Several participants indicated that with a great deal of their time and energy dedicated to student discipline, they lacked the time to take on more leadership responsibilities in areas of interest. Not being part of the school leadership team and, therefore, not being involved in the decision-making process presented challenges to other participants. Almost 70% indicated seldom or never having opportunities to lead in the political arena, which could be a challenge in transitioning to the principalship or headteacher role. In addition, the lack of involvement in the budget process presented a challenge to other participants. Of the 37 (92.5%) China deputy headteachers who responded to this question, 14 (37.8%) indicated the need for more
professional development so that they could be better-utilized in their leadership role. Another 29.7% indicated that the ability to develop and foster an open line of communication between administration and teachers would be advantageous, while 18.9% indicated they would be better utilized if they had autonomy and authority to define their own responsibilities.

**Conclusions**

The two phases of this research project emphasized benefits of studying education policies and practice globally. By investigating policies and practices that are working through the lens of policy makers and practitioners, we understand the complexity of school reform both across cultures and schools. The authors presented findings from studies conducted over the past three years to highlight similarities and differences in policies and school practices from the US, UK, and China. Our goal was to explore challenges of the profession and to examine options that work. The options may have potential to contribute to development of leadership across cultures through a global understanding of how we work to improve schools for children of the 21st century.

What we found is that educators in school leadership positions, whether in the UK, US, or China, seek to lead improvements in their schools. While the Chinese educators hold a revered position, they desire more professional learning in leadership of schools. UK deputy heads, in schools that view themselves as autonomous, have opportunities to lead and participate in reform as leaders, rather than solely as managers. US assistant principals, while in a position of quasi-authority, often work in a culture of compliance, spending more time in management than instructional leadership. From the contradictions in responses from US AP’s, it may appear that they do not perceive
management as being different from leadership. While both management and leadership skill sets are critical in school administration, continual reformation of schooling requires leaders with vision, communication skills, and political savvy to negotiate the process of change.

Assistant principals in this study, while expressing the desire to serve as school leaders, do not feel they are trained nor given field-based experiences to develop political skills and strategies to deal with external constituent groups. While they appreciate serving in schools where principals distribute leadership responsibilities, AP’s as leaders-in-training need to be provided instructional leadership roles, if indeed they are to be the future school leaders. Not only do administrators in China desire more formal training in leadership, they need to be able to translate the broad educational goals in local schools for meaningful change.

Formal university training programs grounded in a commitment to partner with schools where aspiring leaders work can be instrumental in ending the ambiguity of the AP role by building consensus that the role is a leader-in-training role. The role misalignment that occurs between training/development of school leaders and reality of AP’s serving in clerical, management-type positions needs alignment. Educators willing to join the ranks of aspiring leaders are crucial in leadership succession planning, and well-planned alignment with training and actual practice will help fill a leadership void in this era of global school reform.

As current school leadership literature supports the paradigm of transformational leadership for reform, many university-based leadership preparation programs have embedded transformational leadership skills and dispositions in their training of
educators who aspire to serve as principals/heads. However, in schools where state and/or national mandates are perceived as the drivers of decisions and behaviors, both principals and assistant principals may be viewed as managers, rather than leaders. While China and UK school leaders perceived their roles as defined by their expertise and interest, US school leaders perceived that their roles were ‘defined by their title/position.’ For US AP’s, we found that the “title” often meant handling discipline and other management duties. School reform will require expertise and passion on the part of those within the school, so perhaps school leaders in China and UK are positioned for continual improvement, especially in schools where a culture of autonomy exists. In the US, schools seem to exist within a compliant culture, responding to federal and state mandates, which highlights the need for leadership to tap expertise and interest and encourage the entrepreneurial spirit of reform within the schools. In other words, less management and more leadership is needed at the school level in US schools.

This research was collaboratively supported by the College of Education of Georgia Southern University (GSU), Foundation-Aided Schools and Academies National Association (FASNA), the Specialist Schools and Academies Trust (SSAT), the International Networking for Educational Transformation (iNet), the Georgia Professional Standards Commission (PSC), and the SINO-American Consortium. We encourage the call for strong leadership across cultures, as the children of 21st century schools deserve best practices and policies to support their learning.
A Study on Parent-Child Relationship and Career Adaptability of College Students

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Abstract

The purpose of this study was to investigate the correlations among parent-child relationship and career adaptability of college students. This study used “Parent-Child Scale” and “Career Adaptability Scale” as the survey tools to investigate those subjects’ basic information. This study selected 214 students from universities in Taiwan to participate a survey which has 49 questions. The obtained data was analyzed by descriptive statistics, t-test, one-way ANOVA, Pearson product-moment correlation and stepwise multiple regression analysis.

The main findings were summarized as follows:
1. The college students performed above the average on Career Adaptability Scale. The highest level was “Career Concern”; and the lowest level was “Career Control”.
2. The college students’ career curiosity, career confidence and entire career adaptability were different among grades. Lower grade students were better than higher grade students.  
3. Independency and higher interaction between parent and child are the most powerful factors to predict the career adaptability of college students.

Finally based on the main findings of my research, this study further provides some practical suggestions for college students, family education, school education and future studies.

Keywords: college students, parent-child relationship, career adaptability
A Call for Change in an Internship Program: 
Design the Accreditation Standards of Professional Development Schools for NPUE and Cooperative Schools in Taiwan

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The purpose of this paper is to design a new internship program for National Pingtung University of Education (NPUE) and to propose accreditation standards of “Professional Development Schools, PDSs” in Taiwan. In order to improve quality of a half-year extension internship for elementary teacher candidates, the researchers who are supported by NPUE from 2009 to 2010 investigate the possibility of reform of teacher candidates’ internship from a contract school model to a PDS model. The qualitative and quantitative research methods are applied in the research in order to establish a proper PDS accreditation system in Taiwan. The methods of a document analysis and a questionnaire survey are used complementarily.

Firstly, the accreditation standards draft is adapted from the original ideas of PDSs of “National Council for the Accreditation of Teacher Education, NCATE” announced in 2001 in USA. Secondly, according to the situations of Taiwan teacher candidates’ internship, the standards will be adjusted. Apply a questionnaire developed in good
reliability and validity into the research. There are about 1100 objects chosen from elementary teachers, elementary mentor teachers, and elementary school administrators to fill the questionnaires. The dimensions of the questionnaire about the PDSs’ standards are the goals, functions, operations, rewards system, and the models of School-University partnership. Then according to the research results, the authors analyze the application of PDSs to teacher candidates’ practicum period in Kaohsiung city, Kaohsiung and Pingtung County in Taiwan. Finally, the design of the accreditation standards of PDSs for NPUE and cooperation schools will be proposed and implemented according to the results and suggestions.

Key Words: Professional Development Schools, Accreditation of PDS Standards, Teacher Preparation Program, Internship Program, Elementary Teacher Candidates, School-University partnerships
HIC Education Conference 2011 Submission

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Title: Utilizing the ‘Competent Speaker’ form to evaluate student efficacy in oral presentations.

Abstract: Corporations and the business community recognize the vital need for oral communication skills in the workplace environment (Shafer, 2009). In fact, the Association of American Colleges and Universities produced a study which reported that “89 percent said they wanted more emphasis on ‘the ability to effectively communicate orally and in writing’” (Zernike, 2010). While a variety of courses across the curriculum help develop written communication skills, oral communication is frequently reserved for a public speaking class. With a new thrust of pressure to incorporate speeches and oral presentations into courses within the Education discipline (and in other areas across the curriculum) it becomes imperative to utilize a standardized and reliable measurement tool to evaluate student presentations (Dunbar, 2006; Quigley, 2002). This report will explore the uses for a few speech evaluation forms, most notably the “Competent Speaker” form created and tested by the National Communication Association, and discuss their application for faculty in the Education discipline.

Additional Notes:

This is a work-in-progress report and is designed to share the findings we have gathered from extensive research using this form within the Communication discipline and to solicit perspectives on its implementation within the Education discipline. Uses for the forms as well as benefits and drawbacks to their implementation will be discussed. Submitted as a paper presentation, it’s our hope that fellow panelists in the session, as well as attendees, can share their perspectives and experiences with evaluating oral presentations within the classroom from inside (and out) the Education discipline.

Sample evaluation forms will be shared for presentations in a variety of formats including individual oral presentations, problem-solving group presentations and utilizing technology among others. Below is a sample of these forms—the “Competent Speaker Evaluation” form.
**THE COMPETENT SPEAKER SPEECH EVALUATION FORM**

**SPEAKER’S NAME:** ____________________________ **ASSIGNMENT:** ____________________________

**EVALUATOR’S NAME:** ____________________________ **DATE:** ____________________________

<table>
<thead>
<tr>
<th>EIGHT PUBLIC SPEAKING COMPETENCIES</th>
<th>SPEAKING PERFORMANCE RATINGS</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>

*Assign Scoring Ranges:

**Competency One:** CHOOSES AND NARROWS A TOPIC APPROPRIATE FOR AUDIENCE AND OCCASION
Comments: ____________________________

**Competency Two:** COMMUNICATES THE THESIS/SPECIFIC PURPOSE IN A MANNER APPROPRIATE FOR AUDIENCE AND OCCASION
Comments: ____________________________

**Competency Three:** PROVIDES APPROPRIATE SUPPORTING MATERIAL BASED ON THE AUDIENCE AND OCCASION
Comments: ____________________________

**Competency Four:** USES AN ORGANIZATIONAL PATTERN APPROPRIATE TO TOPIC, AUDIENCE, OCCASION & PURPOSE
Comments: ____________________________

**Competency Five:** USES LANGUAGE THAT IS APPROPRIATE TO THE AUDIENCE, OCCASION & PURPOSE
Comments: ____________________________

**Competency Six:** USES VOCAL VARIETY IN RATE, PITCH & INTENSITY TO HEIGHTEN AND MAINTAIN INTEREST
Comments: ____________________________

**Competency Seven:** PRONUNCIATION, GRAMMAR & ARTICULATION APPROPRIATE TO THE DESIGNATED AUDIENCE
Comments: ____________________________

**Competency Eight:** USES PHYSICAL BEHAVIORS THAT SUPPORT THE VERBAL MESSAGE
Comments: ____________________________

General Comments: ____________________________ **Summative Scores of Competencies:** __________

References


Submission for Hawaii International Conference on Education

Title: Identifying Intercultural Sensitivity Competencies through Focus Group Research

Topic Area: Adult Education

Presentation Format: Paper Session

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Abstract:

Current Research on Intercultural Sensitivity is based mostly on self-reporting instruments. There is a lack of research on how other’s perceptions are related to true intercultural sensitivity competence. Focus group research will be conducted with non-US-native individuals to determine what competencies they feel visitors from the United States possess when visiting their respective countries-of-origin. The following four questions will be asked to determine what competencies exist:

1. Picture a person from the United States who visited your country and who you felt was interculturally sensitive. What qualities did he/she possess which made you feel he/she was interculturally sensitive?
2. What one quality was the most important in indicating intercultural sensitivity?
3. Picture a person from the United States who visited your country of origin and who you felt was not interculturally sensitive. What qualities did they possess which made you feel they were not culturally sensitive?

Due to the nature of focus group research, additional probing questions may be asked to clarify or expand upon ideas shared during group sessions. All sessions will be recorded, transcribed and evaluated to determine themes which may exist.

Title: Learning from the Land: Reflections on an Indigenous land-based graduate Program of Studies

Format: panel presentation

Presenters:

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Objective: The presenters describe a land-based graduate program initiative taken up by the Department of Educational Foundations at the University of Saskatchewan. In this Masters of Education program, the courses are taught primarily by Indigenous faculty and from within an Indigenous paradigm with a focus on holistic learning. Several courses are taught in conjunction with First Nations or Metis communities. These “Land-based institutes” require the full and active participation of both faculty and students who live on-site in or near these communities for the period of the courses. Learning and teachings use the four quadrants necessary for complete knowledge with physical, spiritual, cognitive, and emotional experiences having an equal basis. Students have access to traditional knowledge holders and respect the cultural protocols of the particular community.

In this panel presentation, three graduate students and one university administrator reflect on their own learning experiences in this innovative program in conversation with diverse texts including oral traditions, published scholarly work from relevant disciplines, and the land itself. Here we explore the possibilities and challenges of a graduate program of studies that takes seriously the epistemic traditions of Indigenous peoples and right relation with the land including plants, animals, living peoples, and ancestral memory and yet is offered within a traditional Western academic institutional context.
LESSONS LEARNED:
School Culture and Climate Inside Higher Performing Schools, Culturally Responsive Schools

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Abstract

Research shows that school culture and school climate drive performance and can serve as a bridge or barrier to student achievement and school improvement. This workshop will provide an overview of Bethune Institute’s Comprehensive School Culture & Climate Diagnostic Assessment and Transformation Process and how it supports schools in assessing and targeting 5 dimensions (Cultural Leadership, Physical Environment, Psychosocial Environment, Academic Environment, and Equity and Cultural Competence) for improvement. Results from our comparison study of the learning environment in higher and lower performing schools will be presented. Participants will identify key cultural practices found in higher performing, culturally responsive schools and what they do differently to engage and effectively serve their diverse student population.
Title: Testing EBASS-MOBILE: PDA approach to ecobehavioral classroom observation in support of RTI

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Abstract:

The purpose of this proposed research is to test the use of an ecobehavioral observational measure conducted using a Personal Digital Assistant (PDA) that is under development at the Juniper Gardens Children’s Project. A PDA is a nonintrusive, palm-top computer running custom software designed to guide an observer’s data collection activities. The proposed study is a separate usability study planned by this author focused on pilot testing the beta version of the new Windows Mobile software system using the PDA. Research questions addressed include (a) product development as well as (b) empirical research questions regarding the sensitivity and construct validity of the measure for some aspects of RTI.
Title: Communication interventions for young individuals with autism spectrum disorder: Single subject research

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Abstract:
Very few empirical studies have addressed the effectiveness of communication interventions for young children with Autism Spectrum Disorder (ASD) in the last three decades. This systematic review synthesized 23 single-subject design (SSD) studies on communication interventions for young children with ASD from 1975 to 2007. Eighty-three percent of the (SSD) studies reported indirect and direct observations as their primary data collection method. Fifty-two percent of the (SSD) studies utilized multiple baseline design across subjects, target behaviors, responses, and descriptions. Fifty-eight percent of the (SSD) studies implemented reinforcements, thirty percent of the studies employed communication interventions, and sixty-one percent of the studies used alternative
interventions. Based on these findings, this article also offers recommendations for designing future research studies in communication interventions for young children with ASD.
Continuing Education of Unemployed Graduates: 
The case Study of Cyprus

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Abstract

Introduction
Graduate unemployment, which is the unemployment among individuals with a University/College degree, is at an escalating phase in most parts of the world. The National Association of Colleges and Employers survey of 16,000 graduating University/College students in the USA, (2009), showed that only 19.7% had jobs lined up for them. However this percentage included the increasing numbers of underemployed. Furthermore, an article in Business Week (2009) discussed the hazards of long term unemployment at the beginning of someone’s career. According to Eurostat data 2010Q1 the youth (under 25 years old) unemployment in Cyprus in June 2010 was at 19.7; and according to the same source, the unemployment rate for the 27 EU countries in June 2010Q1 was 20.3.

Numerous schemes are globally being put forward amid a worsening job market, in an effort to increase the employment prospects for those leaving education. One such scheme is further educating unemployed or underemployed graduates. This is one of the numerous measures taken by some countries in order to rescue the unemployed graduates.

This educational rescue measure was implemented in the Cypriot society through the financial assistance of the European Social Fund in collaboration with the Human Resource Development Authority of Cyprus (HRDA), the Ministry of Labor & Social Insurance, and the Cyprus Productivity Center. The program started late 2009 and will end late 2011, aiming at further educating the graduate unemployed, Entrepreneurship and Managerial Skills and intern making them more marketable.

Research Objectives
The present study aimed at examining the effectiveness of the educational program in terms of: (1) educational enhancement, and (2) increase employability of the unemployed (graduates) participants. This is an interim examination, as the total number of seminars, island wide is 16 and 8 have already been successfully completed.
Research Methodology
Participants were 224 unemployed graduates from 4 major cities in Cyprus, referred to the program from the local Unemployment offices. The program was composed of a total of 100 hours. The participants were given an hourly subsidy. Qualitative as well as quantitative research methodologies were used. Thus, four semi structured interviews were conducted and a survey instrument composed of seventeen, 5 points likert-type scale statements, followed by a comments section. These were administered to all participants to examine the levels of quality of the program and its impact on their increase possibilities of employability.

Preliminary Findings
The results of the study provided a good indication of the high satisfaction levels of the course and the ten seminars that composed it. The majority of the participants expressed the need for a longer course in terms of hours and specifically commented on longer seminars for several topics such as on Marketing, Human Resource Management, Labor Law, Computers. In general they all agreed that the program contributed greatly to the enhancement of their academic knowledge.

However, a great majority stated that they would have preferred hands-on experience on some issues, and suggested invited guests from the industry and specifically from those organizations who were in the search for new employees. Furthermore, surprisingly there were numerous comments for some type of an assessment at the end of the program, for example a final examination. Lastly, they were all very satisfied with the quality of the handouts given out and they strongly suggested electronic notes.

Additionally, there were numerous comments on how de-motivated they felt when entering the program as they were psychologically down due to their unemployment status, and how the program itself helped them boost their self esteem; as they stated it helped them improve their interpersonal communication skills, and also they expressed that they were leaving the program more hopeful and optimistic for successful employment opportunities. As these are preliminary results the authors do have (up to this day), data on the percentage of participants who were successfully employed after the completion of the program.

Originality/value
The paper contributes to the field of education and unemployment by investigating the issues related to unemployed graduate in Cyprus, where similar research is sporadic.
Keywords: Unemployed graduates, Adult Education, Continuing education of graduates

Paper type Research paper, research in progress

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Title: Promoting Inclusion for Students with Special Needs: Building Teacher Confidence and Understanding

Submission ID#: 117

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Abstract
In order to examine pre-service general education teachers’ levels of awareness and confidence in working with students with special needs, their ability to recognize characteristics of struggling students, and how to make appropriate and sophisticated adaptations to help students be successful in the general education classroom, a survey was developed that looked specifically at two questions: One, what is the extent to which pre-service general education teachers will be better able to recognize areas of academic difficulty so that they may be better able to make appropriate and sophisticated adaptations for students with special needs and two, what is the degree to which possessing knowledge on disability characteristics and making appropriate adaptations can enhance pre-service general education teachers’ awareness and confidence in working with students with special needs? In order to examine responses to open ended questions, a unique coding system based on Bloom’s Taxonomy and the work of Hoover and Patton (2005) was developed to look at the depth and breadth of responses. Findings and implications from the survey results will be discussed.
Title of the submission: A pilot study on the English communication skills needed during the internship of Computer Science students

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A pilot study on the English communication skills needed during the internship of Computer Science students

1. Introduction

In a university in Hong Kong, in the Computer Science Department, students were required to take an English for Specific Purposes (ESP) course to prepare them for the communicative tasks needed for their placement in the sandwich year of their programme. Based on the recommendations of an accreditation body, students were required by their department to learn to write and engage in spoken activities related to five different business documents in this ESP course over a period of 13 weeks. The activities included writing an agenda and the minutes, conducting a meeting, writing a memorandum report, writing a letter, writing a proposal and giving an oral presentation. The packed contents of the course resulted in serious problems related to the design of the course, the tasks, assignments and teaching methods. As an initial attempt to solve the problems, a pilot study was carried out to explore the written and oral English communication skills needed in the internship of the Computer Science students so as to identify what to include and remove from the course in order to lighten it.

West (1994:1) defines needs analysis as identifying “what learners will be required to do with the foreign language in the target situation, and how learners might best master the target language during the period of training.” Dudley-Evans and St. John (1998:122) regard needs analysis as the “corner stone of ESP” and it leads to a “very focused course”.

A review of the literature shows that extensive needs analyses have been carried out in a large number of workplaces, such as industrial firms (Cowling 2006), banks (Chew 2005, Edwards 2000), as well as among textile clothing merchandisers (Li and Mead 2000). However, almost no studies have focused on the communication needs of the students in their internship.

The aim of this study was to find out (1) the communication needs of the students in a Computer Science programme in a university in Hong Kong during their internship and (2) how much of what was taught in the preparatory course for the students’ internship met their real communication needs during their internship. The information collected
can inform the course designer what to include in the ESP course when it is run in the next round to better meet the needs of the students.

2. Research Method

The Computer Science students needed to attend a Communication Skills Course on Computing I before they went for their internship and they had to attend a Communication Skills Course on Computing II when they returned from their internship. A convenient sample of seventeen students who opted to come for consultation of their major assignment in the Communication Skills course for Computing II was given a questionnaire to complete to identify the communication skills needed in their internship. Among these seventeen students, eight students were randomly selected for an interview to find out the posts they held and the difficulties that they faced in communication in their internship. Their opinions on whether what they learned in the Communication Skills Course for Computing I could meet their communication needs in their internship were also collected.

Frequency counts were made for the data in the questionnaires. To help present the results more clearly, the five categories on the 5 point scale in the questionnaire were combined into three. All interview data were tape-recorded, transcribed, tabulated and categorized.

3. Results

The questionnaire results and the interview results are reported below.

3.1 Questionnaire results

3.1.1 How frequently the students needed to write the following documents in English

The results can be seen in Table 1 below.

<table>
<thead>
<tr>
<th>Types of writing</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 1 shows that most of the students either always or often needed to write emails (94.12%) and reports (52.94%). No students always or often needed to write agendas.

### 3.1.2 How frequently the students needed to conduct or attend meetings in English

The results can be seen in Table 2 below:

#### Table 2  How frequently the students needed to conduct or attend meetings in English

<table>
<thead>
<tr>
<th>Meetings</th>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend a meeting conducted in English</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>23.53%</td>
<td>17.65%</td>
<td>29.41%</td>
<td>23.53%</td>
<td>5.88%</td>
</tr>
<tr>
<td>Conduct a meeting in English</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>5.88%</td>
<td>11.76%</td>
<td>23.53%</td>
<td>23.53%</td>
<td>35.29%</td>
</tr>
</tbody>
</table>
Table 2 shows that the percentage of students who always or often needed to attend or conduct meetings in English is below 50%. Slightly more student (41.17%) needed to attend meetings in English frequently than those who needed to conduct meetings in English (17.65%). However, generally speaking, it seems that oral English communication skills in meetings were not frequently needed.

3.1.3 The kinds of communication skills needed in their internship

The kinds of communication skills needed in the students’ internship are presented in Table 4 to Table 7 below.

<table>
<thead>
<tr>
<th>Kinds of documents</th>
<th>Frequency Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emails</td>
<td>11</td>
<td>64.71%</td>
</tr>
<tr>
<td>• Documents</td>
<td>8</td>
<td>47.01%</td>
</tr>
<tr>
<td>• Reports</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>• User guides</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>• Books</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>• Newspapers</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>• Notices</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>• Proposals</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>• Technical reviews</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>• Company websites</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Instructions from the others</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Manuals</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Memos</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Policies</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• PowerPoint slides</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Project designs</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Staff guidelines</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Specifications</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• System designs</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• Tests</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>• User requirements raised by the clients</td>
<td>1</td>
<td>5.88%</td>
</tr>
</tbody>
</table>
Table 4  What they needed to write in English

<table>
<thead>
<tr>
<th>Kinds of documents</th>
<th>Frequency Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emails</td>
<td>13</td>
<td>76.47%</td>
</tr>
<tr>
<td>Reports</td>
<td>8</td>
<td>47.01%</td>
</tr>
<tr>
<td>Documents</td>
<td>5</td>
<td>29.41%</td>
</tr>
<tr>
<td>Memos</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>Proposals</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>User guides</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>Progress of the projects</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>User manuals</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>Instant messages</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Instructions from the others</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Notes</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Specifications</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Test cases</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Software</td>
<td>1</td>
<td>5.88%</td>
</tr>
</tbody>
</table>

Table 5  The occasions on which they needed to speak in English

<table>
<thead>
<tr>
<th>Activities</th>
<th>Frequency Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone calls with colleagues</td>
<td>5</td>
<td>29.4%</td>
</tr>
<tr>
<td>Chatting with managers and teammates</td>
<td>3</td>
<td>17.65%</td>
</tr>
<tr>
<td>Talking to the expatriate colleagues</td>
<td>3</td>
<td>17.65%</td>
</tr>
<tr>
<td>Room bookings</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>Meetings</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>All kinds of communications</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Discussing user requirements with users</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Often no need to speak English unless there are external visitors</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Ordering lunches</td>
<td>1</td>
<td>5.88%</td>
</tr>
</tbody>
</table>
- Presenting in meetings 1 5.88%
- Seeking help from overseas software companies 1 5.88%
- Usually if people in other Asian countries call to ask for user support 1 5.88%

Table 6 The occasions on which they needed to listen to someone in English

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meetings</td>
<td>10</td>
<td>58.82%</td>
</tr>
<tr>
<td>Chatting</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>Presentations from others</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>On phone</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>Attending town hall and training sessions</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Conducting video conferences with overseas offices</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Discussing user requirements and system problems with the users</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Having some discussions with teammates</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Helping write memos for visitors sometimes when the bosses were not there</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Listening to what the bosses said</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Online training</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Phone calls from Singapore and India</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Reporting the progress of work to the managers every week</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Seeking information from overseas software</td>
<td>1</td>
<td>5.88%</td>
</tr>
</tbody>
</table>
From Tables 3 to 6, it can be seen that the kinds of communication skills needed by over 50% of students were only reading (64.71%) and writing (76.47%) emails and listening to English in meetings (58.82%). The other communication skills listed were not needed by most students.

3.2 Interview results

What will be reported below includes information about the posts that the students held, the difficulties that they faced in communication during their internship and their opinions about what to include in the Communication Skills Course that prepared them for their internship.

3.2.1 The posts that the students held during their internship

Among the eight students who were interviewed, five of them worked in banks and 3 worked in trading companies. The posts that they held in their jobs included:

- Student programmer
- Application developer
- Software engineering trainee
- Student placement in credit data department
- IT trainee in back office
- Support
- Student trainee
- Temporary Engineer

Their duties involved Information Technology (IT) duties and administrative duties. The IT duties that they needed to perform were:

- Programming
- Project development
- Testing
- Regression testing (When changes needed to be made to a large program, it was necessary to check if the previously finished parts would be affected by the newly changed parts and cause errors.)

- Documentation
- Support
- System Maintenance

Their administrative duties include
- Interdepartmental liaison
- Room booking
- Gathering and activities coordination
- Sending reminders to teammates

3.2.2 The difficulties that the students faced in communication

In reading, the major difficulty of the students was that they did not understand some of the technical terms.

In writing, five of the students reported that they had samples to follow when they were asked to write certain documents. Two of them sometimes referred to samples. However, one of them did not have any samples to follow at all. Sometimes they had to revise their work several times before it was accepted. They faced the greatest difficulty when writing to their managers because they did not know the appropriate style and tone to use.

In listening, they had a problem understanding westerners who spoke very fast and had strong accents. They became nervous and did not understand what was said to them when they were suddenly spoken to in English.

In speaking, they could not speak fluently enough to be understood properly and they particularly had difficulties with Social English when they needed to chat in English over afternoon tea.

3.2.3 What to include in the course that prepared the students for their internship

In writing, all students would like to learn how to write emails. They particularly wanted to know how to write formal emails and the differences in the format and language to be used when they wrote for different audiences.
In speaking, the students would like to learn the communication skills needed in talking with users and overseas teammates and in expressing their opinions in meetings. More practice in negotiations and giving oral presentations would be helpful to them.

They preferred a course that is more interactive and less technical.

4. Discussions

When the communication skills needed in the students’ internship as reported on in this study and the contents of the existing Communication Skills for Computing I were compared, it was found that the one major item missing in the course was the writing of emails. Because emails are so frequently used daily, there is often a false impression that the students have automatically acquired the knowledge about this genre which thus does not need to be taught. However, because even formal documents are frequently prepared within emails nowadays, there is an urgent need to include this component in the course. The greatest challenge is to help the students identify the differences between the format, language and style that needs to be used when the audience and the degree of formality of the emails are changed. Writing reports, participating in meetings and giving oral presentations are appropriate tasks to keep in the course. It might be helpful to add negotiation skills, support giving skills to users and Social English to the course. It seems unnecessary to teach the students how to write agendas, minutes, letters and proposals because these tasks are usually performed by staff members at the supervisory level in the companies. The students usually play the roles of junior staff in their internship.

Though the findings are interesting, it must be born in mind that this is a pilot study and the sample of subjects is small. The results can by no means be generalized. Nevertheless, the insightful findings seem to suggest an urgent need to conduct a research project on a much larger scale with a much larger sample in many different Computer Science programmes in order to identify the real communication needs of the Computer Science students during their internship. It is hoped that with the help of the empirical findings, resources will be more cost-effectively used when a preparatory course for the students’ internship is to be designed and the students will benefit more when they attend such a course.
References:


Title: Applying positive behavior support for a preschooler with challenging behaviors at natural setting

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Abstract:

This research will focus on implementing Functional Behavior Assessment as a part of Positive Behavior Support program in the home setting to identify the effect of the PBS plan on decreasing problem behaviors for 41 months old Korean-American girl. The intervention includes a variety of strategies to reinforce positive behaviors to improve her social skills.
Many Pieces of the Puzzle: A Collaborative Process of Becoming a Teacher

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Many Pieces of the Puzzle:  
A Collaborative Process of Becoming a Teacher  

Hee-Won Kang and MaryAnn Nickel  
Sonoma State University  

2011 Hawaii International Conference on Education  

This paper is on an innovative model of student teaching in elementary education that emphasizes collaboration among different members of the field-based component in teacher preparation programs—student teachers, mentor teachers, administrators and university faculty. This program was purposefully entitled the CORE (Collaborations for Renewal of Education) model of student teaching.

The collaboration in the CORE program is among part-time student teachers, full-time student teachers, mentor teachers, principals and university supervisors. Student teachers work in collaborative pairs in the classroom, and the program focuses on the simultaneous renewal (Goodlad, 1990) of all members of the collaborative. The roots of the program can be traced back to the essential ideas found in peer coaching and peer observation (Joyce and Showers, 1980), the ideas spawned from the 1990’s call for school reform (Darling-Hammond, 1989; Goodlad, 1990; Holmes, 1990; Kennedy, 1990; Zimpher, 1990) and the persistent appeal for improved and more effective teacher preparation. The model has grown and developed over nine years of largely successful implementation to include lesson study and response to intervention of RTI (Howard 2009).

How CORE Works

Student teachers are placed in collaborative pairs in classrooms. Prior to the beginning of the semester, the university Supervisor negotiates a mutually agreed upon day of the week to be on site. The Supervisor is available on that particular day each week of the semester to observe students teaching, meet with the Mentor teachers, and hold on-site small group seminars. Student teachers observe peers and Mentor teachers. Students stay at the school site for one year, moving to a new classroom at semester break. Schools are asked to agree to a one-year commitment in this model, however a two-year commitment is preferable.

Meetings are held weekly among student teachers, mentor teachers, and university supervisors to discuss, debrief, reflect and plan, with a focus on what worked. The rationale for an emphasis on the elements of success is logical. Teachers often spend a great deal of time anguishing over what did not work. But close study of what was not successful is less likely to yield future success than a careful examination of what elements contributed to the greatest effectiveness of the learning episode under consideration. However, eventually all aspects of the lesson are discussed in the lesson debrief including
the challenges, concerns, the match between goals and outcomes, and the possible next steps. Insights of student teachers, mentors, principal and supervisor are shared. Interaction among the observers during lesson debriefs enabled participants to share teaching experiences and strategies, ask questions, discuss issues and concerns, obtain resources and materials, and to generally support each other.

These debriefing sessions, held after each student teaching session, were a key part the professional development of all participants. In the debriefing session, the student teachers who had finished a student teaching session were given the first opportunity to discuss their reflections on what went well followed by contributions from peer observers. After the successes were discussed and recorded a similar process was used to discuss challenges and possible next steps. The mentor teacher and faculty supervisor were the last to discuss their observations. The student teachers often were comprehensive in their understanding of the many and complex elements of the lesson and student learning.

Weekly on-site seminars were also planned with specific focus on areas of concern raised in the meetings by student teachers. In terms of teaching English learners, discussions in the meetings and seminars focused on development of academic language and literacy skills, content knowledge, higher order thinking skills and strategies. Mentor teachers, Second language coordinators, and Resource teachers from the school site are invited to these inquiry-based site seminars as a rule.

**A study of the model at one partnership site**

The purpose of this evaluation was to investigate how the student teachers, mentor teachers, and faculty responded to the CORE program. Data was collected through participant observation, interviews, reflections and comments during meetings, and written reflections from participants at all levels in the program, looking at common themes from the data that were gathered throughout one complete semester.

Common themes and concerns were identified, and three dominant themes are reported here. Though there were a number of themes that arose in observation reports, student reflections, and in discussions, the three dominant themes that consistently arose were collaboration, teaching English learners, and classroom management.

**Collaboration**

In terms of collaboration, a major focus of data collection was on how part-time student teachers, full-time student teachers, and mentor teachers interacted. Despite some feeling a bit intimidated at first, the student teachers developed a personal and professional relationship with their mentor teachers. (These teachers were themselves excellent models of collaboration, as they would collaborate with other teachers at their school to do joint projects, activities, assignments, etc.). Most of the mentor teachers got the student teachers and observers involved early. When student teachers were not observing or teaching, they were often working independently or in groups with students.
Student teachers often reported on how encouraging, supportive, and motivating their mentor teachers were. They appreciated how teachers broke things down for students. Mentor teachers invited student teachers’ ideas and helped them clarify their ideas. Mentor teachers helped student teachers develop a sense of what students need, and they also gave student teachers realistic ideas of what would work with particular age groups and what would not. Student teachers reported feelings of inclusion, respect and validation. Mentor teachers not only would tell student teachers about areas of improvement and help them learn from mistakes, but would also tell student teachers that they are doing right and give them confidence.

These benefits of mentor teacher and student teacher collaboration were not one way. Mentor teachers reported a sense of their own professional renewal from working with student teachers. Some of them adopted ideas, strategies, and techniques that the student teachers introduced into the classroom.

However, a major source of learning and development were the peers of the student teachers, and this is a strength of the CORE model. Student teachers reported on the psychological and professional benefits of learning with, and gaining support from, their peers. Some student teachers reported feeling more comfortable and safe asking their peers than the mentor teachers and university faculty. Part time teachers in particular related well to their full time student teaching peers, as full time teachers had been part time teachers before and knew what their peers were going through. Different student teachers have different points of view and perspectives on what they saw, what was pertinent to them, what was more obvious, etc. They could count on peers for support, exchanging ideas, and feedback. They shared concerns and issues with each other and talked about their anxieties. They reported that they felt that they were all learning from each other.

A common comment among student teachers concerned how they worked together in the classroom as a team. Mentor teachers, full time student teachers and part time student teachers often met after class to plan future instruction and brainstorm who could do what. Having two student teachers in the classroom, along with parents and other adults, provided a lot of opportunities for student teachers to experience classrooms in which everyone collaborated to facilitate learning among a very diverse student body.

**English learners**

This particular school had a diverse student body. Over three quarters of the student body were minority students (mainly Latino), and over half of the student body were English learners (see table 1). This was an excellent environment in which student teachers could learn how to effectively educate English learners. However, abilities to assess student needs, develop lessons and materials that make content more accessible, and instructional strategies and skills to effectively teach English learners were not easily developed, and frustrations with accommodating English learners were commonly expressed.

Table 1
Student Demographics at the Student Teaching Site
At the university, student teachers learned about different stages of second language and literacy proficiency levels and general techniques on how to accommodate English learners, but in real life, teacher candidates reported that they found that it was not so straightforward. Students in their classes differed greatly in many different areas, besides second language and literacy proficiency, that affected academic performance, such as first language and literacy proficiency, family background and parents’ levels of education, prior experiences, prior education, personalities, attitudes, learning strategies and skills, prior development of content knowledge, amount of vocabulary, and more. Some of the students had high levels of basic interpersonal communication skills (BICS), which misled some student teachers into thinking that these students could handle well the lessons that the student teachers prepared and taught, but found that these students had many difficulties in comprehending the lesson and participating in group work due to their low levels of cognitive academic language proficiency (CALP). Also, some students performed well in math, but did not do well in other subject areas that were more language intensive, such as social studies and science. Some student teachers stated that the English learners in their class had a difficult time with understanding the “abstract” concepts that they were teaching in these subject areas.

Despite these frustrations and problems, student teachers gained a lot of experience in developing instruction to meet the varied needs of all the students. Though frustrated at times, the student teachers realized the need to differentiate instruction for not only language proficiency levels, but also levels of prior content knowledge, learning skills and strategies, and other ways that students varied. In the beginning of the terms, some student teachers had looked for quick and easy techniques to accommodate English learners and other students, but soon found that there were no quick and easy solutions. Mentor teachers, peers, and university faculty helped the sometimes overwhelmed student teachers further develop and practice the instructional skills and strategies needed to
accommodate the varied needs of English learners and other students, such as adapting
texts, using visuals to contextualize content, incorporating native language resources,
pairing and grouping strategies, and more. Many of the student teachers expressed the
need and desire to learn Spanish to help in their teaching and in their communications with
parents. Student teachers found that through these techniques, some English learners who
rarely participated during the lessons began to raise their hands and share their thoughts,
and that student comprehension and understanding of stories and content increased.

Throughout the term, student teachers had many opportunities to try out instructional
strategies and find out which worked and which were not so successful. For example, one
student teacher tried grouping strategies to utilize peer scaffolding and support to help
English learners, but then realized through observation that some students in some groups
would end up doing the majority of the work while others participated little in the tasks
and work. She realized that students sometimes needed specific roles or jobs that allowed
students to take advantage of their strengths to contribute to the group process and work.

In short, student teachers found that not taking needs and strengths of various students
into account while developing lessons ended up with some students getting it while others
were not engaged at all. Student teachers found that they needed to develop a repertoire of
strategies to engage all students in their lessons and activities.

Classroom management

Classroom management was also a major concern among all the student teachers. This was
one area in which student teachers felt the least prepared. Some felt that classroom
management was the hardest part of their student teaching, and that classroom management
and behavior issues were not a separate entity, but intimately connected to how effective
their lessons were and how students learned. They reported that their classrooms would
become chaotic at times. Issues that student teachers reported that they had to deal with
included organizing and pacing lessons, setting boundaries, using their voice effectively,
offering consequences and positive reinforcement opportunities, and others.

Student teachers found that classroom management was something that they had to
consistently work on and reflect upon. A lot of discussion with peers, mentor teachers, and
faculty focused on strategies and tools that they could use to more effectively manage their
classrooms and make the environment conducive to learning without the distractions and
problems that inevitably would arise. Student teachers reflected on what worked and
didn’t work, and worked to develop classroom management skills.

Throughout the term student teachers reported on not only the problems they faced, but
what they learned and their successes. Many began to feel more comfortable in setting
boundaries and other strategies, began getting more respect from students, and finding
that their classroom environments and communities became more conducive to learning.
In spite of these experiences and successes, student teachers complained that though
classroom management was really very important, hardly any courses spent sufficient time
on classroom management. Many stated that they think that more attention should be
given to classroom management in the preservice program. However, overall, they realized
that classroom management strategies and tools were not only something to be learned in their course, but also something that need to be acquired through experience in the classroom.
References


Caring Teachers and Character Values Instruction Make Significant Impacts on Student Achievement in Two At-Risk Inner-City Middle Schools

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Caring Teachers and Character Values Instruction Make Significant Impacts on Student Achievement in Two At-Risk Inner-City Middle Schools

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Abstract

Many symptoms of character degeneration in our urban schools have been indicated by the high incidence of fights, bullying, suspensions, youth gangs, and generalized display of disrespect, verbal abuse, and physical assault of teachers by students. Without a school-based character-values intervention, many of today’s inner-city children may be lost to the values of the drug culture, gang culture, television shows, and movies of violence or abuse.

The Houston Partnership for Character program was a school-based character education program that sought to improve student achievement by enhancing: a) teacher levels of caring and fairness; and b) student levels of caring and honesty. Two Houston ISD middle schools, which effectively implemented the HPC model in 2006-07 and 2007-08, were selected for this assessment of program effects. Through a carefully matched-pairs method, based on socio-economic status, ethnicity, gender and baseline reading scores, two cohorts of 6th grade students from the two intervention schools and a comparable non-participating middle school were monitored over a two-year period and used in a quasi-experimental assessment of program effects.

Results of the assessments indicated that all of the two HPC schools achieved higher and statistically significant Teacher Caring levels, with effect sizes of 0.10-0.54, and Teacher Fairness levels, with effects sizes of 0.74-1.00. The HPC students also achieved statistically significant gains: i) in levels of Caring (effect sizes of 0.41-0.64), and in Honesty levels (effect sizes of 0.59-0.72); and ii) in reading and math, with effect sizes between 0.20 and 0.45, and percentile values ranging from 8 percentile units (58th in Reading) to 17 percentile units (67th in math), higher than that of the comparison group.
Introduction

As the nation’s urban middle and high schools grapple with the provision of significant learning experiences for their students, many educators seem to have overlooked the vital role a school-based character education program could play in improving not only students’ character values but, more importantly, their academic performance levels (Berkowitz, 2006; Etzioni, 2008; Hunter, 2009; Winton, 2008). The increasing numbers of absentee-parents, emotionally distant or preoccupied parents, fatherless homes, less-stable marriages, step-families, and the subsequent lack of adequate “quality” and “quantity” time between children and parents, have increasingly relegated character-values education for children from parents to the mass-media, especially television, the internet, and children’s neighborhood peers (Popenoe, 1996; Sanchez, 2004). One can envision the adverse impact on children, of television shows and movies in which disagreements, conflicts, and sour relationships are often resolved though violence, physical abuse, and verbal abuse.

Without a school-based character-values intervention, many of today’s inner-city children may be lost to the values of the drug culture, gang culture, television shows, and movies of violence or abuse. Many symptoms of character degeneration in our urban schools have been indicated by the high incidence of fights, bullying, suspensions, youth gangs, and generalized display of disrespect, verbal abuse, and physical assault of teachers by students (Sanchez, 2004; NCES, 2009). One wonders why some students feel unsafe at school, dropout of school, commit crimes and get incarcerated, or why all of the nation’s inner city K-12 institutions now have their own police departments and building-level video-surveillance systems; and, among other factors, why the overall academic performance levels in inner-city schools are lower than they are in private and parochial K-12 schools, where high student discipline is the norm.

Houston ISD’s pioneering effort in urban school reform pertaining to character education dates as far back as the early 1990s, when it initiated K-12 character-values education. However, the integration of character values into classroom instruction began with a United States Department of Education’s Partnerships in Character Education Program (PCEP) grant in 2002. The success of the initiative led to the emergence of a comprehensive model, the Houston Partnership for Character (HPC) Program, which received a second PCEP grant in 2006-07. The research objectives that guided the evaluation of the program were: i) to determine the extent to which the HPC program strategies were implemented; and ii) to assess the extent to which the HPC program increased the caring levels of participating teachers and students, as well as the honesty and academic achievement levels of participating students.

Research Procedures

Study Design and Sample

A quasi-experimental two-group pretest-posttest design was used for this assessment of program effects or effectiveness. To facilitate baseline equivalence between the program students and the experimental comparison students, two levels of baseline matching were undertaken. First, a comparison middle school, with similar institutional and community demographics and academic performance levels was selected for the two HPC middle schools (Table 1). Secondly, for each HPC student a student from the comparison school was matched on free lunch status, ethnicity, gender, and sixth grade Stanford Achievement Test reading scores. This cohort of matched pairs was followed for two years, from 6th to 7th grade (2006-2008).
Table 1. Demographics of Participating Schools (HPC MS-1 & HPC MS-2) & Comparison School (Comp-MS): Baseline Year-2006-07

<table>
<thead>
<tr>
<th>School</th>
<th>HPC-MS-1</th>
<th>HPC-MS-2</th>
<th>Comparison MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Enrollment (All Grades: 6-8)</td>
<td>986</td>
<td>1068</td>
<td>1160</td>
</tr>
<tr>
<td>Female Students (%)</td>
<td>49%</td>
<td>48%</td>
<td>49%</td>
</tr>
<tr>
<td>Hispanic Students (%)</td>
<td>99%</td>
<td>95%</td>
<td>96%</td>
</tr>
<tr>
<td>Other Ethnic Groups (%)</td>
<td>1%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Free/Reduced Lunch (%)</td>
<td>91%</td>
<td>94%</td>
<td>90%</td>
</tr>
<tr>
<td>LEP Students (%)</td>
<td>21%</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>At-Risk (%)</td>
<td>69%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Student Mobility Rate (%)</td>
<td>19%</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Stanford Test Reading NCE Average (6th Grade)</td>
<td>45</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>Stanford Test Math NCE Average (6th Grade)</td>
<td>57</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>Number Teachers</td>
<td>57</td>
<td>69</td>
<td>56</td>
</tr>
<tr>
<td>Male Teachers (%)</td>
<td>39%</td>
<td>36%</td>
<td>39%</td>
</tr>
<tr>
<td>African American Teachers (%)</td>
<td>30%</td>
<td>16%</td>
<td>30%</td>
</tr>
<tr>
<td>Asian Teachers (%)</td>
<td>12%</td>
<td>17%</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic Teacher (%)</td>
<td>21%</td>
<td>26%</td>
<td>18%</td>
</tr>
<tr>
<td>White Teachers (%)</td>
<td>37%</td>
<td>41%</td>
<td>50%</td>
</tr>
<tr>
<td>Average Teaching Experience (years)</td>
<td>15</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Teachers with Masters Degrees (%)</td>
<td>35%</td>
<td>20%</td>
<td>29%</td>
</tr>
<tr>
<td>Number of Counselors</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

As a result of a mix of sample mortality factors such as student retentions, mobility, and cohort students who did not complete the baseline survey in sixth grade or the post-survey in seventh grade, the sizes of the match-paired cohorts experienced considerable declines: HPC-MS-1, from 173 students in baseline year to 102 in 2007-08, and HPC-MS-2, from 290 students in baseline year to 108 in 2007-08. Furthermore, while some of the intervention students who completed both surveys could not be included in the matched-pairs analysis because of their lack of Stanford Achievement reading and math test scores, others could not be included because of the loss of their pair partners, unless an appropriate substitute pair could be identified from the comparison pool of students. Consequently, the numbers of HPC 6th-7th grade cohort students with both baseline and second year survey data, Stanford test scores in both reading and math, and matched-pair partners, decreased in all HPC schools.

Data Collection Instruments

Two instruments were used for collecting relevant data for the study. The Stanford Achievement Test-10th Edition, a national norm-referenced test, was used for the assessment of program effects on student performance levels in reading and math, while a 60-item HPC Summative Assessment Student Survey (SASS) instrument was used for the assessment of program effects on Students’ Caring levels and Honesty levels, Teacher Caring levels, and Teacher Fairness.
levels. Students’ sixth grade fall semester SASS data and sixth-grade Stanford NCE scores in reading and math were used as baseline data in the study. A factor analysis of baseline SASS data involving 4,000 students was used for the instrument’s reliability assessment which yielded Cronbach alphas of between 0.7413 and 0.8679 (e.g.: Student Caring, \( \alpha = 0.7514 \); Student Honesty, \( \alpha = 0.7413 \); Teacher Caring, \( \alpha = 0.8679 \); and Teacher Fairness, \( \alpha = 0.8437 \)).

Each of the factors was aggregated from multiple items from the SASS instrument. For example, the Teacher Caring factor had 10 SASS items including the following: Teachers in this school really care about me; Teachers encourage students to be friendly and kind to each other; Teachers in this school do not give up on students and do the best they can to help all students to succeed; Teachers try their best to protect and defend students who are picked on by others; Teachers do not get angry or rude when students make mistakes; Teachers listen to students’ ideas, even if they don’t agree with them; and Teachers treat parents with respect.

**Data Analyses**

If the evaluation design had used a random assignment of subjects’ framework, the high sample mortality rates among the participating schools could have undermined the integrity of the study. But with the use of a matched-pairs design, the integrity of the findings remained strong, even though the findings could not be generalized to the entire baseline population of students. The findings could be based on the students in each of the participating schools who had all the required data. And, to ensure that minor baseline differences between the matched-pairs intervention students and the comparison group students were eliminated, an Analysis of Covariance (ANCOVA) model was used, which facilitated an assessment of program effect sizes, and the subsequent conversion of effect sizes into percentile values.

**Implementation of the HPC Model**

**The HPC Program**

The Houston Partnership for Character Model was a comprehensive school-based character education program that used a collaborative framework involving school administrators, teachers, parents, and the entire “village” of leaders, higher institutions, and business organizations in the community. Major components of the model included: a 6-Step Character Infusion Process; school-wide display of character-values’ banners and other artifacts in strategic locations; Writer Trainers, who trained teachers and facilitated the full implementation of the classroom infusion process; a University Trainer, who trained pre-service teachers in participating local universities; a Parent Trainer, who trained and engaged parents; and a Character Education Coordinating Board (CECB) that oversaw, not only the needs of the program, but also the campus-based Character Education Advisory Councils in all of the participating schools.

The 6-Step Character Infusion Process involved the: 1) identification of the district mandated instructional objectives; 2) linking of the targeted objective to real world experiences of the students; 3) selection of a pertinent core/character value; 4) determination of the relevance of the selected core value to one or more of the following: business/economics, politics, society, environment, etc.; 5) selection of an instructional strategy capable of engaging the attention and participation of the students; and 6) summarization of the mandated instructional objective and assessment of the extent to which the objective was achieved. The process was not an additional curriculum but rather a practice that allowed teachers to spend some time helping students to
internalize character values as an integral part of daily instruction. The process enabled teachers to infuse character values such as: honesty, respect, caring, trust, and fairness into instructional activities. It facilitated enhanced student engagement, group discussions, role playing, problem solving, and required teachers to demonstrate these values in their dealings with students.

**HPC Implementation**

All of the teachers in each of the program schools participated in the HPC’s Character Infusion Workshops during the first year. There was also full teacher participation in follow-up refresher sessions during the second year. Post assessments of the teacher workshops showed considerably high levels of teacher knowledge about character education and the infusion process. With an overall average rating of 3.5 (on a Likert Scale of 0-4), teachers in participating schools indicated high levels of confidence in their ability to implement the program in their schools and classrooms (HPC-MS-1, 3.3; HPC-MS-2, 3.6). Ninety one percent of the teachers rated the sessions as effective, with an overall effectiveness rating of 3.63, (based on a 4-point scale), the training sessions were also perceived to be very effective.

In support of the teacher training sessions and school-based infusion efforts, the program’s Parent-Trainer also worked with parents and organized workshops to increase parental involvement and improve parental confidence and support of the program. For two years, the participating teachers integrated the 6-Step Character Infusion process into their instruction.

One of the program’s middle school math teachers described how he integrated two character values, “honesty” and “trust,” into his math class on “interest rates.” After he had discussed the technical aspects of how interest rates are calculated, he explained to his students how the rate of interest banks charge on car loans and home mortgage loans vary from one loan recipient to another. He went on to explain how the rate is based on an individual’s credit report/rating, of which people who are honest and can be trusted with honoring their promises in paying bills regularly and on time (i.e. people with good credit) receive lower interest rates, while those who do not pay their bills on time or fail to pay their bills (i.e., people with bad credit) receive higher interest rates on their loans.

The teacher then provided a scenario where two loan seekers, one with good credit, and the other with bad credit obtained home mortgage loans of the same amount but the one with good credit received a much lower interest rate than the rate received by the person with bad credit. The students were later instructed to calculate the monthly payment amounts of the two loan recipients, and were stupefied by the realization that the person with bad credit would pay over $100,000 more than the person with bad credit, by the end of the 30-year loan payment period. It then dawned on the students how being honest, trustworthy, and responsible in ones dealings with others, provide tangible rewards and benefits. The teacher went on to describe how his class was so enlivened and engaging that one student who hardly talked in class revealed to the class how he then understood why his mother had instructed him to obtain the family home phone in his name, rather than hers, because of her bad credit record.

HPC’s Writer-trainers visited the classrooms of participating teachers to observe the implementation of the HPC’s 6-Step Character Infusion Process/instructional strategies. By the end of the second year, 70% of the targeted teachers had been observed and rated on a 3-point scale (1=Poor; 2= Average; and 3=Master Teacher) to determine teachers who needed extra training support or instructional modeling. In the 1st year, the 6th grade teachers and classrooms
were targeted, while in the 2nd year the 7th grade were targeted. An end-of-year survey of the effectiveness of the follow-up support services revealed high ratings among the participating schools of between 64% and 90%. An end-of-year survey of the HPC teachers in spring 2008 further indicated a high level of integration of CE instructional strategies into daily lessons (i.e.: HPC-MS-1, 64%; HPC-MS-2, 78%). In effect, the implementation of the program was substantively effective, with the infusion of character values in daily instruction, creation of visual effects through banners and posters on classroom, gym, cafeteria, and hall-way walls.

**Findings**

**School Environmental Quality: Program Effects on Teachers**

As a school-based program that hinges on the ability and willingness of teachers to model the targeted character values and also integrate the values into classroom instruction, an assessment was made to determine the extent to which students had seen changes in their teachers’ Caring levels, and Fairness levels. As discernible from Table 2, the Caring levels of teachers in the two intervention schools were substantially higher than they were in the comparison school.

<table>
<thead>
<tr>
<th>School (Group Size)</th>
<th>Value</th>
<th>Pre-Test Mean</th>
<th>Pre-Test Std. Dev</th>
<th>Post-Test Mean</th>
<th>Post-Test Std. Dev</th>
<th>Adjusted Post-Test Mean</th>
<th>F</th>
<th>P-Value</th>
<th>Effect Size</th>
<th>HPC Mean Percentile**</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPC-MS-1 (102)</td>
<td>Caring</td>
<td>54.85</td>
<td>6.97</td>
<td>9.15</td>
<td>55.77</td>
<td>15.71*</td>
<td>0.000</td>
<td>0.54</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>Comp-MS (102)</td>
<td></td>
<td>54.02</td>
<td>8.21</td>
<td>12.16</td>
<td>50.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fairness</td>
<td>53.78</td>
<td>8.35</td>
<td>8.49</td>
<td>56.63</td>
<td>27.59*</td>
<td>0.000</td>
<td>0.74</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HPC-MS-2 (108)</td>
<td></td>
<td>51.73</td>
<td>8.88</td>
<td>13.77</td>
<td>48.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Comp-MS (108)</td>
<td></td>
<td>51.90</td>
<td>11.16</td>
<td>12.15</td>
<td>49.08</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Caring</td>
<td>52.90</td>
<td>9.76</td>
<td>9.05</td>
<td>50.20</td>
<td>38.96*</td>
<td>0.000</td>
<td>0.10</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fairness</td>
<td>50.16</td>
<td>9.7</td>
<td>8.16</td>
<td>58.73</td>
<td>53.91*</td>
<td>0.000</td>
<td>1.00</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>52.37</td>
<td>10.36</td>
<td>13.60</td>
<td>47.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant: p<0.05; ** The average post-test score of the Non-SLC group was equated to 50th percentile in order to determine the percentile position of the average score of the HPC groups.

The differences were statistically significant for the two HPC schools, and reflected effect sizes of 0.10 (HPC-MS-2) and 0.54 (HPC-MS-1) for Caring levels and 1.00 (HPC-MS-2) and 0.74 (HPC-MS-1) for Fairness (Cohen, 1988). The conversion of the effect sizes into percentile values demonstrated the magnitude of HPC impacts as indicated by HPC’s average scores of 54th (HPC-MS-2) and 71st (HPC-MS-1) percentiles for Caring and 71st (HPC-MS-1) and 84th (HPC-MS-2) percentiles for Fairness, compared to the 50th percentile for Caring and Fairness levels of teachers in the comparison school.

**Changes in Students’ Character Values**

As shown in Table 3 the HPC students gained substantially in levels of Caring and Honesty, relative to the levels that were achieved by students in the comparison school. These gains by students in the two HPC schools indicated statistically significant differences in levels of Caring
and Honesty that could be attributed to the HPC program. The impact of the program on the two character values enabled HPC-MS-1, for example, to achieve effect sizes of 0.41 in Caring levels, and 0.59 in Honesty levels, while HPC-MS-2 achieved effect sizes of 0.64 in Caring levels, and 0.72 in Honesty levels. All of the HPC schools therefore achieved higher percentile levels than their comparison school’s 50th percentile values for both Caring and Honesty.

Table 3. ANCOVA Comparison between Students in HPC and Comparison Schools: Student Caring & Honesty Levels (2006-08)

<table>
<thead>
<tr>
<th>School (Group Size)</th>
<th>Value</th>
<th>Pre-Test Mean</th>
<th>Pre-Test Std. Dev</th>
<th>Post-Test Mean</th>
<th>Post-Test Std. Dev</th>
<th>Adjusted Post-Test Mean</th>
<th>F</th>
<th>P-Value</th>
<th>Effect Size</th>
<th>HPC Mean Percentile**</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPC-MS-1 (102)</td>
<td>Caring</td>
<td>53.13</td>
<td>8.72</td>
<td>11.64</td>
<td>55.23</td>
<td>17.27*</td>
<td>0.000</td>
<td>0.41</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Comp-MS (102)</td>
<td>Honesty</td>
<td>54.22</td>
<td>8.45</td>
<td>14.52</td>
<td>49.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>52.49</td>
<td>8.41</td>
<td>9.16</td>
<td>53.93</td>
<td>19.74*</td>
<td>0.000</td>
<td>0.59</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>53.15</td>
<td>8.93</td>
<td>12.22</td>
<td>47.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPC-MS-2 (108)</td>
<td>Caring</td>
<td>52.72</td>
<td>10.36</td>
<td>11.08</td>
<td>57.88</td>
<td>23.70*</td>
<td>0.000</td>
<td>0.64</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Comp-MS (108)</td>
<td>Honesty</td>
<td>51.89</td>
<td>11.90</td>
<td>14.43</td>
<td>49.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>52.98</td>
<td>10.73</td>
<td>9.00</td>
<td>55.06</td>
<td>30.55*</td>
<td>0.000</td>
<td>0.72</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>51.04</td>
<td>11.70</td>
<td>12.15</td>
<td>47.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant: p<0.05; ** The average post-test score of the Comparison group was equated to 50th percentile in order to determine the percentile position of the average score of the HPC groups.

Program Impact on Student Achievement

As evident in Table 4, all of the HPC schools outperformed their comparison peers. The performance differences were statistically significant (p<0.05), with effect sizes between 0.20 and 0.45, and percentile values ranging from 8 percentile units (HPC-MS-2, 58th in Reading) to 17 percentile units (HPC-MS-1, 67th in math), higher than that of the comparison group.

Table 4. ANCOVA Comparisons between HPC & Non-HPC Students Stanford Achievement Test-Reading & Math (2006-07 & 2007-08)*

<table>
<thead>
<tr>
<th>Middle Sch. (Group Size)</th>
<th>Subject Area</th>
<th>Pre-Test Mean</th>
<th>Pre-Test S. D.</th>
<th>Post-Test Mean</th>
<th>Post-Test S. Dev.</th>
<th>Adjusted Post-Test Mean</th>
<th>F</th>
<th>P-Value</th>
<th>Effect Size</th>
<th>HPC Mean Percentile **</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPC-MS-1 (102)</td>
<td>Reading</td>
<td>40.00</td>
<td>14.19</td>
<td>53.12</td>
<td>13.35</td>
<td>54.39</td>
<td>17.84*</td>
<td>0.000</td>
<td>0.45</td>
<td>67</td>
</tr>
<tr>
<td>C-MS (102)</td>
<td>Math</td>
<td>42.77</td>
<td>16.33</td>
<td>49.08</td>
<td>14.92</td>
<td>47.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>50.70</td>
<td>16.69</td>
<td>61.96</td>
<td>16.26</td>
<td>61.76</td>
<td>16.02*</td>
<td>0.000</td>
<td>0.25</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50.29</td>
<td>13.41</td>
<td>57.81</td>
<td>13.20</td>
<td>58.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPC-MS-2 (108)</td>
<td>Reading</td>
<td>40.17</td>
<td>14.27</td>
<td>49.55</td>
<td>13.05</td>
<td>50.27</td>
<td>13.20*</td>
<td>0.000</td>
<td>0.20</td>
<td>58</td>
</tr>
<tr>
<td>Comp-MS (108)</td>
<td>Math</td>
<td>41.74</td>
<td>16.28</td>
<td>48.13</td>
<td>14.88</td>
<td>47.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>47.46</td>
<td>13.88</td>
<td>59.91</td>
<td>13.59</td>
<td>60.93</td>
<td>17.44*</td>
<td>0.000</td>
<td>0.35</td>
<td>64</td>
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<td></td>
<td></td>
<td>49.53</td>
<td>14.05</td>
<td>57.09</td>
<td>13.83</td>
<td>56.08</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Significant: p<0.05; ** The average post-test score of the Comparison group was equated to 50th percentile in order to determine the percentile position of the average score of the HPC groups.

Discussion


This study has revealed the substantive effectiveness of the Houston Partnership for Character program in generating: (a) improvements in teachers’ Caring and Fairness levels; (b) improvements in students’ character values (i.e., Caring and Honesty); and (c) improvements in student achievement in reading and math. The teachers in both HPC program schools achieved significantly higher Caring and Fairness scores than their matched comparison peers. And, with such teacher improvements, it seems unsurprising that students in the HPC program schools achieved higher Caring and Honesty percentile scores than their matched comparison peers, with statistically significant score differences also in reading and math. These findings demonstrate a strong and pervasive association between character education programming and student achievement, as has been previously observed by many educators (Etzioni, 2008; Tully, 2009).

The incremental validation that the two program schools add to the demonstrated effectiveness of Houston’s character values program is substantive. In addition, the fact that these two schools achieved higher performance levels than their comparison school lends credence to the great potential that character values education has in enhancing student achievement. Educators in urban schools with significant achievement challenges may carefully consider adopting values education models such as the Houston Partnership for Character program. Even though the case for schools to assume the responsibility for infusing character values in the youth of today has been advocated by many concerned educators in recent years, the leaders of the nation’s schools have seemingly not given the issue much attention. As observed by Tony Sanchez, we “cannot expect our students to develop good character through wishful thinking or hope that someone else will do it”…. otherwise “the media will continue to step forward as the most influential institution” in the development of character values of the nation’s youth (Sanchez, 2004).
Acknowledgements

The authors are grateful to the principals of the participating schools for enabling the collection of all pertinent data for this study. The authors also thank the staff of the Houston ISD Character Education Department for their contributions to this study. Even though the generation of items and scenarios for the character values survey instruments was a collaborative effort between the researcher and the program staff, the ideas were based on ideas from books, past conference presentations, articles, and surveys on character education; and to all who were the original sources of those ideas, the authors are thankful. This evaluation was funded by the U.S. Department of Education through the Partnerships in Character Education Program (Grant Award Number: Q215S060006).
References


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Portfolio Assessment as a Tool for Promoting Professional Development of School Principals: A South African Perspective

Raj Mestry¹ and Michèle Schmidt²

Abstract
Poor matriculation results in South African urban schools have resulted in the implementation of professional development programs for principals who wish to improve their qualifications and practice. This article studies principals’ perceptions of the efficacy of using portfolios to assess their professional growth. Using a poststructural lens to theorize portfolio use, interview data were examined to discern what themes consistently evolved when principals were engaged in self-evaluating their own professional practice through a methodological framework of portfolio development. The findings revealed insights into the efficacy of the use of professional portfolios in the professional development of principals.

Keywords
portfolio assessment, professional development, leadership preparation programs

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Introduction

Immediately following the democratic transformation in South Africa in 1996, its education system was characterized by fragmentation, inequity in provisions, a crisis of legitimacy, and the demise in the general academic culture. These conditions, found mainly in urban school settings, were further exacerbated by teachers belonging to militant unions and consequently resisting the new government’s incipient attempts to replace the old system. This inevitably created serious managerial problems which ultimately led to the deterioration of educational standards (Gallie & Sayed, 1997).

According to Ramphele (1997), attempts by the South African government to transform the grossly inequitable and inadequate school system failed to materialize into sound practice. The South African Council of Educators’ (SACE) Chief Executive Officer, Brijraj (Naidu, 1998), stated that the factors responsible for poor matriculation included a breakdown of professionalism by principals and teachers, lack of resources at schools, and apathy toward education by students and their communities. Matseke (1998) in Top Principals Make Top Schools, focused on the crucial role of principals in the learning and teaching process to foment change in contemporary schools. Naidu (1998) reported that there is an acute situation making it necessary to train and develop the principals of urban schools. Preparing principals properly could serve to manage organizational structures and other facets of administrative development effectively to develop improvements in the quality of learning.

This article maintains that the professionalization of the principalship through the use of professional portfolios is potentially a critical ingredient in principal programs not only in South Africa’s (SA) education context but also the United States and elsewhere. Although this article draws from data gathered in SA, implications for other nations will be discussed with the intent of emphasizing the universal importance of professional portfolios in other urban contexts. With this in mind, we will explore the potentials of portfolio use in a principal preparation program as a professional training tool for principals by theorizing the professional portfolio to explore the principals’ perceptions of their use of professional portfolios. This will include research into the benefits and challenges of portfolio use for professional purposes.

The following research questions helped to frame the study: What are the principals’ perceptions of portfolios as a tool for promoting their professional development in urban South African schools? What challenges/benefits did the principals experience in their use of professional portfolios?
Context of South African Leadership

A lack of stringent criteria and the absence of a qualification for the appointment of principals resulted in many principals underperforming in their leadership and management roles (Bush, 2004). Currently in SA, there is still no standard principal preparation or certification program. Instead, each of the nine provincial departments determines its own approach and course content (mostly in-service programs) but none has a prerequisite program or licensure requirement. In addition, some provincial departments lack the capacity to implement in-service programs. To provide principals with the necessary knowledge, skills, values, and attitudes to lead urban schools effectively has become increasingly problematic in relation to the challenges faced by a dynamic and changing educational culture.

In an attempt to address these deficiencies, the National Department of Education embarked on an intensive and continuous professional development program for appointed school principals and those aspiring to become principals (Department of Education, 2006). Of particular interest to the South African Ministry of Education is the call for preparedness to face the increasingly protean nature of education. This would include the need for principals to engage in continuous professional development if they are to meet the expectations placed upon them in South African schools.

Advanced Certificate in Education

To ensure suitable candidates are appointed as principals in SA, a new entry requirement recognizes those principals who obtain the Advanced Certificate in Education (ACE)—Principalship course or an equivalent of the National Professional Qualification for Principals. Other countries are also turning to more formal Principal Certificates in a climate of reduced recruitment and retention in the principalship such as Singapore, the United Kingdom and the United States. (Quong, 2006). In the United States, for example, a teacher is eligible to apply for the principal’s post once he or she has completed the Master of Educational Administration degree (Tucker & Codding, 2002). In the United Kingdom, teachers must first become senior teachers or deputy heads and work with the principal as a member of the senior management team for a minimum of 5 years before they can apply for “headship” (or principal) posts (Weindling & Dimmock, 2006).

For the purpose of this article, the authors examine the implications of the portfolio assessment component of a principalship program in SA keeping in mind that these implications are far reaching and relevant to other urban
centers in the United States and elsewhere. In the past 4 years, the University of Johannesburg\(^1\) has piloted a 2 year part-time ACE Principalship program. This program was designed to develop an institutional ethos, promoting professional and lifelong learners, with the goal of addressing leadership and management issues prevalent in schools. During this period, the University refined the contents of learning materials, improved delivery at contact sessions and cohort meetings, and revised its assessment strategies. The cohorts identified to undergo in-service training at the University were comprised mainly of principals and deputy principals of underperforming urban schools in the Gauteng Province. The program was designed around module instruction in leadership and management, particularly from a South African perspective, and with an emphasis on pedagogy, learning, finance, human resources, educational law, and policy.

One of the goals of the ACE program was to provide prospective leaders a sound knowledge base and rigorous intellectual experience that would equip them to harness human and other resources necessary to ensure highly effective educational institutions. It would then be expected that principals would develop insight into aspects dealing with school improvement, assessing school needs, shaping the strategic direction of the school, improving quality teaching and learning, implementing legislation and policy issues related to school education, empowering staff, and actively engaging themselves in school development. Although it is beyond the scope of this article to evaluate whether these goals were achieved, our interest was limited to an examination of four principals’ perceptions of their use of portfolios to improve their practice and to determine the benefits and challenges of using portfolios.

**Professional Portfolios**

Traditionally, the most common use of professional portfolios has been in teacher education programs. Teacher portfolio use has had a relatively short history, dating back to the 1980s, as a result of work done by Shulman (1998). This assessment tool most commonly serves as a professional development opportunity to enhance teachers’ practice, for purposes of portfolio-based teacher appraisals; in teacher education programs, and for purposes of teacher professional development (Zeichner & Wray, 2001). Since the success of teacher portfolios as an assessment tool is well documented, it provides a wealth of knowledge and insight into teacher education programs as well as the diurnal teaching process. In fact, some states in the United States mandate the use of professional portfolios for teacher accreditation purposes (Zeichner & Wray, 2001).
In contrast, only recently, principal professional portfolios gained recognition as a legitimate tool for principal professional development resulting in mixed success (Marcoux, Brown, Irby, & Lara-Alecio, 2003). Nevertheless, there exists a growing number of principal preparation programs affiliated with universities or school districts in the United States, as well as internationally such as Australia and SA, some of which employ professional portfolios. Not surprising, the literature on professional portfolios for principals remains limited, under theorized, emerging primarily from the United States. In light of these limitations, scholars (e.g., Johnston & Thomas, 2005), suggest that more research is needed to highlight what may be described as a paradigm shift in the preparation of principals entering the 21st-century. This shift is characterized by current perspectives on the assessment of learning in higher education that focuses on assessment that is significantly different from traditional practices. Furthermore, this change is based on, among other things, an understanding of how principals learn; how individual differences in learning can be accommodated; how to provide meaningful feedback of principals’ learning as well as opportunities to reflect upon their learning and practice; and how to develop outcome-based learning facilitation, curriculum, and module design (Johnston & Thomas, 2005).

Specific to this article, when taking the South African situational and historical context into consideration, the authors have shown great interest in such alternative assessment strategies for the purposes of providing training for principals in SA. The lead author, as the assessment coordinator of the Department of Education Management at the University of Johannesburg in SA, had the opportunity to initiate an in-depth study of professional portfolio assessment that could be applied to practicing principals and deputy principals in the ACE program. This study served as the impetus for this article.

As researchers, we realize that there is enormous pressure to have systems of assessment that are reliable, efficient, and cost-effective. At the same time, we are cognizant of the potentially conflicting needs to develop assessment systems aligned with current thinking on learning theories and the close relationship between types of assessment and the nature of learning (Johnston, 2004). The pitfalls of subjecting principals to traditional methods of assessment such as examinations in professional programs may result in high drop-out and failure rates, apathy in learning, limited curriculum coverage, and undue stress among principals and faculty members (Hyde-Clarke, 2005).

The rationale, then, and some of the positive outcomes for using professional portfolios include the fact that they encourage principals to think more deeply about their leadership and management practice, raise awareness of principals to be conscious of the theories and assumptions that guide their
practice, and stimulate principals to develop a greater desire to engage in collaborative dialogues about their practice (Zeichner & Wray, 2001). These outcomes are particularly desirable because the process of developing portfolios requires active and self-directed learning and reflection, all of which occur when principals invest physical and mental energy when undertaking activities that are intended to make learning meaningful (Du Plessis & Koen, 2005).

**Professional Portfolios as a Theoretical Tool**

To this point, we have done little in the way of examining professional portfolios within a theoretical context, which inevitably impacts their practical implications. Uses of portfolios are widespread and most prevalent in the United States in areas of higher education such as medical education (Challis, 1999), school and university teacher training (Baume & Yorke, 2002), writing (Broad, 2000), engineering (Payne, Bramhill, Lawson, Robinson, & Short, 1993), architecture, and art and design (Johnston, 2004). Portfolios take many forms (a report on a major project, a collection of different pieces of work) and have different purposes (to showcase performance, track developmental growth); provide records of goals, growth, achievement, and professional attributes developed over time in professional practice and in collaboration with others; and serve as an assessment strategy to ascertain knowledge, understanding, and skills (Challis, 1999). Not only are portfolios an effective way of determining the progress of principals or teachers, they are also useful for instructors of programs to evaluate teaching strategies and curriculum. Given the widespread, growing and varied use of portfolios in higher education, it is important that research findings are examined and critiqued more than they have been traditionally (Johnston, 2004).

**Portfolios as Technology**

While limited writings have attempted to theorize portfolios (e.g., Johnston, 2004), assessment in general, and portfolios specifically, are viewed as a technical activity, lacking “theoretical and philosophical contextualization” (Delandshere, 2001, p. 114). In a climate of neo-liberalism, globalization, marketization, and accountability, assessment as a technology garners critical currency in our turbulent postmodern society, particularly as a means to determine social mobility (Delandshere, 2001). Yet, such a worldview has limitations. For example, in the United States, standardized, large-scale assessment has gained an unprecedented popularity since the 1970s and continues to be debated more than alternative assessments, yet alternative assessment²
strategies tend to be more meaningful—one of these strategies being the professional portfolio (Hargreaves, Earl, & Schmidt, 2002).

When theorizing alternative assessment in general, advocates (such as Black & Wiliam, 1998; Hargreaves et al., 2002), claim that while large-scale, legislated assessment often receives the greatest attention, alternative forms of assessment matter more, since they have the capacity to provide deep and meaningful learning. Yet, what is critical is that alternative assessment strategies, (for instance, portfolios), are not ends in themselves, nor should they be perceived that way, since they embody a continuous process of learning.

As we begin to theorize professional portfolio use for the purpose of analyzing our own data in this study, we begin to see some of the problematics attached to alternative assessment. For example, as mentioned above, a technological perspective of assessment typically prevails and highlights the challenges of gaining validity and reliability with any type of alternative assessment (portfolios not excluded) (Hargreaves et al., 2002). In fact, depending on the theoretical lens used to ground professional portfolio use, such a lens determines different challenges and assessment outcomes in terms of the portfolio’s trustworthiness, reliability, and usefulness. For example, when viewed from a traditional psychometric perspective, reliability, and validity issues are difficult to determine when portfolios become a platform for narrative or journal accounts based on subjective interpretation (Johnston, 2004). It is for this reason that some scholars, (such as Snadden & Thomas, 1998), suggest more open-ended approaches to assessment that do not rely solely on scientific benchmarks and criteria. Efforts such as these are often controversial, since assessment in general is typically undertheorized in this approach. Yet it is this paradigm in which we are most interested. By shifting the focus of portfolio use away from merely a technical task, scholars, and principals alike are challenged to explore more innovative ways of thinking about learning and assessment, often resulting in acceptance or resistance to its use (Engel, 1994).

Theories of Portfolios Beyond Mere Technology

When moving beyond a technical examination of portfolios, interpretive, critical, and poststructural critiques reveal that portfolio use becomes a sociopolitical practice (Johnston, 2004). This challenges the technical grand narrative and notions of power that often favor particular populations (Giroux, 1992). Through other such theoretical lenses, it is possible to focus on principals’ reflective and unique constructions as well as diverse interpretations of their experiences with an emphasis on local context. Portfolio use
becomes fair and sensitive to the differences among men and women, race, class, and age because it reflects diverse illustrations of learning and accomplishments whereas diminishing the focus on comparisons of worth among principals (Johnston, 2004). Individual portfolios become a distinct and valued artifact with the potential to capture and reflect growth and shifts in principal identity. More importantly, portfolios have the potential to reflect professional growth for principals (Hargreaves et al., 2002). In essence, portfolios value holistic, integrative interpretations; context-bound knowledge; values and judgments of both the principals and their assessors; and multiperspective, dialogic exchanges between principals and assessors (Darling, 2001).

The apparent benefits of portfolios aside, it would be folly to ignore some of the more problematic debates surrounding the use and assessment of portfolios and other alternative forms of assessment. For example, portfolios are often described as a form of authentic assessment. While authentic assessment is often viewed as a useful form of learning and assessment (Hargreaves et al., 2002), it also becomes problematic because such assessment “may be diverse, wide-ranging, negotiated, inclusive, and multi-faceted”, which is “precisely why it cannot be authentic in this very sense of the term” (p. 89). Consequently, portfolios run the risk of resulting in products that are more contrived than authentic. Principals might select only what they believe reflects their achievements but ignore any problematic areas. This could result in glossy, artistic portfolios lacking authentic substance but are spectacularly adorned, the product of personal fawning, narcissism, self-indulgence, and hypocrisy (Hargreaves et al., 2002). In other words, “portfolio assessments can simulate rather than stimulate achievement” (Hargreaves et al., p. 90).

The very nature and quality of portfolio assessments highlight the problem in the way in which professional portfolios are conceptualized and implemented, and their value as an assessment and/or professional development tool (Zeichner & Wray, 2001). Although professional portfolios may potentially be good in theory, the practical benefits can really only be established by determining the perception of those using and assessing portfolios. Herein often lies some of the controversy attached to professional portfolios from a theoretical and practical perspective (Johnston, 2004).

In attempting to reconcile the tensions between viewing portfolios as authentic and technical assessment tools, Shepard (1991) offers a useful definition that is most plausible for our purposes when dealing with issues of reliability and validity. She suggests, “the assessment tasks themselves are real instances of estimators of actual learning goals” (cited in Bateson, 1994, p. 235). Therefore, instead of relying on traditional test items to prove
competence in a specific domain of achievement, assessment tasks (e.g., portfolios), actually become the domain of achievement, thus eliminating the need for interpretation or verification of an outcome. In other words, by virtue of its existence, the portfolio and its contents, become valid and reliable. By taking this approach to portfolio use, it becomes possible to not only respect the integrity of the author but also the contents of the portfolio since portfolios can take on a variety of roles in a variety of circumstances.

At the same time, it is important to bear in mind that, while superficially, portfolios might profess equality, scholars posit that equal does not mean the same. Instead, equal means that all principals have an opportunity to become passionately involved in their work, to explore ideas in-depth, and to be evaluated according to both the product they create and the process they go through to create it (Johnston, 2004). As principals therefore, move further away from the folk knowledge of testing as being depicted as the sole source of knowledge, that is, where the language of psychometrics translates validity to mean good, what begins to be gained is the linkage between these measures and the subjects’ history. In other words, more emphasis begins to be placed on the humanistic aspect of portfolio use and the individual thoughts and learning they reflect (English, 2003). Trevisan (1991) echoes this sentiment by stating that portfolios are able to capture learning in ways that standardized tests cannot.

Despite the arguments set out above, debates continue around authentic assessment, (portfolios included), all of which is beyond the scope of this article. However, some other salient tensions surrounding portfolio use as they are critiqued include the following: their time-consuming nature in which they have been described as prisons of time (Hargreaves et al., 2002), specific skills are required for their use, and the questionability of attaining some sort of quality assurance so that they are not mere work folders/scapbooks (Hargreaves et al., 2002). Shavelson and Baxter (1992) stress that “short-circuiting th[e portfolio] process leads to ill-conceived and poorly constructed [portfolios]” (p. 23). Bateson (1994) points out that realities such as the above become challenging when there are few exemplars from which to work, particularly when these assessments (in this case, portfolios), are intended to capture the unique, diverse nature of principal learning and reflection.

**Method**

This qualitative study was designed to capture the perceptions of principals who were enrolled in the ACE program, with regard to portfolios as a tool for promoting professional development in South African urban schools and to
explore the challenges/benefits experienced by these principals in their use of professional portfolios. The study utilized in-depth individual and focus group interviews as the main data generating tools. Four principals were interviewed more than 12 weeks.

**Selection of Participants**

A purposive sample was drawn for the interview phase. Purposive sampling involved selecting principals who fit the criteria of desirable participants based on their experience or knowledge (Merriam, 1998). The total target population was 94 principals in the Gauteng Province who completed the ACE program at the University of Johannesburg. Of this total population, four principals were interviewed in this study and a total of 12 interviews were conducted.

**Participants**

The participants were comprised of 2 men and 2 women between the ages of 32 and 53; their teaching experience ranged from 12 to 20 years. Principal A, a White male was principal of an urban school comprised primarily of Black students and a few White students with special needs. Principal B, a Black female managed a combined school situated in the residential area of Soweto, which is the largest Black township in the country. Principal C, a Colored female headed an ex-Model C primary school located in an urban area west of Johannesburg and finally, principal D, a Black male was principal of an urban primary school situated in the north-west of Johannesburg.

**Data Collection**

While both individual and focus group interviews were conducted, the individual interviews comprised not only questions about portfolios, but also other questions about the ACE program in general. On the other hand, the focus group interviews were dedicated solely to the principals’ experiences with portfolios. Both interview styles were characterized by open-ended questions. The aim was to acquire an understanding of the principals’ perceptions of their experiences with portfolios (such as how portfolio assessments were conducted); and to learn about the challenges and benefits when using portfolios.

All interviews were audiotaped and transcribed to enable careful review by the researchers. To gain reliability for the study, the principals were interviewed
once every 4 weeks. Since the discursiveness of the interviewer-interviewee interaction fluctuates over time and through events, it was deemed that this form of triangulation was critical. Research methodologists emphasize this technique, especially in the absence of other data sourcing (Kvale, 2002).

Since the lead author was closely involved in the ACE program in which the principals were using portfolios, it became incumbent that the authors be cognizant of the benefits and potential bias of this individual’s involvement. We understand that the researchers and the respondents bring along “biases, predispositions, attitudes and physical characteristics” that may influence data either positively or negatively (Merriam, 1998, p. 87). In this research, the researcher’s role during the interviews was to exercise caution and not to predetermine meaning (Creswell, 1994), but rather to objectively report the respondents’ values including their biases and judgments. To accomplish this, the researchers, particularly the researcher closely involved in the program, bracketed their own knowledge of the program in order to allow spontaneous responses from the participants.

Other efforts were made to ensure reliability and validity in the study. These included conducting a pilot study beforehand with five, randomly selected principals, who had already completed the ACE program. The pilot study ensured that the method of questioning was suitable by providing the researchers an opportunity to adjust questions if necessary. They also were instructed to adopt an appropriate tone and slant of questioning when conducting the interviews (Yin, 1986).

**Data Analysis**

A constant comparative method was used for the analysis of the qualitative data collected. The researchers analyzed the data to form appropriate categories and patterns of meaning. The data were analyzed for content, broadly using a grounded theory approach (Creswell, 1994; Strauss & Corbin, 1999) of open coding, to identify themes and categories. A process of axial coding was used to abstract, cluster, code, and categorize the data. Ultimately, the collated information was presented as a series of themes. The more salient themes are discussed as they relate to the research questions.

**Findings**

It became evident that the implementation of portfolio assessment as a management tool in the urban schools under study was in its embryonic stage at the University. There were also numerous contentious issues around portfolio
use that were being grappled with by the principals. The following themes emerged from the empirical research undertaken in an attempt to respond to the research questions in this study.

**Portfolio Assessment as an Alternative to Exams**

Eliminating written exams as an assessment tool resulted in heated debate among the principals in the study. In fact, most of the respondents were of the opinion that examinations should be abolished because they place undue pressure on them. Their ACE course was practiced-based and they believed that portfolio assessments were a better alternative. Since the average age of the respondents interviewed was between 40 and 50 years of age, the principals explained that at their age they could not see themselves sitting for a formal examination. The development of a portfolio was less pressure inducing, and they liked the fact that the assessment was on a continuous basis.

Principal B asserted:

> [The] portfolio is updated throughout the year. It is hands-on and very practical and it gives a person a chance to be in constant contact with the various role-players and to see if the project is on track. We don’t have to memorise and regurgitate the information, as we would do in exams.

She further elaborated that:

> If we undertake to do the project well, then what we learn during the contact sessions and our additional reading should be applied accordingly. It is just like exams… the only difference is that we do it at our own pace with very little stress and pressure.

Still, one respondent, (Principal D), felt strongly that examinations were a much fairer and unbiased means of assessment than portfolio assessments. He asserted:

> Examinations are an essential part of any form of evaluation. I feel that the ACE (program) lacks that part only. I would recommend that examinations be instituted because they are really a better means of assessment.

It is very difficult to repudiate the opinion that examinations are a much better way of assessing the competence of the candidates. Nevertheless, research indicates that traditional testing techniques still prove to be inadequate for testing practical competencies and skills, and thus necessitates the
implementation of authentic ways of assessing of students (Friedrich-Nel, de Jager, Joubert, & Nel, 2003, p. 49). It should be noted that Principal D did not take portfolio development seriously and waited until the eve of the deadline to compile his portfolio. In this case, we believe that writing formal examinations may eliminate those students who are not prepared to work with dedication, consistently, and effectively in the ACE course. We think that consistent and dedicated students will find performance (portfolio) assessment much more beneficial because they are assessed on their application of information or skills related to real (authentic) situations. The assessment method should focus on the integration of knowledge, practical skills, and the reflection of values and this is in line with student assessment in the faculty of education.

Application of Knowledge, Skills, and Values

Three of the four principals were in favor of portfolio assessment as an assessment tool. They thought it was holistic in nature and a practiced-based method of assessment providing students with a fair, valuable, and objective assessment based on predetermined criteria established in consultation with the relevant role-players such as the students, assessors, and faculty members.

Principal A remarked:

It gives the candidate a chance to apply the knowledge acquired in the contact sessions and shows evidence of what has been done, that is claims of competence. It is the best way of assessing students and giving them a chance to prove themselves.

Another principal, (Principal C), described the challenging nature of portfolio use, which forced him to reflect on his practice:

The compilation of portfolios was very challenging to me whenever I had to provide evidence to support activities that have been completed. As a manager, my ethics, values and morality were challenged markedly because it was virtually impossible for me to provide fictitious evidence to support claims of competence.

Developing Portfolios of a Good Standard

The principals encountered a serious problem in the implementation of the project. They initially found problems in drafting the project plan and formulating a general aim and specific objectives. All four of the respondents were
of the opinion that they were not provided with sufficient training in the compilation of portfolios. This was the first time that they were subjected to compiling a portfolio and because of the limited contact time with the University faculty members this aspect of the course was seen as a shortcoming. Many chose to consult with peers and those who found it difficult to meet with peers consulted faculty members telephonically.

Principal B described the situation: “There was a bit of confusion and a lack of direction in respect of portfolios”.

Another principal, (Principal C), critically remarked:

I don’t think the lecturers were sure what they wanted from us. Towards the end of the first year we heard about portfolios. One of the lecturers was assigned to explain [it] to us. In the second year, we met specifically for portfolios in June and the due date for handing in the portfolio was in October. There was very little time and...the requirements were increased [somewhat]. It [training] was rather too short. In your first year you need to be given all the theory on portfolios and in the second year you work on your portfolio as the final product for evaluation.

**Link Between Project Plan and Portfolios of Evidence**

All four of the principals agreed that there was a strong link between the project plan and the portfolio. In fact, portfolios cannot be compiled without project plans and therefore a well conceptualized project plan will determine the success of the project undertaken. The plan dictates the principal’s course of action.

Principal A described it adequately as follows:

The project plan was the map that gave me direction. By referring to the plan, I was able to keep the project on track so that at the end there is not so much deviation of my project plan from the compilation of the portfolio.

Another principal, (Principal C), asserted that:

Whatever was indicated in the project plan, for example, due dates, key personnel involved in an activity and resources available were undertaken accordingly. Yes, from time to time we were forced to revise the plan because of unplanned demands.
It became evident that the successful compilation of portfolios was dependent upon the project plan. The project was really the map that set the direction to the appropriate course of action in completing the project.

**The Role of Site-Based Evaluators**

All the respondents agreed that site-based evaluators played an important role in assessing their competence in the project undertaken. There was a mixed reaction about the role of department officials serving as site-based evaluators. Those in favor expressed their opinions by stating that the department officials have good background knowledge of their schools and would therefore be more sympathetic in their assessments. Others were of the opinion that these officials may have been more demanding and may have seen their role as inspectors rather than as part of a support system.

Site-based evaluation was an integral component of portfolio assessment and this was confirmed by the following comment by Principal C:

I don’t have a problem with IDSOs (Institutional development systems officers) being external examiners provided that they were involved [in] and had given their full support [to the project] throughout the process. But I think I am more comfortable with field assessors (external and not associated with the department) because they are neutral people and therefore the assessment may be [more] authentic. The site-based evaluators who visited me... helped me tremendously to understand the relevance of ensuring the core actions for managing and leading people and policy are covered in the project.

It was therefore evident that site-based evaluators were an essential part of the assessment process with which all the principals concurred.

**Discussion of Findings**

The findings provide insight into the perceptions of the principals in the four urban schools about their use of portfolios in the ACE leadership preparation program by revealing some of the more salient challenges and benefits of portfolio use in such a program. Equally important, the findings reveal a kind of universality in their implications to nations beyond SA, such as the United States and elsewhere. For example, not uncommon in our study and other U.S. studies was principal resistance to self-guided learning as long-held beliefs
and practices were challenged, indeed for our principals, they were challenged morally in their own reflections of their learning. Portfolio advocates maintain that principal portfolios hold the promise of a more authentic form of assessment of professional performance and provide an opportunity for ongoing reflection and continuous improvement (Marcoux et al., 2003; Milstein, 1996). In this way, principals are able to submit work on a more frequent basis, and test understanding and application across the content of the entire course, which was indeed the case in our study. Principals are the major role-players and “potential beneficiaries of a good assessment strategy” (Du Plessis & Koen, 2005, p. 19).

Nevertheless, our study and others conducted in the United States reveal that abandoning the traditional paradigm and successfully adopting the principles and ideas of continuous assessment requires time, energy, effort, patience, and commitment from faculty members and students (Marcoux et al., 2003; Milstein, 1996). Finally, regardless of the challenges found in this study and corroborated in other studies, the majority of the principals designated themselves as benefiting from portfolio assessment. In fact, for a number of the principals, portfolio assessment alleviated the pressure and anxiety associated with end-of-year examinations, encouraged them to work consistently, provided them with an opportunity to reflect upon their learning, and facilitated their self-directed learning.

More specific to the study under discussion, the most prevalent disagreement among the principals revolved around the issue of assessment of portfolios and the belief that there should be “one ideal, objective assessment of a portfolio through appropriate training of assessors, construction of clear guidelines, and other such measures” (Johnston, 2004, p. 397). This positivist-oriented outlook only supports what we argued earlier, in that alternative assessment (portfolios included), can be viewed uniquely as a sociopolitical practice (Delandshere, 2001), where assessment “serves in validating and reproducing certain forms of knowledge or ideas at the expense of others (p. 115)”. The principals in this study were grappling with this very notion about what assessment tool serves as the most legitimate and objective type, that is, portfolios or exams?

Eliminating written exams as an assessment tool therefore, resulted in some disagreement among the principals in the study. Specifically, for one principal in this study, written exams were popular in higher education institutions. Nevertheless, much scholarly research points to the limitations of exams in promoting student learning (Friedrich-Nel et al., 2003). For example, Elton (in Lumina, 2005) argues that the “traditional... examination... in which students answer in two or three hours some few questions... is
worryingly unreliable.” Similarly, Cole, Ryan, and Fick (1995) assert that examinations represent a limited microscopic and incomplete view of students’ abilities. With the traditional testing techniques proving to be inadequate to test competencies and skills, [alternative] assessment has emerged in the new learning society to determine the achievements of students (Friedrich-Nel et al., 2003).

These findings reveal that the majority of principals believed that portfolios served their purposes in terms of allowing a platform for reflection and regard for unique experience. The principals liked the holistic and practiced-based nature of assessment grounded in what they perceived were fair, valuable, and objective criteria established in consultation with the relevant role-players. Even so, it should be noted that one principal believed that examinations were a much fairer and unbiased means of assessment than portfolio assessment, which is by and large often a popular perception.

In acknowledging portfolios as a valid assessment form therefore, questions of reliability and validity became a factor in this study. While a lone principal’s view is a popular one, one might ask if it leads to the most meaningful assessment. When relying solely on examinations, the granting of qualifications to principals in leadership programs based solely on summative judgments remains problematic and might tend to be rooted disproportionately in power relations. This could result in questions such as the following: “How is achievement defined? Who sets the standards and in whose interests are they set? Are such standards even possible?” (adapted from Johnston, 2004, p. 398).

On the other hand, when relying solely on an interpretive assessment model, the problem does not diminish, and in fact, intensifies by raising other equally troubling issues. For example, interpretation of narratives or journaling portfolios becomes a “mental construction or interpretation” (Johnston, 2004, p. 398), by the assessor and/or the author of the portfolio. But the problem then becomes: “How can these individual constructions be noticed and honored within a program” and “How important is it to achieve reliability/validity according to traditional means?” In other words, can such truths be more a matter of consensus among informed and sophisticated constructors, rather than being based on one perceived paradigmatic reality or alleged grade that the principals should be striving to reach?

In response, supporters of a more interpretive assessment approach (e.g., Johnston, 2004), stress that subjective interpretations of assessments do not mean that anything goes. Indeed, we see the principals in this study grappling with their own values and ethics in terms of what they believed would be valid evidence of their practice as would be revealed through their portfolios.
Such reflections on the part of the principals reveal a move toward sophisticated, intelligent, and meaningful assessment of their own practice that otherwise might not be achieved if their development were assessed using examinations.

Portfolios, then, allowed the principals to reach their own contextualized and constructed assessment of their work that also challenged them to adopt an *ethic of disciplined inquiry* (Moss, 1994), all the while encouraging them to challenge and revise initial interpretations. All of this indicates that the principals required a certain set of skills, knowledge, and values to construct their portfolios. Furthermore, the issue of ethics plays a very important function in the compilation of criteria determining what constituted evidence and what did not. In composing the commentary it was evident that the principals were required to be able to communicate, negotiate, and collaborate around certain activities effectively.

In order for portfolio assessment to be implemented successfully, it became important to provide guidelines to assist the principals in preparing for the assessment tasks. Although the criteria for assessing the project plan, portfolios of evidence and the commentary were given to principals in a timely manner, the contents of these documents were not explained gradually to the principals. This made it difficult at times for them to understand all the criteria for each aspect of their portfolios within a short period of time allotted. Indeed, when acknowledging the legitimacy of a more interpretivist approach to assessment, time, collaboration, and negotiation become important commodities for ensuring the success of the portfolio process or when the process breaks down (Johnston, 2004). This became evident when the principals in this study were not provided with sufficient training in the compilation of portfolios and had limited interactions with the University faculty members, leading to “confusion and a lack of direction in respect of portfolios.” In fact, the faculty members and external assessors identified that the principals in the project experienced logistical as well as academic problems in the compilation of their projects.

Finally, the principals’ responses regarding who should assess their portfolios provided a platform for intense discussion, from both a theoretical and practical perspective. The principals believed that the assessors needed to be vested in their work and the process but also be somewhat objective, thus they favored external assessors.

On a final note, judging the quality of portfolios remained, not only in this study, but also in the research in general, a controversial topic. Some researchers (e.g., Guba & Lincoln, 1989) suggest that emphasis be placed on *credibility* and *transferability* rather than *reliability* and *validity*, both of which offer spaces for context and the unique differences among principals. Perhaps, more
importantly, a way of ameliorating this problem is to assume that assessments should be fair and transparent, leaving room for the principals’ own perspectives and development (Moss, 1994).

**Conclusion**

Since the undertaking of this study, the National Department of Education has introduced a new policy that requires all practicing principals to possess the ACE Principalship qualification by 2011. To summarize, portfolio assessment was an ideal strategy used by this higher education institution to evaluate the professional development of principals studying the ACE course. The findings revealed a tension between alternative assessment and summative evaluations (such as exams); the difficulty and necessity of certain skills to bring forth the full potential of portfolios, which at times challenged principals’ values and ethics of what was deemed as valid evidence of practice; the ever present challenge of the time-consuming nature of portfolios and the time needed to plan the project beforehand providing a map or plan of action; and finally the question of who should serve as an appropriate assessor. These observations were important in terms of the theoretical lens we used in an attempt to move beyond portfolios as mere technology.

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**Notes**

1. Rand Afrikaans University merged with Technikon Witwatersrand and incorporated Vista University to form the University of Johannesburg. This University is located in the Gauteng Province, one of the wealthier provinces of South Africa. Since the densely populated province comprises a greater urban society, this study was therefore located within the Gauteng urban schools.

2. We use the terms *alternative* and *authentic* assessment interchangeably in the article although we are aware that conceptually they differ in many cases.

**References**


**Bios**

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1. Title of submission:

Working with Clients Across Cultures: Understanding Cultural Multiplicity and the Importance of Identity Negotiation

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6. Summary of paper:

Counseling today increasingly reflects the multicultural fabric of social life. One of the central issues that counselors often confront in their work with clients is the question of cultural identity. Traditionally, identity was seen as fixed and stable, reflecting bounded notions of culture and human development. Today, however, the impact of globalization, the diffusion of cultures, and the fluidity of human experience has given way to a concept of identity as multiple and context-bound. As a result, cultural experience is seen as contested, dynamic and dialogical as persons are required to negotiate multiple, often conflicting identities. The complexity of cultural identity and the psychological process of identification cannot be underestimated. Nor can its relevance be overlooked. Indeed, recent studies suggest fully one-fifth of all children in the United States today are immigrants.

Multicultural experience and the process of acculturation is a basic characteristic of contemporary life. It is also linked to recognized psychological stressors across the life-span. Because counselors are increasingly working with clients who struggle with psychological difficulties related to cultural experience, counselling education needs to be cognizant of the psychological concepts used to capture and explain the challenges faced by individuals with multiple cultural identities.

My talk will focus on two central concepts -- multiplicity and identity negotiation -- and demonstrate their relevance to counseling work. I will suggest that identity negotiation forms an
important aspect of psychological health among bicultural persons dealing with multiple, often conflicting cultural identities. Focusing on the process of identity negotiation can also help us to understand and come to terms with the conceptual terminology of multiplicity that is often employed to explain multicultural existence. I will use a clinical case illustration from my counseling work with second-generation immigrants to demonstrate the psychological processes involved in the challenges of living across cultures and languages. I will interweave clinical case material with conceptual discussions and clarifications.

I will demonstrate how the notion of multiplicity has become a major area of interdisciplinary study. When applied to the broader framework of culture, the notion of multiplicity points to the fluid and changing nature of cultural identities, thus undermining essentialist definitions of identity as fixed and stable. Bicultural persons identify not in singular categories, but often experience a fused, or hybrid identity, which is different from any of its constituent parts. This hybridity functions to decenter traditional identity regimes and suggests that subject positions in culture are often assigned rather than freely chosen. I maintain that while such notions as multiplicity and hybridity help us to understand the ambivalent and often fragmentary nature of our cultural identities, the question of “how” we negotiate and maintain these identities requires careful exploration.

I suggest that the experience of multiplicity relies on a limited form of psychological continuity that allows for self-recognition and identity negotiation across time. Indeed, counselors have spent comparatively less time studying the role of continuity, in part because talk of continuity is frequently equated with a return to essentialism. But continuity exists within the same cultural framework that yields multiplicity. Without a sense of continuity, it would be hard to have any kind of identity at all; talk of identity negotiation would inevitably give way to identity diffusion. I maintain that persons not only experience multiple identities, they also have the capacity to
negotiate their identities over time. I will suggest our potential for reflective action is based on personal agency and a limited psychological continuity. Using the clinical case example, I examine the client’s ability to negotiate identities through her authorship of a life-narrative and suggest that her narrative experience is itself premised on an embodied self-awareness of what it is like to occupy specific cultural and social positions. This perspective on identity negotiation is itself culturally embedded and made possible through the cultural frameworks of understanding in which we participate.
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Closer to Fine: Idiographic and Nomothetic Dimensional Considerations of Online Education

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Abstract

This paper is a reflection of the changing nature of education resulting from internet-related technologies using the work of Jacob Getzels and Egon Guba (1957) as one of its foundations. Getzels and Guba offered the idea that organizations and institutions are social systems comprised of various individuals who all play important roles within the organization. While technological advances allow colleges and universities to offer courses and programs online, technology appears to be moving faster than the art of teaching online, even though both are advancing at ever-increasing speeds. The argument can be made that one of the unintended consequences of these efforts is the depersonalizing of the educational process for the sake of efficiency and convenience.

As these new educational opportunities emerge, a case can be made supporting the idea that the most effective educational endeavors are still the result of people interacting within the confines of a social context. Clearly, internet-related technologies offer socialization and interactivity in online educational endeavors.

This paper discusses not only the ongoing possibilities and opportunities, but also the necessity of researching the changing nature of education brought about by internet-related technologies from the vantage point of three perspectives: student, faculty and management/administration.
Closer to Fine: Idiographic and Nomothetic Dimensional Considerations of Online Education

**Introduction**

Educational efforts are often primarily built around the concept of establishing teaching methodologies rather than first considering how people learn, especially adults. These theories and methodologies often expect learners to fit into prescribed academic social contexts that are found within traditional educational settings.

This paradigm of education, where the teacher dominates the education process, was captured in the lyrics of *Closer to Fine* (1989) by Emily Saliers of the musical duo Indigo Girls. The song beautifully reflects the youthful search for knowledge and identity. In the song Saliers wrote:

> I went to see the doctor of philosophy  
> with a poster of Rasputin and a beard down to his knees.  
> He never did marry or see a B-grade movie.  
> He graded my performance, he said he could see through me.  
> I spent four years prostrate to the higher mind, got my paper and I was free.  
> (Saliers, 1989)

With the onset of internet-related technologies, perhaps it is time to honestly consider putting the learner at the center of the educational process.

Internet-related technologies have the potential to offer humankind the opportunity to reshape the way it views, uses, and incorporates formal education into its cultures. The introduction of internet-related technologies into the mainstream of any society has the ability to alter both the obvious and subtle ways in which human beings learn and how they are taught. Furthermore, they have altered educational reality at a rate that was unimaginined less than a generation ago.

Technology has altered the educational landscape in a manner that has created a divide between the teacher and learner. This unprecedented occurrence has posed questions as to the role of teacher in the teaching/learning context when using technology to teach at a distance.
Traditionally, the teacher has been seen as a sage, a keeper and dispenser of knowledge, and the student has been seen as a cup to be filled with wondrous facts and ideas held sacred by the teacher and the academy.

While instructors are busy learning new skills necessary to teach online it seems that their students, who were born into the digital age, are simply adapting and transferring already learned skills into the educational arena. These students, who are at times referred to as digital natives, have grown up immersed in digital technologies from mediums such as gaming and entertainment. As a result they have a lifelong familiarity with the basic concepts of the evolving technology that may be foreign to their teachers’ world. Yet, there seems to be little adaptation on the part of the educational infrastructure to draw from the expertise of the learners within the system. Logically, this will dissipate as the learners of today become the educators of tomorrow. However, utilizing the enormous experiential base of the learner, even if it is unorthodox in traditional terms, seems wise.

In theoretical terms, incorporating the learner directly into the educational design process in institutions of higher education seems to fit well into the theory of andragogy (Knowles, 1973) and Getzel and Guba’s (1957) work with idiographic and nomothetic dimensions in social systems.

One problem with this changing paradigm is that students may expect the same kind of interaction with their online courses as they experience in other online environments such as advanced gaming, which offer instant and continuous interaction. This is highly reminiscent of several decades ago when teachers were concerned about the influence of television on their students. In the early years of television, teachers had to deal with students who were becoming accustomed to seeing a problem originate, unfold and then be resolved in an entertaining format.
of 30 minutes or an hour. They seemed to expect the same thing at school, a clearly unrealistic expectation.

Likewise, it is possible that younger online learners may expect to be challenged and entertained at the same time in their online courses. While it may be true that learning, and nurturing the skills necessary to exist in the cyber world, is hard work, especially when attempting to staying current, it is logical to ask if the process of learning is changing. Even if the format of educational delivery is in a state of continual flux with ever faster changes it still seems that learning, by its very nature, is often difficult and tedious work.

Most research into online courses is discussed from the vantage point of the instructor. While this is important, a major premise of this paper is the idea that every aspect of the educational infrastructure would benefit from a serious consideration of the students’ perspective.

There are several paradigm shifts occurring within the educational world. For example, it can no longer be assumed that institutions of higher education are the exclusive holders of information. These changes within education may impact educational institutions much in the same way that the printing press impacted the formal church. Providing the masses with the scriptures, that had previously been the sacred privy of priests, monks and church bureaucrats changed the way in which the church and the individual interacted.

Another shift of the educational paradigm is that internet related technologies have created academic and economic competition between institutions that once enjoyed monopolies created by geographic, legal and prestige boundaries. These technologies allow greater flexibility in the way students can obtain an education, and have ushered in respectability for private and for profit schools that were once sneered at by traditional colleges and universities. It is
important to note that this shift includes universities that are actually businesses, whose goal is to turn a profit, where public institutions are still expected to altruistically impart knowledge for the betterment of humankind.

Presently this competition is even occurring among sister institutions within the same university system, such as the University of North Carolina System. At one time it would have not been possible for one of the sister institutions who fall under the umbrella of the University of North Carolina system to extend its reach into a sister institution’s service area. For example individual campuses could not offer classes in contiguous counties considered to be the domain of another campus. However, nothing prevents any campus from offering their online courses to anyone within North Carolina.

**Rationale for the research**

It is clear that online education is currently in vogue and an important tool for institutions of higher education. While the science of education seems to be often driven by fads and faddish behavior it can be argued that the onset of the technological revolution fueled by the internet is not a fad and is rather a fundamental shift in our educational paradigm. Internet related technologies have the potential to reshape the way we think about education.

Educational researchers are in a unique position to not only research and report what is currently happening, they have the opportunity to help shape this new educational paradigm. They can do this by collecting and analyzing research that focuses on the learner and thus help educators gain a better perspective as to how best to create online courses and programs for maximum effectiveness.

Many institutions of higher education are focusing larger amounts of attention on distant education, including attempting to attract online learners. This is especially true in regard to non-
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traditional students such as older students who are returning to school while maintaining jobs and family commitments that may have prevented them from attending traditional college and university programs.

In the current economic downturn, people in the United States are losing their jobs at alarming rates and the need to return to school to prepare for new jobs is high. Colleges and universities then become competitors for these students. A premise of this paper is that institutions of higher learning that are truly student centered will gain a better reputation and attract the best and the brightest of these nontraditional students returning to school now that many of the physical and geographic barriers related to taking classes have been reduced or eliminated. Establishing the student as the center of the educational design process is akin to smaller schools’ reputations for creating classes and programs where each student remains a person and is not simply a number in an uncaring bureaucracy.

There are also extraneous factors making online courses more desirable in this economic ebb such as unstable fuel prices, vehicle wear and tear and commute time that interferes with work hours or family needs. Other factors include the fact that many of the people returning to school are single parents, and without online options they could not afford baby sitters several times a week. Students having to miss scheduled classes due to family and work matters can be problematic as well. It can also be argued that this allows more family time which could be good for the children in the home, especially in times of economic and personal stress.

As potential students begin returning to school to retool their skills and abilities for the changing world of work while at the same time trying to balance work, family and shrinking budgets, institutions of higher education should also be working to help these students address their academic needs. In this regard, appropriately using technology to design educational
experiences to help the learner acquire the needed knowledge and skills from a distance is paramount.

Many of these students may be older than traditional college freshmen yet they are young enough to have technology friendly mindsets and relevant skill sets necessary to navigate online courses. While this cannot be taken for granted or assumed to be universal, many of the students already have technological skills necessary to navigate their normal world making their adaption to education quite swift.

Institutions of higher education could benefit from a serious consideration of moving toward a greater on-line presence even if they intend to maintain exemplary face to face courses. It is also apparent that centering these efforts on the learner is an excellent starting point, or even a natural turning point if the process has begun.

This paper suggests that if we, as educators, want to be leaders in utilizing internet technology rather than reacting belatedly to a changing world, we need to consider centering our efforts on the student and the needs of their future work world rather than paying homage to tradition of expecting them to fit into ours.

**On-line Student Characteristics**

Online research has been concerned with the influence of student characteristics such as age and enrollment status, gender, ethnicity and learning style on the ability of students to adopt and learn effectively online. In a 2002 study of two class sections of CSC 114, Introduction to Programming in C++, taught at North Carolina University in the 1999 fall semester. The aim of the study was to find out how students who enrolled in the online section of the course differed from those enrolled in the traditional section. The two groups were found to be differed in several important aspects. Online students were older, less likely to be enrolled in undergraduate
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courses, more likely to have job and or child care responsibilities, and had more experience with computers.

While the general view in previous research such as the one described above has been that students engaged in distance education are often older and busier than the traditional student, some research findings are quite contrary. According to Clayton (2001) general, national enrollment statistics reported in The Chronicle Almanac, 2002-2002: The Nation offers extensive demographical information about students enrolled in higher education. The Chronicle Almanac reports that 62.7% of students enrolled in two and four-year U.S. institutions in fall 2000 were under the age of 25 and 37.3% over 25. An analysis of the national full-time and part-time enrollment shows 72% of all students enrolled attend school full-time while 28% attend part-time. It is interesting to compare the Chronicle’s percentages with those reported by the National Education Association in “A Survey of Traditional and Distance Learning Higher Education Members” conducted in 2000. According to the NEA report the age of students in distance learning courses varies considerably.

best practices: theoretical basis for online instructional design

Teaching strategies rather than content determine success of an online course. The learning cycle postulated by Kolb is a useful teaching tool that helps students to make connections between theoretical concepts and practical applications. The stages of the learning cycle are concrete experience in which the student deals with a new concept or situation; reflective observation where the student considers or examines the experience; abstract conceptualization which occurs as the learner seeks a pattern, builds concepts and tests theories; and active experimentation follows as actions are changed because of the insight gained from the learning process. Students learn experientially by systematically performing
learning activities at each stage in the sequence and are able to link theory to practice. (Bolan, 2003; Staley, 2000; Fulkerth & Stevenson, 1997). See figure 1 below.

![Diagram: Structural Dimensions Underlying the Process of Experiential Learning, and the Resulting Basic Knowledge Forms.]

**Figure 1: Structural Dimensions Underlying the Process of Experiential Learning, and the Resulting Basic Knowledge Forms.**

Gagne, as presented by Alley and Jansak, (2001) and Deubel (2003), proposes nine conditions for experiential learning online whereby the instructor gains students’ attention, outlines learning objectives to create student expectancy, stimulates recall of prior learning, tells or shows the students what they are to do, provides learning guidance, elicits performance, gives feedback, and assesses performance. The conditions include externally observable events of instruction associated with corresponding events that occur as the learner responds to instructional processes as described in Table 1 below.

Gagne’s (Alley and Jansak, 2001 and Deubel, 2003) conditions for experiential learning online are represented below (Al-Shalchi, 2009) (Allen, 2007; Alley, 2001; Andrus, 2008) in Table 1:
### External Events: Instructor Based

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Internal Events: Student Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gain attention</td>
<td>Reception</td>
</tr>
<tr>
<td>2. Tell learners the objective</td>
<td>Expectancy</td>
</tr>
<tr>
<td>3. Stimulate recall or prior learning</td>
<td>Retrieval to working memory</td>
</tr>
<tr>
<td>4. Present stimulus with distinctive features</td>
<td>Selective perception</td>
</tr>
<tr>
<td>5. Provide learning guidance</td>
<td>Semantic encoding</td>
</tr>
<tr>
<td>6. Elicit performance</td>
<td>Learner responds</td>
</tr>
<tr>
<td>7. Provide feedback</td>
<td>Reinforcement</td>
</tr>
<tr>
<td>8. Assess performance</td>
<td>Retrieval and reinforcement</td>
</tr>
<tr>
<td>9. Enhance retention and transfer of learning</td>
<td>Retrieval and spaced review</td>
</tr>
</tbody>
</table>

Events one through four set the instructional stage. Event five keeps learning on track and describes acts that enhance storing and recalling through hints or organizing content. Event six through eight form a *learning cycle* that should ideally recur until an acceptable level of performance is achieved. Events eight and nine determine if learning has occurred and if that learning can be applied to unfamiliar situations (Alley and Jansak, 2001; Deubel, 2003).

**Using Technology to Organize Course Content:** Technology should be used to organize course content in a consistent manner so that students can quickly locate different reading materials, find out when to complete and turn in assignments (Thurmond et al., 2002). An analysis of how students perceived the usefulness of course materials for various language courses revealed that key factors were clearly and logically organized content, clear objectives, meaningful feedback, and easy navigation (Felix, 2001). Clear organization of
course content whereby concepts are presented in a precise manner provides a structure to the teaching component of the online learning experience. Learning plans that are explicit about instructional intent and student expectations should be used to provide a framework that guides the students through the learning process. Using learning plans, online course content can be divided into lessons that are manageable within a given time period. The structures for lessons can be outlined in the learning plan by answering critical questions for online learners regarding the importance of the material to be learned (Why is this important?) and what the student is expected to learn and apply (What will I learn to do?). The structure for learning activities can be outlined in the learning plan by answering student questions regarding the manner in which the material is to be learned (How will I learn this?), and how performance will be evaluated (How will I demonstrate that I have learned this?). Instructional material embedded in the technology of delivery may include lectures, notes, outlines or summaries of key information, text readings, study guides, and case studies, written assignments, individual projects, test modules, self-tests, and final exams (Schuster, Rodriguez, Chabot, & Arundel, 2001; Klotz & Robertson, 2002; Staley & McKenzie, 2000; Richardson, Swan, 2003).

Faculty/Instructors

Early in the history of online education many, if not most college and university professors who entered the world of teaching online did so on a voluntary basis. In this case voluntary is not to be defined in the traditional altruistic way where instructors expect little or no compensation for their work. These voluntary efforts were often encouraged by institutional use of extrinsic, external and alternative incentives such as financial reward, updated technology or the opportunity to work from home.
As the number or courses and programs offered online has increased, researchers have identified several areas where faculty need institutional support in order to be optimally successful when teaching online (Parker, 2004). Thus there is a sense of importance placed on the nomothetic function of institutions to support various idiographic needs.

For example Parker (2004) identified that faculty need technical assistance in course development and delivery as they transition from teaching in traditional face to face classroom settings to teaching online. This is especially true with faculty who are not well versed in the latest technologies designed to enhance the online educational experience. Perhaps the greatest digital divide is being played out with the graying of the baby boomer generation who are more comfortable in the traditional classroom setting as compared to their younger colleagues who have a much greater understanding of technology due to the fact it has always been a part of their lives. Parker (2004) suggested that faculty with less experience teaching with technology could benefit from peer mentoring. In a shift of the traditional paradigm, older seasoned faculty may be receiving this mentoring from younger, less overall experienced colleagues, or even their students.

Other idiographic issues concerning faculty who utilize various technologies to teach online include policies addressing faculty workload and compensation, intellectual property ownership issues, and having adequate support services during the scope and sequence of the online offerings. These support mechanisms could come in the form of initial faculty orientation and ongoing in-service training provided as needed to individuals and groups.

A potential point of conflict between the idiographic and nomothetic dimensions of online education may be illustrated by the fact that much work is required of faculty teaching online before their students log on to the class for the first time. In many cases this has been a
challenging paradigm shift for educational institutions to make. Professors are not usually compensated for work they have not done, and the traditional mindset is that planning for a course is not actually teaching the course so it is paramount to work not yet done. In the new age of courses and course materials delivered online institutions may have to reconsider this established paradigm. Thus this is one of the areas of potential organizational friction between the idiographic (individual) and the nomothetic (institution) dimensions of educational institutions moving to online teaching/learning.

To restate the organization dilemma it is universally understood that instructors need adequate time to prepare for their classes, but when does the institution recoup this time? Perhaps the solution is not found by simply considering financial compensation for a specific time frame, but rather is found in the way institutions configure the way faculty are expected to spend their time. For example there could be a shifting scale in place that could be adjusted in terms of research and writing and professional service.

Another traditional institutional nuisance that may be challenged by online teaching is the idea of office hours. Given that one of the advantages of offering online classes is that students do not have physically travel to the college and/or university to take classes it seems logical that this should be true of visiting professors and advisers as well. With the capability to teach online should come the ability to meet online for office hours, which may conflict with nomothetic institutional policies that require instructors to keep specific numbers of office hours in traditional office settings.

**An Example of Superintending the Online Process**

The Department of Leadership and Educational Studies (LES) at Appalachian State University has been using 3D virtual learning environments for graduate courses in the Instructional Technology program for a number of years. To accomplish this goal the department
purchased the necessary software and maintains its own server called the AET Zone for graduate studies. This server also offers space to Clemson University in South Carolina and the North Carolina Virtual Public Schools Program.

Originally, all work was done in Active Worlds and while Instructional Technology was the majority stake holder, the Library Science and School Administration programs were also using Active Worlds to varying extents. While students and instructors seemed to be enjoying using the interactive environment, the program had certain limitations.

For example, Active Worlds required a plug in for audio and file sharing. This plug in took students into a separate window, where they were unaware of text messages from other users and could not see the virtual environment their avatars were in. It is also a Windows only format, which forces Mac users to purchase extra software at their own expense in order to participate. Three years ago the department began working with another platform, Teleplace. The Teleplace environment has real-time audio and video built in, allowing direct collaboration on documents, and it is cross-platform compatible. Again, the department purchased the necessary software and maintains its own server for graduate students as well as the STEM/ITC project. Over the past year, the programs that have been operating in Active Worlds have been moving to Teleplace and many newly interested faculty have begun teaching online in Teleplace with no prior experience in the other 3D environment. As with any new endeavor, there have been fits and starts to the process. Identifying the limitations of the program and discovering how to take an established face-to-face class and translate it into an online equivalent is a challenge.

Generally, the online courses in the LES Department are a combination of synchronous and asynchronous activities. Students are encouraged to meet and collaborate independently of
class time, and class time is sometimes limited to one or two meetings a semester, depending on
the instructor. In many cases, the ability for everyone to be online at the same time and meet in a
virtual space has led to instructors automatically re-creating a face to face classroom situation
(i.e. students sit and listen while the instructor lectures, group discussion on cue from instructor,
etc.), which is often less than ideal. Regardless of a 3D environment, the use of avatars and real-
time communication, a lecture is ultimately a disembodied voice and students are in a position of
being unable to evaluate body language, or to know when pauses are to take questions instead of
a microphone adjustment.

In Fall Semester 2010, the Library Science department started its first entirely online
degree program. In discussing how to create a sense of community and elevate interactions with
students, they decided to attempt a virtual space where there were both common spaces
(discussion areas, work spaces, amphitheatre for lecture, faculty lounge) and course specific
areas where student could find the resources and documentation for their class. Some of the
course work was designed to create discussion groups with students from different classes, and,
most importantly, instructors were available throughout the day and evening in the virtual space
to answer questions for students and generally be available for any type of discussion. Initially, it
succeeded beyond all expectation. After a brief introduction at the beginning of the semester,
students were given free reign to come and go as their time and schedules permitted, they formed
discussion groups for various projects and the timeline for course projects was updated regularly
so that they could always find the information they needed by logging on to the virtual space.
Within three weeks, the forum was amazingly active. It was rarely empty as generally one or
more students were present throughout the day. For the instructors it was simply a matter of
logging on and having the volume up on their computer in case a student buzzed. This allowed them to be present throughout the day and still work on other projects.

Because things were going so well and everyone raved about the space and how well it worked, the technical side of dealing with this virtual environment became problematic. The space became rapidly overloaded with images, documents, videos and notes and at that point, the forum crashed. One of the hardest things about working with technology is that most people don’t know—and don’t particularly care—how it works, so long as it works. They care when it doesn’t work, but in general, trying to explain “under the hood” issues is a tough sell. Individual Teleplace forums have a memory limit, and because it works as a peer to peer program, when one person enters, the current copy of the forum is passed from that user to any new person entering, as opposed to pulling its current form from the server. Because of the memory limit, not only was it nearly impossible for a user to enter the forum, no one was capable of passing a copy to anyone else, either.

This led to the painful process of meeting with the faculty to have a discussion about what could go. As is often the case with instruction, originals are sacrosanct—even digital originals—and they should not be touched; the immediate response was that nothing could be eliminated. It was quietly hoped there was another way to fix it. Unfortunately, there was not. Raising the memory limit on the forum itself made it unstable, and in its current condition, it was unusable. So after a few minor adjustments were initiated, faculty agreed to remove some videos from early in the semester that were no longer entirely necessary. That seemed to fix the problem for about two weeks. Things were slow, but students could get in and work. Then it locked up again.
At this point, faculty members decided that the common space would not work, and started requesting separate spaces for their classroom material. Unfortunately, this breaks the students out into different areas where they are less likely to see each other and to interact. It has been observed that students are hesitant to contact each other if they are not in the same space, which cuts down on the sense of community and lowers the level of interaction that instructors and programs had hoped for. Ultimately, the solution faculty opted for re-created the same issues they were initially trying to avoid, and interactivity between students and faculty has plummeted as a result of the ‘siloing off’ of the different areas.

Currently the department is looking at how to create the “happy medium”, encouraging faculty to prune back digital resources, potentially use links to videos and documents instead, for the sake of community and interactivity.
Problems and Limitations

Colleges and universities should strongly consider the needs of the learner as they move classes and programs online. This would be clearly idiographic in nature. This shift is not a quick and easy process and there are multiple pitfalls that must be considered when moving toward an on-line presence. There are multiple variables to consider when putting courses and programs on-line. Problems associated with such a fundamental paradigm become nomothetical in nature when educational institutions must consider the needs of instructors charged with delivering the courses. While some of these needs are idiographic in nature this support becomes nomothetic when administrators charged with supporting these efforts are expected to secure the necessary resources to help create an infrastructure of institutional support necessary to accommodate this changing learning/teaching process. An organizational dilemma may also develop when weighing two critical aspects within the idiographic dimension, the learner vs. the teacher.

These considerations are multiplied when a college or university is preparing to offer an entire program, or potentially an entire degree online. The number of programs and degrees available online is increasing rapidly as colleges and universities are being forced to examine the consequences of remaining stagnant in the face of immense change that is reshaping the educational landscape.

Computers hooked into the internet are not the first technological advance to spark claims of culture or institutional destruction. Some of the technological advances that have actually changed the basic foundation of education were not specifically designed as a means to improve the way we formally educate people, but they have. Examples of these technologies include the printing press, electricity, running water and indoor plumbing, in-house food preparation, various
ways and means of communication, and large-scale transportation efforts. Their impacts on education have been immeasurable. It is inconceivable to consider operating a school without these advances yet they are now so commonplace they are taken granted. When these “technologies”, primarily nomothetic in nature, fail, we cancel class, or even close schools and school systems.

Even when compared with the aforementioned changes in our educational infrastructure the onset of internet-related technologies are changing the way we educate people in ways that public and/or state institutions have not traditionally dealt with, or even contemplated. These changes can be considered a part of the idiographic or the nomothetic dimensions.

These changes have ushered in new players onto the educational stage. The privatization of education is now available on a much wider scale to potential students who are, at times, anxious to find alternate means of obtaining an education that will help them enter a given career, obtain initial or advanced licensure, or complete a program that beforehand was unavailable to them as they attempted to balance the rigors going to school while working full time and maintaining the essential elements of caring for their families. In essence a new spirit of completion is emerging that is starting to challenge the long-standing role of higher education.

These factors would seem to warrant that institutions of higher education consider how to meet the idiographic dimensions of the students. Given that the Internet breaks down geographic barriers and gives students a wider array of choices, schools that consider the idiographic dimensions of students will fare better than those who expect the students to fit into the nomothetic dimensions of the institution.

Literature regarding research into online learning often seems to be problematic as well. It is not uncommon to find studies in the current literature that are, in some ways, flawed. Some
of the data used to draw specific conclusions seem skewed thus making their conclusions unworthy of generalization.

Examples of poor research design leading to problems with validity and reliability include researchers using small sample sizes, purposive and convenient research samples, not controlling researcher bias, and false reporting of those being researched because of the power hierarchy between professor and student with grades being a primary motivator. Perhaps these problems are to be expected due to the relative newness of the internet related technologies into the formal schooling.

The concept of academic honesty has always been a challenging and problematic aspect of schooling regardless of discipline or level. Recently it was revealed that there is a congressional investigation into cheating on exams for FBI agents. This seems significant to this paper’s topic in several ways. More information on this scandal may be found at this link: http://news.blogs.cnn.com/2010/07/28/justice-department-reviewing-reports-of-fbi-test-cheating/?iref=allsearch

One of the implications of such a scandal is to highlight the fact that it is difficult, if not impossible, to externally ensure that students never cheat. In a perfect academic world, students would be operating at the highest levels of moral reasoning and questions of cheating would be meaningless to ask. Yet if using the past is an accurate predictor of future student behavior, it is a safe assumption to make that there will be cheating in the future. It seems that as long as there is a formal system of education there will be the possibility of cheating.

Furthermore, if we accept the idea that the learner is largely responsible for the education they receive it seems fitting to suggest that they are equally responsible for their ethical behavior during the process. Kohlberg (1981) and others have researched and written on
the concept of moral reasoning and it seems appropriate to propose using the principle of moral reasoning against the backdrop of online courses and programs.

In theory this should be less of a problem for graduate classes. Then again this theory would have assumed that we could have applied the same theory to the aforementioned FBI tests. The FBI cheating scandal may also be partially a result of high stakes testing. While not defending this behavior it is nonetheless logical to assume that the more that is at stake the higher the chance of attempted cheating.

Preparing courses that try to assure honesty from the students is one of the more serious challenges facing online educators. Cheating in school is a time-honored tradition and the only one true way of preventing it entirely is to convince students not to do it. It is as simple as it is complex. Online students and instructors are in a position that is unlike any other we have experienced in the history of education. It is conceivable that technology in education will create a new learning environment where it may become necessary to reconsider the concept of academic honesty. Perhaps it is time for the academic community to reconsider the debate in regard to when research becomes plagiarism.
Conclusions/Recommendations

Clearly there is much research yet to be done in the emerging field of online instruction with internet-related technologies. This paper recommends that much of this research focus on the idiographic dimension of educational organizations, helping to insure institutions of higher education meet the needs of their students, rather than simply claiming they do.

Research into best practices online seems to have been focused on most online forms (blogs, message boards, ASULearn type sites, websites etc.). However research regarding 3D virtual classrooms is sparse at this point. As a result the authors recommend serious research effort regarding the effectiveness of 3D online offerings in regard to both the idiographic and nomothetic dimensions.

Current research suggests a considerable difference between face-to-face best practices and online best practices. This seems logical given the differences between face-to-face (dynamic and rich in immediate exchanges) and online (relatively static and delayed exchanges). However, with the introduction of the 3D classroom where students and instructors interact in real time within a virtual classroom would seem to suggest that some of the best practices in the face-to-face environment could be successfully incorporated into the virtual classroom without sacrificing online best-practices. It is logical that future research regarding 3D learning environments would need to examine this issue.

Future emphasis could also focus on the fact that online education is a breaking from established and traditional wisdom of schooling the new paradigm offers an opportunity for the learner to become an active part of the educational process. This seems especially beneficial when it is clear that students sometimes know more about the technology being used to deliver
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the course material than does the instructor. By allowing students to be more of a part of the instructional design and delivery process, institutions of higher education and the instructors working within need to acknowledge that the role of higher education has changed dramatically.

Equally important to consider is the fact that colleges and universities are no longer the sole keepers and dispensers of knowledge. While this may be initially threatening to our educational institutions, it could be a clear opportunity for colleges and universities to become more focused on higher level thinking skills. It seems logical that efforts to research this brave new world should be undertaken. Such research would allow examination of multiple perceptions and needs of all the various stakeholders in online education. Surveys could be taken that would measure these perceptions from students, instructors and administrators standpoints. From such research the idiographic and nomothetic dimensions could be examined more carefully. Sample surveys are included in appendixes A, B and C.

Another recommendation of the paper is that a meta-analysis could be conducted of existing research/literature. Looking at data globally may give a clearer and more honest set of answers to questions regarding teaching online.

This paper also argues that institutions of higher education should rethink their means and methods of granting scholarly credit for professors creating and maintaining online courses and programs. It appears that many traditional institutions of higher education have stopped short of rewarding faculty efforts in important ways that would encourage faculty to enter into the world of online teaching. A primary example is the fact that many colleges and universities seem to have prohibited awarding faculty appropriate credit for scholarly activity as a means of the encouraging and rewarding professors for designing and delivering courses in an exclusively online or hybrid formats.
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It is conceivable that by not allowing professors the opportunity to include the development and delivery of on-line/hybrid courses as a form of scholarship amounts to institutional short sightedness or even self-sabotage. It appears that we are entering a time in our educational history where it is crucial for institutions of higher education to obtain, and then help sustain the efforts of the best and the brightest of the profession to create and teach online courses. If professors do not see the career benefits justifying the time and effort required to design and teach online courses an unintended result may be the squelching of faculty efforts to put courses on-line.
Related and Referenced Literature


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APPENDIX A

STUDENT PERCEPTIONS OF ONLINE LEARNING

The following survey is designed to gather specific data in regard to online teaching and learning from the viewpoint of instructors and/or potential instructors. The purpose of collecting the data is to provide a baseline set of information that will help assess where faculty are and where they want to be in regard to offering coursework online. While it may be possible to use demographic data to identify individuals when collecting group data no such attempt will be made by the researchers of this project. All information provided by respondents will be held in the strictest of confidence and no attempt will be made to identify any specific respondent. All respondents are assured that their participation in this survey is voluntary and individual responses will be confidential.

Individual demographics

Gender  ____F  ____M

Age:  _____under 18  ____18-22  ____ 23-28  _____29-32  _____33-38
       ____ 39-42  ____43-48  ____49-52  _____53 and above

Undergraduate Student Academic rank:  ____Freshman  ____Sophomore
       ____Junior  _____Senior

Graduate Student Academic rank:
       _____Master’s level  _____Post Masters non-degree (licensure/certification only option)
       _____Specialist (Ed.S.)  _____Doctorate  _____Post doctorate

Are you a degree seeking student?  _____yes  _____no

Have you taught a course exclusively on-line before?  _____yes  _____no

Have you taught a hybrid course before?  _____yes  _____no

Have you taken a course exclusively online?  _____yes  _____no

Have you taken a hybrid course before?  _____yes  _____no

Total years attending Appalachian State University:  _____

Total years taking course in higher education:  _____
Please respond to these statements using the following scale:

1. Strongly Agree
2. Mostly Agree
3. Neutral
4. Mostly disagree
5. Strongly disagree
6. Does not apply to me

**Personal Motivation and Interest**

I am interested in taking courses completely on-line. 
I am interested in taking hybrid (part on-line, part face to face) courses.
I am trying to decide if taking on-line courses is right for me.
My field of study typically offers online courses
I believe I can learn any skills necessary to successfully take courses online.
I feel that I already have the necessary skills and abilities to successfully take courses
My basic personality is well suited for taking online courses.
It is possible for me to take online courses without the use of ASU labs, etc.
It is possible for me to take online courses without the use of any ASU equipment

**Discipline Specific Questions**

Social/people skills are important in my field of study.
The content area of my discipline fits easily into an online format teaching/learning.
Students in my field of study who take courses exclusively online may have a harder time than traditional students in mastering specific skills necessary for success.
On line materials have eliminated the need for textbooks in my discipline.
On line materials have reduced the need for textbooks in my discipline.
The material I am presently studying will be relevant 25 years from today.

**Pedagogy**

My learning style is best suited for classes where the course instructor gives limited instruction and I am responsible for large parts of my learning.

My learning is best suited when the course instructor gives very strict guidelines and is very specific about what I need to do as a student.

Learning online is essentially the same as learning in traditional face to face courses.

It is possible to learn any subject matter as effectively online as it is to learn it in a traditional face to face setting.

Even with courses offered completely online it is important that students and teachers meet face to face at least once per course in a traditional group session.

My learning style is largely based on the premise that teachers need to gather and present relevant information to their students and provide specific guidance to insure specific learning outcomes.

My learning style is largely based on the premise that teachers need to provide their students with directing questions that challenge the students to seek answers by finding their own sources of information.

My learning style is largely based on the premise that teachers direct students to specific topics of learning without specific direction and/or leading questions, thus encouraging students to seek and share their own conclusions about assigned topics.

It is important for students to have significant input in the direction of the courses they are taking.

It is as possible to build effective learning communities online as it is in face to face courses.

Students in online courses/programs may lose networking opportunities with other members of their field of study when compared students taking traditional face to face courses.

It is as possible to build positive teacher/student relationships online as it is in face to face courses.

The courses I have taken at Appalachian State University typically require higher level thinking skills.
The courses I have taken at Appalachian State University typically require using critical thinking skills.

**Assessment**

I feel that my instructors should use rubrics when assessing my work in their courses.

It is possible to assess critical thinking through the use of rubrics.

It is possible to determine that students are using higher level thinking skills through the use of rubrics.

Assessing student work should be primarily objective with little room for teacher opinion.

**General beliefs regarding on-line instruction**

Delivering courses and programs online is driven by the fact that this kind of course/program delivery is a better form of teaching and learning than traditional face to face settings.

Delivering courses and programs online is driven by financial concerns rather than educational best practices.

Delivering courses and programs online are primarily a new educational fad and will eventually give way to the next fad hailed as best practice.

Delivering courses and programs online is an educational revolution and will forever change how humankind educates itself.

All online materials necessary for success in online courses are available at no charge.

Most online materials necessary for success in online courses are available for no charge to my students.

The online courses I have taken, or want to take require (or will require) specific resources that are only available to students for a fee.

I am not sure what costs will be incurred by taking courses online.

Social/people skills can be effectively taught online.

I believe that the vast majority of the information found on the internet is factual.

I believe the ability to ascertain good from bad research is an essential skill for students taking courses online.
I believe that online students should have at least a fundamental understanding of basic research methods.

There is a potential danger of losing some degree of human dynamics in the teaching-learning process when delivering courses/programs exclusively on-line.

It is easier for students to be academically dishonest in online courses than in traditional face to face courses.

The role of colleges and universities are fundamentally changing as a result of technology, especially the internet.

Using Technology

The technology involved in delivering courses/programs online can become more important to the learning process than the content being delivered.

Students learning how to use and adapt to the technology necessary to take online courses can be as valuable as learning some course material.

Colleges and universities who specialize in online education, i.e., Argosy and the University of Phoenix, have a clear and distinct advantage of offering courses online when compared to colleges and universities that primarily continue to offer courses in the more traditional ways, i.e., face to face/lecture/discussion, etc.

Today’s typical university student knows more about technology than their instructors/professors.

It is difficult to stay current with technological changes due to their rapid rate of change.

It is difficult for students to obtain and maintain the tools (i.e., adequate computers, programs, connections, etc.) necessary to participate in online courses/programs.

It is difficult for students to obtain and maintain the technical skills (i.e., typing, using specific programs, researching on the internet, etc.) necessary to participate in online courses/programs.

It is difficult for instructors/professors to obtain and maintain the tools (i.e., adequate computer, programs, connections, etc.) necessary to teach in online courses/programs.

It is difficult for instructors/professors to obtain and maintain the technical skills (i.e., typing, working specific programs, researching on the internet, etc.) necessary to participate in online courses/programs.
Specific Learning Styles Methodology

Using a scale of 1 to 5, with 1 being the most effective way you learn from courses you take, and 5 being the least effective, please rate the following. Use NA for those listed methods you have never experienced.

1. Lecture
2. Class discussions
3. Specific readings assignments
4. Specific writing assignments
5. Students presenting individual reports to the class
6. Students participating in group projects.
7. Guest lecturers/presentations
8. Using the internet
9. Using video/audio presentations
10. Using case studies
11. Role play
12. Assignments that involve the use of student generated technological projects that range beyond traditional word processing, power point, etc. For example products/artifacts involving student produced audio, photography, video, etc.
13. Collaborating with students on writing articles and/or formal paper presentations.
14. Other (please specify)
Specific Forms of Assessment

Using a scale of 1 to 5, with 1 being the most effective ways you feel professors can assess (grade) your work, and 5 being the least effective, please rate the following forms of assessment. Use NA for those methods that you have not experienced.

1. Multiple choice questions
2. True/false questions
3. Unannounced quizzes
4. Fill in the blank questions specific answer questions
5. Short answer questions
6. Matching
7. Analogies
8. Essay questions
9. Formal written essays
10. Identification/definition types of questions asked with no choices provided
11. Traditional/technical/term papers.
12. Projects requiring students to conduct research (not literature reviews)
13. Rubrics
14. Other forms of assessment you utilize (please specify)

What kind of assistance do you need, or anticipate you will need to assist to best assist you in your efforts to take course online?
APPENDIX B

FACULTY PERCEPTIONS OF ONLINE LEARNING

The following survey is designed to gather specific data to support our online faculty learning community. The purpose of collecting the data is to provide a baseline set of information that will help assess where faculty are, and where they want to be in regard to offering coursework online. While it is clear that when surveying a group as small as this it may be possible to identify specific respondents via demographic information all members of the group are assured that their participation in this survey is voluntary and individual responses will be confidential.

Individual demographics

Gender  ____ F  ____ M
Age:  ____ under 25  ____ 25-29  ____ 30-34  ____ 35-39  ____ 40-44
      ____ 45-49  ____ 50-54  ____ 55-60  ____ 61 and above
Academic rank:  ____ Professor  ____ Associate Professor  ____ Assistant Professor
      ____ Instructor/lecturer  ____ Adjunct Professor (any rank)
Are you tenured?  ____ yes  ____ no
Have you taught a course exclusively on-line before?  ____ yes  ____ no
Have you taught a hybrid course before?  ____ yes  ____ no
Have you taken a course exclusively online?  ____ yes  ____ no
Have you taken a hybrid course before?  ____ yes  ____ no
Have you ever participated in a Faculty Learning Community prior to this one?  ____ yes  ____ no

Total years experience teaching in pre/primary/secondary education?  ____
Total years experience teaching in higher education:  ____
Total years experience teaching at Appalachian State University:  ____
I am willing to consider allowing my work in online teaching to be a part of ASU IRB approved research project  ____ yes  ____ no
Please respond to these statements using the following scale:

1. Strongly Agree
2. Mostly Agree
3. Neutral
4. Mostly disagree
5. Strongly disagree
6. Does not apply to me

**Personal Motivation and Interest**

I am interested in teaching courses completely on-line.  

I am interested in teaching hybrid (part on-line, part face to face) courses.  

I am trying to decide if teaching on-line is right for me.  

My department supports putting courses/materials on-line.  

My department supports the concept of putting programs on-line.  

I believe I can learn any skill necessary to successfully teach online.  

I feel that I have the necessary skills and abilities to successfully teach my subject matter online.  

My basic personality is well suited for online teaching  

It is possible for me to teach online courses without the use of ASU office space.  

It is possible for me to teach online courses without the use of any ASU equipment  

**Discipline Specific Questions**

Social/people skills are important in my discipline.  

The content area of my discipline fits easily into an online paradigm of teaching/learning.  

Students in my discipline who take courses exclusively online may have a
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harder time than traditional students in mastering specific skills necessary for success.  
On line materials have eliminated the need for textbooks in my discipline.  
On line materials have reduced the need for textbooks in my discipline.  
The material I am presently teaching will be relevant 25 years from today.  

**Pedagogy**

My teaching style is basically learner centered.

My teaching style is basically teacher centered.

Teaching online is essentially the same as teaching traditional face to face courses.

It is possible to teach any subject matter as effectively online as it is to teach it in a traditional face to face setting.

Even with courses offered completely online it is important that students and teachers meet face to face at least once per course in a traditional group session.

My teaching style is largely based on the premise that teachers need to gather and present relevant information to their students and provide specific guidance to insure specific learning outcomes.

My teaching style is largely based on the premise that teachers need to provide their students with directing questions that challenge the students to seek answers by finding their own sources of information.

My teaching style is largely based on the premise that teachers direct students to specific topics of learning without specific direction and/or leading questions, thus encouraging students to seek and share their own conclusions about assigned topics.

It is important for students to have significant input in the direction of the courses they are taking.

It is as possible to build effective learning communities online as it is in face to face courses.

Students in online courses/programs may lose networking opportunities with other members of their discipline when compared to traditional face to face courses.

It is as possible to build positive teacher/student relationships online as it is in face to face courses.
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My courses typically require higher level thinking skills on the part of my students. _____
My courses typically require critical thinking skills on the part of my students. _____

Assessment

Rubrics are essential when assessing student work. _____
It is possible to assess critical thinking through the use of rubrics. _____
It is possible to determine that students are using higher level thinking skills through the use of rubrics. _____
Assessing student work should be primarily objective with little room for teacher opinion. _____

General beliefs regarding on-line instruction

Delivering courses and programs online is driven by the fact that this kind of course/program delivery is a better form of teaching and learning than traditional face to face settings. _____
Delivering courses and programs online is driven by financial concerns rather than educational best practices. _____
Delivering courses and programs online are primarily a new educational fad and will eventually give way to the next fad hailed as best practice. _____
Delivering courses and programs online is an educational revolution and will forever change how humankind educates itself. _____
All online materials necessary for the success in my courses are available at no charge to my students. _____
Most online materials necessary for the successful delivery of my courses are available for no charge to my students. _____
My online courses require (or will require) specific resources that are only available to my students for a fee. _____
I am not sure what costs will be incurred by my students as a result of my online courses. _____
Social/people skills can be effectively taught online. _____
I believe that the vast majority of the information found on the internet is factual. _____
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I believe the ability to ascertain good from bad research is an essential skill for students taking courses online.  

I believe that online students should have at least a fundamental understanding of basic research methods.  

There is a potential danger of losing some degree of human dynamics in the teaching-learning process when delivering courses/programs exclusively on-line.  

It is easier for students to be academically dishonest in online courses than in traditional face to face courses.  

The role of colleges and universities are fundamentally changing as a result of technology, especially the internet.  

**Using Technology**

The technology involved in delivering courses/programs online can become more important to the learning process than the content being delivered.  

Students learning how to use and adapt to the technology necessary to take online courses can be as valuable as learning some course material.  

Colleges and universities who specialize in online education, i.e., Argosy and the University of Phoenix, have a clear and distinct advantage of offering courses online when compared to colleges and universities that primarily continue to offer courses in the more traditional ways, i.e., face to face/lecture/discussion, etc.  

Today’s typical university student knows more about technology than their instructors/professors.  

It is difficult to stay current with technological changes due to their rapid rate of change.  

It is difficult for students to obtain and maintain the tools (i.e., adequate computers, programs, connections, etc.) necessary to participate in online courses/programs.  

It is difficult for students to obtain and maintain the technical skills (i.e., typing, using specific programs, researching on the internet, etc.) necessary to participate in online courses/programs.  

It is difficult for instructors/professors to obtain and maintain the tools (i.e., adequate computer, programs, connections, etc.) necessary to teach in online courses/programs.
It is difficult for instructors/professors to obtain and maintain the technical skills (i.e., typing, working specific programs, researching on the internet, etc.) necessary to participate in online courses/programs.

**Specific Teaching Methodology**

Using a scale of 1 to 5, with 1 being the most effective teaching strategy you use, and 5 being the least effective, please rate the following. Use NA for those listed methods you do not use.

15. Lecture
16. Class discussions
17. Specific readings assignments
18. Specific writing assignments
19. Students presenting individual reports to the class
20. Students participating in group projects.
21. Guest lecturers/presentations
22. Using the internet
23. Using video/audio presentations
24. Using case studies
25. Role play
26. Assignments that involve the use of student generated technological projects that range beyond traditional word processing, power point, etc. For example products/artifacts involving student produced audio, photography, video, etc.
27. Collaborating with students on writing articles and/or formal paper presentations.
28. Other (please specify)
Specific Forms of Assessment

Using a scale of 1 to 5, with 1 being the most effective assessment strategy you use to evaluate student work, and 5 being the least effective, please rate the following forms of assessment. Use NA for those listed methods you do not use.

7. Multiple choice questions
8. True/false questions
9. Unannounced quizzes
10. Fill in the blank questions specific answer questions
11. Short answer questions
12. Matching
13. Analogies
14. Essay questions
15. Formal written essays
16. Identification/definition types of questions asked with no choices provided
17. Traditional/technical/term papers.
18. Projects requiring students to conduct research (not literature reviews)
19. Rubrics
20. Other forms of assessment you utilize (please specify)

What kind of assistance do you need, or anticipate you will need to assist to best assist you in your efforts to teach online?
APPENDIX C

ADMINISTRATIVE PERCEPTIONS OF ONLINE LEARNING SURVEY

The following survey is designed to gather specific data to support a better understanding of various perceptions of online teaching and learning. The purpose of collecting the data is to provide a baseline set of information that will help assess where various college and university administrators are, and where they want to be in regard to offering coursework online at their institution. While it is clear that when surveying a select group as small as this it may be possible to identify specific respondents via demographic information all members of the group are assured that their participation in this survey is voluntary and individual responses will be confidential.

**Individual demographics**

Gender   ____F   ____M

Age:      _____under 25  ____25-29   ____ 30-34  _____35-39  _____ 40-44
           ____ 45-49    ____50-54   ____ 55-60  _____61 and above

Administrative rank: _____Department Level _____Dean’s level _____University Campus Level
               _____University System level

Are you tenured?          _____yes _____no

Have you taught a course exclusively on-line before?  _____yes _____no

Have you taught a hybrid course before?     _____yes _____no

Have you taken a course exclusively online?    _____yes _____no

Have you taken a hybrid course before?     _____yes _____no

Have you ever participated in a Faculty Learning Community? _____yes _____no

Total years experience working in pre/primary/secondary education?   ____

Total years experience working in higher education as a professor/instructor?   ____

Total years experience administering in higher education?   ____

Total years teaching at Appalachian State University:   ____
Total years administering at Appalachian State University: _____

Please respond to these statements using the following scale:

1. Strongly Agree
2. Mostly Agree
3. Neutral
4. Mostly disagree
5. Strongly disagree
6. Does not apply to me

**Personal Motivation and Interest**

I am interested in seeing courses taught completely on-line. _____

I am interested in having hybrid (part on-line, part face to face) courses offered. _____

I am trying to decide if teaching on-line is the best way to educate our students. _____

My institution supports putting courses/materials on-line. _____

My institution supports the concept of putting programs on-line. _____

I believe anyone learn any skill necessary to successfully teach online. _____

I feel that I have the necessary skills and abilities to successfully teach online. _____

My basic personality is well suited for online teaching _____

It is possible to teach online courses without the use of University office space. _____

It is possible to teach online courses without the use of any University equipment _____

**Discipline Specific Questions**

Social/people skills are important in my discipline. _____

The content area of my discipline fits easily into an online paradigm of teaching/learning. _____

Students in my discipline who take courses exclusively online may have a harder time than traditional students in mastering specific skills necessary for success. _____

On line materials have eliminated the need for textbooks in my discipline. _____

On line materials have reduced the need for textbooks in my discipline. _____
Most material presently taught at the college/university level will be relevant 25 years from today.

**Pedagogy**

My teaching style is basically learner centered.

My teaching style is basically teacher centered.

Teaching online is essentially the same as teaching traditional face to face courses.

It is possible to teach any subject matter as effectively online as it is to teach it in a traditional face to face setting.

Even with courses offered completely online it is important that students and teachers meet face to face at least once per course in a traditional group session.

My teaching style is largely based on the premise that teachers need to gather and present relevant information to their students and provide specific guidance to insure specific learning outcomes.

My teaching style is largely based on the premise that teachers need to provide their students with directing questions that challenge the students to seek answers by finding their own sources of information.

My teaching style is largely based on the premise that teachers direct students to specific topics of learning without specific direction and/or leading questions, thus encouraging students to seek and share their own conclusions about assigned topics.

It is important for students to have significant input in the direction of the courses they are taking.

It is as possible to build effective learning communities online as it is in face to face courses.

Students in online courses/programs may lose networking opportunities with other members of their discipline when compared to traditional face to face courses.

It is as possible to build positive teacher/student relationships online as it is in face to face courses.

My courses typically require higher level thinking skills on the part of my students.

My courses typically require critical thinking skills on the part of my students.
Assessment

Rubrics are essential when assessing student work.

It is possible to assess critical thinking through the use of rubrics.

It is possible to determine that students are using higher level thinking skills through the use of rubrics.

Assessing student work should be primarily objective with little room for teacher opinion.

General beliefs regarding on-line instruction

Delivering courses and programs online is driven by the fact that this kind of course/program delivery is a better form of teaching and learning than traditional face to face settings.

Delivering courses and programs online is driven by financial concerns rather than educational best practices.

Delivering courses and programs online are primarily a new educational fad and will eventually give way to the next fad hailed as best practice.

Delivering courses and programs online is an educational revolution and will forever change how humankind educates itself.

All online materials necessary for the success in my courses are available at no charge to most students.

Most online materials necessary for the successful delivery of my courses are available for no charge to most students.

Most online courses require (or will require) specific resources that are only available to my students for a fee.

I am not sure what costs will be incurred by students taking online courses.

Social/people skills can be effectively taught online.

I believe that the vast majority of the information found on the internet is factual.
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I believe the ability to ascertain good from bad research is an essential skill for students taking courses online.

I believe that online students should have at least a fundamental understanding of basic research methods.

There is a potential danger of losing some degree of human dynamics in the teaching-learning process when delivering courses/programs exclusively on-line.

It is easier for students to be academically dishonest in online courses than in traditional face to face courses.

The role of colleges and universities are fundamentally changing as a result of technology, especially the internet.

Using Technology

The technology involved in delivering courses/programs online can become more important to the learning process than the content being delivered.

Students learning how to use and adapt to the technology necessary to take online courses can be as valuable as learning some course material.

Colleges and universities who specialize in online education, i.e., Argosy and the University of Phoenix, have a clear and distinct advantage of offering courses online when compared to colleges and universities that primarily continue to offer courses in the more traditional ways, i.e., face to face/lecture/discussion, etc.

Today’s typical university student knows more about technology than their instructors/professors.

It is difficult to stay current with technological changes due to their rapid rate of change.

It is difficult for students to obtain and maintain the tools (i.e., adequate computers, programs, connections, etc.) necessary to participate in online courses/programs.

It is difficult for students to obtain and maintain the technical skills (i.e., typing, using specific programs, researching on the internet, etc.) necessary to participate in online courses/programs.

It is difficult for instructors/professors to obtain and maintain the tools (i.e., adequate computer, programs, connections, etc.) necessary to teach in online courses/programs.
It is difficult for instructors/professors to obtain and maintain the technical skills (i.e., typing, working specific programs, researching on the internet, etc.) necessary to participate in online courses/programs.

**Specific Teaching Methodology**

Please rate the following using a scale of 1 to 5, with 1 being the most effective teaching strategy that professors can use when teaching, and 5 being the least effective. Use NA for the methods listed that you believe have no benefit as a teaching tool at the college and university level.

29. Lecture
30. Class discussions
31. Specific readings assignments
32. Specific writing assignments
33. Students presenting individual reports to the class
34. Students participating in group projects.
35. Guest lecturers/presentations
36. Using the internet
37. Using video/audio presentations
38. Using case studies
39. Role play
40. Assignments that involve the use of student generated technological projects that range beyond traditional word processing, power point, etc. For example products/artifacts involving student produced audio, photography, video, etc.
41. Collaborating with students on writing articles and/or formal paper presentations.
42. Other (please specify)
Specific Forms of Assessment

Using a scale of 1 to 5, with 1 being the most effective assessment strategy used to evaluate student work, and 5 being the least effective, please rate the following forms of assessment. Use NA for those listed methods that you believe are not effective judging student’s work at the college and university levels.

7. Multiple choice questions
8. True/false questions
9. Unannounced quizzes
10. Fill in the blank questions specific answer questions
11. Short answer questions
12. Matching
13. Analogies
14. Essay questions
15. Formal written essays
16. Identification/definition types of questions asked with no choices provided
17. Traditional/technical/term papers.
18. Projects requiring students to conduct research (not literature reviews)
19. Rubrics
20. Other forms of assessment you utilize (please specify)

Open ended question:

What specific kind of assistance do you feel that professors/instructors need to be effective online teachers?
Math CAMMP: A Constructivist Summer Camp for Teachers and Students

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Abstract: This paper describes a multi-faceted, constructivist, graduate mathematics education class with an intensive, student-centered internship. The class incorporates instructional manipulatives, technology, integrated modules, ongoing assessment, supervised internship with elementary and middle grades students, and access to a K-6 database of integrated modules developed by class participants.
Math CAMMP: A Constructivist Summer Camp for Teachers and Students

The Comprehensively Applied Manipulative Mathematics Program (CAMMP) began in 1992 as an idea for teaching elementary and intermediate teachers constructivist strategies. This summer camp approach is implemented in a graduate course that entails an exciting two-for-one enterprise. First, elementary and middle grades teachers enroll in a summer term graduate course on teaching mathematics. Second, using the strategies they have learned, teachers then implement a week-long summer math camp experience for rising first through sixth grade students who come to campus.

This two-for-one enterprise is successful year after year because teachers are looking for new strategies that employ “hands-on learning,” something CAMMP has a reputation for delivering. And the course works for nearby families who rely on CAMMP’s reputation to deliver opportunities for children to get a head start on next year’s mathematics curriculum.

MATH CAMMP – FOR THE TEACHERS

The graduate course is designed for 45 contact hours and is co-taught by the authors. Two faculty (the authors) have historically taught this course with summer funding provided by very high enrollment (averaging 43 students over the past 5 years). The first 30 hours are spent in class reconstructing K-6 mathematics concepts and procedures with teachers using a constructivist, hands-on approach. We refer to our approach as “guided constructivism” (Green, Piel, & Flowers, 2008). We believe, for example, that teachers do not need to wait for their students to “invent,” for example, the standard long division algorithm; it has already been invented and is quite efficient. Rather, we encourage teachers to incorporate a variety of strategies for solving division problems with manipulatives. These manipulative strategies allow students to develop deep conceptual understanding of how the long division algorithm works. The various strategies constitute what we refer to as the elements of CAMMP. By themselves, there is nothing new or novel in any element. But taken together, it is the package, the assembling of these elements into a model of teaching that constitutes the CAMMP approach to teaching mathematics (Piel & Green, 2010).

Elements of CAMMP

Problem Solving Modules. An essential strategy for learning (NCTM, 2000), problem solving is the primary motivation for learning mathematics, and our instruction begins with problem solving situations. Grade level teams design integrated, thematic modules of problems reflecting appropriate grade-level content, such as: insect fractions, rain forest multiplication, arctic subtraction, and space shuttle decimals.
Action Language. CAMMP teaching strategies incorporate a variety of hands-on objects. Traditional language for operations doesn’t really tell children what arrangements are being formed or even how symbols can be arranged. We use action language so our students will understand how arithmetic operations describe possible arrangements of objects (where the actions are later extended to symbols).

<table>
<thead>
<tr>
<th>Operation</th>
<th>Action Language</th>
<th>Traditional Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition</td>
<td>Joined with</td>
<td>Plus</td>
</tr>
<tr>
<td>Subtraction</td>
<td>Take away</td>
<td>Minus</td>
</tr>
<tr>
<td>Multiplication</td>
<td>Sets of</td>
<td>Times</td>
</tr>
<tr>
<td>Division</td>
<td>Grouped into</td>
<td>Divided by or “gazinta”</td>
</tr>
</tbody>
</table>

Concrete Manipulatives. When new concepts are introduced, we believe concrete manipulatives should be used, whether students are in first grade or high school. We use counters and Cuisenaire rods, because both entail one-to-one correspondence between objects and their value, and because they can be held in the hand. With these manipulatives, objects can be joined, taken away, made into sets, and grouped into – all the action language we use for arithmetic and prealgebra.

Representational Manipulatives. These are one level more abstract than concrete manipulatives and allow children to extend actions on objects to actions on representations. Representational manipulatives may be pictures, tally marks, or base 10 blocks. Manipulatives at this level reflect many-to-one values for the objects being manipulated. For example, a tally mark may count as a one, a ten, or a hundred; the same mark has multiple values depending on which column it occupies. Parents are amazed that our summer students solve multi-digit problems using these manipulatives long before they have memorized basic facts.

Technology. Teachers incorporate into their thematic modules one hour each morning of computer-based math activities. These may be undertaken on either internet sites or the college’s network-based math software.

Transition Activities. Many teachers move directly from hands-on manipulatives to symbolic activities as if this conceptual leap was somehow transparent to students. From a student’s point of view, understanding place value often gets lost in this transition, and it is very difficult to teach using a purely textbook or symbolic approach. Our transition activities are the same ones for all the operations – expanded notation and partial sums, products, and differences – so that the same strategy will be successful for students regardless of which operation they are performing. The partials are effective because they do not require regrouping during multi-digit operations.
Symbolic Algorithms. CAMMP teachers understand that symbolic algorithms should come at the end of a sequence of developmentally appropriate actions that give meaning to the arithmetic operations and that originate with actions on objects. By the time CAMMP students learn basic facts and perform standard algorithms, they have a rich history of problem solving actions upon which symbolic meanings can be constructed.

Alternative Algorithms. Some students exhibit a history of difficulty with certain algorithms. For these students, we provide alternative algorithms that are always different (typically less conceptually complex) from the standard algorithm.

Quantitative Solutions. These are the numerical “answers” to math problems and are the most familiar element of learning mathematics for our teachers. But since we always teach through problems solving, quantitative solutions are incomplete. They need to be linked back to the objects they represent.

Referential Meanings. These are the objects to which quantitative solutions refer. Whether referential meaning is trees, bicycles, glaciers, or onions, this meaning can only be obtained by referring to the objects in a problem solving situation. If the is no problem to solve, no situational context, then there is no referential meaning for a solution.

Checking Reasonableness. At the transitional and symbolic levels students should learn that a complete solution includes an assessment of its reasonableness. We teach reasonableness by using an Upper and Lower Limits strategy. For every problem, students determine the logical maximum value and the logical minimum value of the solution. If the computed solution lies between these two logical limits, it is deemed reasonable.

Checking Accuracy. Many teachers and parents object to the use of calculators for computing solutions or checking answers. We use a method of checking called Casting Out Nines. The method is efficient and fun; children often beg teachers, “Can we check our answers, PLEEEEEse?” We understand that this method is imperfect and occasionally results in errors. Yet, students and teachers like it so much that we prefer it as a CAMMP strategy.

Course Structure – Scope and Sequence

Our approach at Math CAMMP is to incorporate the elements above into how we plan for instruction. One of the best vehicles we’ve found is the Integrated, thematic module. Its content comes from science, history, economic, ecological, or other “theme,” and the theme becomes the organizing idea for generating mathematics problems. Teachers are assigned to grade-level teams design a five-day unit of learning activities using their theme.
Along with the integrated, thematic module, teachers integrate math technology through internet-based math games and networked K-6 math software (i.e., IBM’s Math Concepts and Larson’s Math). One hour per morning is spent rotating groups of students through our college computer labs. The technology component provides representational and symbolic levels of math content for the students at an individualized pace.

MATH CAMMP - FOR THE KIDS

The last fifteen contact hours of the course constitutes both the teachers’ practicum and the Math CAMMP for Kids. Parents will have registered their children online and paid a registration fee for each child ($220 in 2010, with ample scholarships for low income students). That fee is about 30 – 40 percent lower than full day camps in the surrounding area. Although math is our main purpose, children attend a full day camp all week long. Mornings are spent doing math, and afternoons are spent doing Lego™ robotics.

Each morning, Monday through Friday, students engage in 3 hours of mathematics problem solving and games in which they learn the essential concepts underlying next year’s math curriculum in the North Carolina Standard Course of Study.

The student-teacher ratio at Math CAMMP is exceptional. Based on teacher’s grade-level interest, they may have as few as two students or as many as five. In 2010 for example, we averaged 2 1/3 students for each teacher. During this week teachers receive immediate, direct feedback from the course instructors, and they compile documentation for each student that conveys to parents: (1) their teacher impact on student learning and (2) “work on” activities for the remainder of the summer.

The visibility of math camp on an otherwise child-sterile environment has helped to illustrate how the college is in the business of developing innovative and cutting edge instructional systems.

LESSONS FOR TEACHERS

Teachers who participate in Math CAMMP gain valuable skills and strategies that help them in the classroom. They learn

- How to make math fun AND educational;
- How to motivate students to achieve high goals;
- That problem solving is a highly motivating context for teaching math;
- How manipulatives speed up rather than slow down learning;
That the same manipulatives are useful across a range of content (e.g.,
Cuisenaire rods for operations on whole numbers, fractions, and decimals);
Strategies for checking answers that motivate students to check their own solutions instead of asking “Is this right?”
How to adapt instruction to students’ levels of understanding;
How manipulatives can be used to differentiate instruction;
How to develop a hierarchy of instructional techniques;
How arithmetic and algebraic operations are related as actions;
How mathematics is a tool for problem solving, not something that simply is an end in itself;
How to plan instruction that incorporates all the elements of CAMMP;
How to develop individual IEPs based on differentiated instruction;
How to incorporate continuous assessment;
How to group students for instruction;
How to appreciate math in a richer, deeper, more meaningful way.

Teachers love Math CAMMP in part because of the direct experience with students and in part because it is unlike any other graduate course they have ever taken. And the students continue to make Math CAMMP the most popular academic/enrichment camp on campus.

REFERENCES


Is there a place for emotions within leadership preparation programmes?

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Abstract

Purpose – This article presents the argument that leadership preparation programmes in the new millennium should be required to train our school leaders emotionally as well as cognitively. A number of scholars have stressed that leaders are increasingly working within roles that are politically sensitive, conflicted and complex, resulting in role anxiety, emotional stress and professional burnout. Principals and vice-principals are frustrated because they are being forced to manage the marketplace, curriculum change and governance factors with an increased emphasis on accountability, marketability and globalisation, often at the expense of their primary role as educators.

Design/Methodology/Approach - Such a discussion is framed within a sociological perspective of emotions and presents the importance of acknowledging the primacy of school leaders' emotions in leadership preparation programs.

Findings – Sociological aspects of emotions are examined within a context of the globalisation, marketisation, and accountability confronting Western education and their implications for extant leadership preparation programs; the latent influences of these broader issues; and, more specifically, their effect on the emotions of leaders within a context unique to Western Canada. Recommendations for what apotropaic the role of leadership preparation programmes should play in shielding leaders from being overwhelmed from within a changing educational landscape are also discussed.

Originality/Value – An examination of the emotions of school leaders and the importance of acknowledging their emotions within preparation programmes remains an understudied topic in the field of education.

Keywords: professional programs, educational administration, educational leadership, emotions

Paper Type: Conceptual Paper

This paper presents the argument that leadership preparation programs in the new millennium need to train and assist our school leaders emotionally as well as cognitively. A number of scholars have stressed that leaders are increasingly working within roles that are conflicted, complex and politically sensitive, resulting in role anxiety, emotional stress and professional burnout. Principals and vice-principals are apparently frustrated because they are being required to manage the marketplace, curriculum change and governance factors with an increased emphasis on accountability, marketisation and globalisation. These societal issues under scrutiny in this paper provide the platform for discussion of school leaders’ emotions and leadership preparation programs. In fact, these issues are ubiquitous but often conflicted, contradictory and complicated depending within which socio-economic context they are examined. It is for this reason that while this paper argues their relevance in how the current and future milieu affects educational leadership, it is beyond the scope of this paper to discuss in detail their finer nuances as they develop into significant movements within society that are also inextricably entangled

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1 The terms administrators, leaders, principals and vice-principals are used are used interchangeably although, internationally, they may have different connotations for some readers.
within the educational policy lattice. The discussion around definitions of these trends will therefore remain brief in order to focus on their implications as they operate within a system of mutual influence in contemporary Western society, affecting not only the emotions of leaders but also leadership preparation programs.

**Globalisation, marketisation & accountability**

Canada, like many other industrialised nations, has been affected by the inexorable trend toward globalisation, marketisation, and accountability. Shifting demographics, changing economies, and technological advancements certainly offer new challenges but also great potentialities and opportunities for our society. For some, these trends offer hope of increased incomes, job opportunities, and networking abilities. To others, they offer only inequities, disenfranchised national and civic identity, and poverty, all of which threaten to marginalise and even undermine the efforts of those who are unable to compete in international markets (McQuillan and Ravanera, 2006). Burbules and Torres (2000) argue that these trends may actually be conceptualised as ideological discourses creating an urgency, real or perceived, that is driving change within society to keep up with the new world order.

When attempting to conceptualise globalization for instance, it becomes evident that there are varied definitions and dimensions. For example, Bottery (2006) offers eight areas for discussion: economic, political, demographic, cultural, technological, American, linguistic, and environmental. Critics charge that while globalisation enhances financial and social capital in developing countries, it does so under the guise of a ‘colonization’ agenda by Western corporations. And indeed, while global organisations such as UNESCO, the UN, and the OECD acknowledge the benefits of globalisation, they also recognise its inherent dangers because these benefits are not distributed equally between or even within societies. These agencies are, however, seeking the means to ensure equitable benefits across countries that would result in equal access to strategies and actions needed to mobilise financial resources in support of sustainable development and reduced poverty. Emerging educational research on this topic reveals not only the soft underbelly of globalisation but, alternatively, its inherent innovative possibilities (Castles and Davidson, 2000; Hardt and Negri, 2002). The more powerful and salient themes in this topic include: the “McDonaldisation” of education policy (Wilkinson, 2006); the shifting roles and priorities of leaders (Bottery, 2006); the growing knowledge economy (Hargreaves, 2003); and the co-modification of education through IT pedagogy, innovation, and practices (Apple, Kenway and Singh, 2005).

Further to this, an examination of marketisation suggests a number of major trends in the literature. Two of the more salient foci may be particularly relevant within a Canadian context. These both concentrate on marketisation as a discursive and structural phenomenon. They suggest that an extant market orientation includes a lexicon that increasingly refers to students as clients and learning as an outcome, while structural metaphors depict education as a marketable commodity (Bartlett, Frederick, Gulbrandsen and Murillo, 2002). Along with this is the intense injection of concepts into school cultures that create growing concerns among scholars (e.g., Bates, 1995) about the dangers of market and industrial influences overriding the traditional values endemic to education. These forces often lead to a renewed and intensified focus on economic principles in education, such as deregulation, competition and stratification (Bartlett et
al., 2002), as well as the managerial concepts such as collegial surveillance, pressures for accountability, standardized testing, and managerial leadership (Bates, 1995).

Finally, in any consideration of accountability, this phenomenon is a nearly ubiquitous issue in education, affecting almost every other topic. Not unlike the phenomena discussed above, accountability has pervaded much of the Western world. A plethora of definitions appear in the various professional literatures. However, a widely accepted definition within education, primarily in the US and increasingly in Canada, seems to remain bound-up within large-scale student assessment frameworks that focus primarily, if not uniquely, on student testing (Earl and Torrance, 2000). The most-widely known legislation in North America to date is quite possibly the US federal act entitled No Child Left Behind (NCLB), the foundation of which seems to be grounded in an accountability system constructed entirely around student-test results. That is, a system that is largely premised on evaluating educational progress defined by student success with rewards or sanctions driving those efforts (Stecher and Kirby, 2004). In Canada, while there has been a long history of teacher assessment, all provinces other than Prince Edward Island, administer some sort of large-scale student assessment, although the scope, grades tested, sample size, format, frequency, and stakes vary widely (Volante, 2007). The provinces are often ranked by the media, depicting Alberta, Quebec, and British Columbia (BC) as leading the way as a result of their assessments, with Ontario following, and the Atlantic provinces lagging behind (Stack, 2006). Raham (1998) asserts that the Canadian education culture, in general, has an inveterate distrust of large-scale achievement data, stressing that testing is incompatible with many of the aims of Canadian education. Furthermore, the data increasingly seem to reflect regional, linguistic, and socio-economic differences rather than real discrepancies in the quality of teaching (Volante, 2007). Hargreaves and Fink (2006a) present the caveat of extant evidence revealing that tests have become progressively easier, presenting the appearance of improvement where none may actually exist.

In summary, Portelli and Solomon (2001) have observed that global forces tend to drive reform movements, resulting in concerns for the potential democratic deficiency in schools as they start to become agents of neo-liberal market reforms. These movements belie a tendency in our school systems to polarise global reforms and local school cultures as virtual antipodes. Shifting demographics of students, new technological infrastructures, and the emerging knowledge society present new challenges but also new potentialities in our schools. More importantly, they impose new demands on school leaders and their emotions (Cline and Necochea, 2000). Leaders are increasingly working within roles that are conflicted, sensitive and complicated, resulting in role anxiety, emotional stress and professional burnout. Principals and vice-principals are frustrated because they are being increasingly forced to manage the marketplace, curriculum change, accountability and governance factors. As a result, Crowson describes our contemporary era as turbulent, but he is quick to indicate that while turbulence has long marked education, things have recently become “different and perhaps more cumulatively frustrating” (2003, p. 30). In essence, both society and education are changing egregiously, and rapidly, as boundary-eroding forces destabilise both the cultural and educational norms. It then becomes incumbent upon leaders to acknowledge the force of these trends and to see the implications for potentially shaping and constraining their emotions. It becomes the role of leadership programs to inject into their curriculum the importance of taking potential leaders’ emotions into account. Therefore, what becomes relevant in this article is the way these movements and their accompanying
tensions affect the work of school leaders by influencing their emotions. All of this should make it abundantly clear that there needs to be a place for the discussion of leaders’ emotions at work in leadership programs during these turbulent times.

The nature of emotions

The study of emotions in educational administration and leadership covers a range of approaches. This paper emphasises a sociological perspective that has been commonly used to view emotions as a social construct (Kemper, 1978), influenced by social interactions and context (White, 1993; Hargreaves, 1998). This perspective distinguishes emotions from being merely psychological constructs and instead considers the contingent effect of interactions with others, environment, and context (White, 1993). In summary, emotions are contextual, political, and relational phenomena as well as the isolated psychological properties of unique individuals (Hargreaves, 1998). They exist in a philosophical dialectic as inter- and intra-personal constructs (Denzin, 1984), deeply embedded in, and configured by, people’s ability to define and achieve their purposes, by their experiences of power and powerlessness, and in their relationships with others (Hargreaves, 1998; Schmidt, 2000).

The research on educational change has, in the past, rarely taken educators’ emotions into consideration (Hargreaves, 2001). In fact, Spillane et al. (2002) concur that emotion as a theoretical construct in education, is often overlooked when examining the impact of educational reform and leadership and given the least recognition of all in leadership preparation programs. In particular, what seems to be missing in the literature is an examination of how emotions influence and are influenced by the work of educators. Some scholars are engaged in researching the topic of educators’ emotional lives and the effect of high stakes accountability (Jeffrey and Woods, 1996), as well as stress-inducing reform strategies (Dinham and Scott, 1996). Other scholars, (e.g., Geijsel and Meijers, 2005) posit that a major responsibility of administrators in organisations is to nurture a culture that provides the emotional support necessary to foster creative and meaningful identity within learning communities. As educators are affected by changes such as those discussed in this article, their professional lives are typically enhanced or demoralised, that is, filled with either positive or negative emotions. When professional roles are characterised by role conflict, role ambiguity, role distance, or confused role expectations, intense and often negative emotional reactions may be the consequence, thus making the work of principals virtually impossible to perform in a fulfilling way (Schmidt, 2000). Feelings of emotional labour (Hochschild, 1979) in these contexts often influence the emotional dynamics surrounding leadership roles and the political and economic climate within which leaders must work. Such conditions may promote intense scrutiny into the routines of schools, as well as administrators’ work in ways that publicly extol or denigrate principals by the media, parents, and the community. As a result, discerning accusatory epithets either humiliate or credit them with creating “poor performing” or “high performing” schools. Such judgments increasingly reify the power of test data into a valid evaluative criterion and inevitably apply pressure for commodification of schools. Repercussions include school leaders experiencing a wide gamut of emotional vicissitudes, ranging from satisfaction, pride and exhilaration to debilitating anxiety, shame, blame, guilt or fear (Schmidt, 2008). Intense emotions such as these may also lead to feelings of decreased commitment and possible resignation. On a more positive note, studies have also shown evidence of “bounded emotionality” wherein members of an organisation...
develop feelings of community and belonging thus creating a social unit out of the school (Kidd, 2004).

**Leadership preparation programs**

A growing debate critical of the applicability of school leadership training programs has been present since the late 1980s in the United States. In fact, a seminal report entitled *Leaders For America’s Schools*, prepared by the University Council for Educational Administration (UCEA) and the National Commission on Excellence in Educational Administration, identified key problem areas in the implementation of leadership training programs. These issues included the following: the definitional ambiguity of educational leadership; an absence of collaboration between school districts and colleges and universities; the low number of minorities and females in the field; a lack of systematic professional development; the poor quality of candidates; irrelevant and outdated curricula; a lack of practical internship/mentorship experiences; the need for licensure systems that promote excellence; and an absence of a national sense of cooperation in preparing school leaders (Hale and Moorman, 2003). Yet, despite these criticisms of leadership standards, many countries are turning to more formal standards by instituting Principal Certificates to help remediate a climate of reduced recruitment and retention in the principalship. As of 2003, at least 35 states adopted standards to guide policy and practice related to principal preparation with encouragement from The Interstate School Leaders’ Licensure Consortium (ISLLC).

Advocates believe that the ISLLC standards remain an important development in the field of educational leadership with the key goal of promoting lasting improvements in school leadership development systems by identifying and adopting change processes that combine the required policy and program elements (Hale and Moorman, 2003). Other countries that have adopted some form of leadership standards and formal Principal Preparation Program or Certification include Singapore, the United Kingdom (UK), Canada and South Africa (Mestry and Schmidt, forthcoming).

Nevertheless, critics of Principal Preparation Programs continue to debate these programs as: not being grounded in rigorous research; reinforcing the status quo; and not providing specific guidance to assist school leaders with their work, which includes their emotions about work (Barnett, 2004; Hale and Moorman, 2003). In other words, preparation programs may adequately address a leader's daily activity with appropriate training and skills but does not address global issues making a systemic overhaul a necessity. In addition, critics argue that there are a lack of ties between public education and universities; little authentic and on-going school-based experiences; little emphasis on management; and too much emphasis on instructional leadership (Hale and Moorman, 2003). Perhaps the most salient criticism is that the jobs of school leaders have altered so dramatically that neither organised professional development programs nor formal university-based programs can, at present, adequately prepare our educational leaders for the 21st century. Thus our educational leaders may be left emotionally overwhelmed and technically incompetent (Hale and Moorman, 2003).
The British Columbia context

This section discusses global issues within the BC context as well as addressing the implications of the BC socio-economic milieu and their potentially transformative effect on BC leaders and leadership preparation programs. The focus of the discussion will be on how the accumulated effect has had a profound influence on the emotions of leaders in general and on educational leadership specifically. An overarching question might be asked along with a few related questions in light of the accolades and criticisms of leadership training: Is it viable, appropriate or even possible for leadership preparation programs to prepare our educational leaders for the emotional upheavals of the 21st century? While seemingly rhetorical in nature, more practical questions for the purpose of our discussion might follow: 1. Do leaders need different skills and training from preparation programs? 2. Does the leadership job description need to be changed? 3. Where do emotions fit in relation to leadership preparation programs?

Research is almost unanimous in finding that the principal’s role has typically been key to successful schools, policy implementation, learning, and achievement (Fullan, 2002). Yet the seemingly inexorable progression of global and market change and the increasing demands for accountability in the Western Canadian school systems are shifting the educational landscape, and even challenging the traditional notion of the principal’s role as the key to successful schooling. Consequently, global forces are defining, changing, and perhaps even diminishing the role of principals as prime leaders. Not surprisingly, British Columbia, like other parts of Canada, faces declining numbers of principals and vice-principals due to retirement and attrition, and difficulties with retention and succession (Cowan, 2004). Consequently, unqualified educators are being hired to fill the gap (Cowan, 2004; Wallace, 2000). The natural and often historical impetus that has seemingly motivated teachers to become principals or vice-principals and that has provided leadership for teachers, students, and schools, seems to have gone by the wayside. Restructuring efforts seem to have derailed these historical intentions as administrators are increasingly expected to manage the environments of down-sizing and amalgamation of school districts, deal with shifting funding formulae and cutbacks, emphasise a skills-oriented curriculum, and involve parents in the governance of schools (Cowan, 2004; Glasman and Couch, 2001; Wallace, 2000). As a result, aspiring leaders are increasingly unsure about whether they even want to take the leap to leadership within this turbulent context, let alone how to meet global and market demands or how to address new accountability pressures. Here we see leaders’ emotions being shaped by the context in which they are deciding to work (White, 1993).

Do leaders need different skills and training provided by preparation programs?

Currently in British Columbia there is no standard principal preparation or certification program. Instead, universities, colleges, independent programs and schools administering certificates, degrees (e.g., M.Ed, Ed.D), and in-service leadership development determine their own curriculum. This leaves the education of leadership incongruent and unstandardised within the province, with some institutions lacking the capacity to implement appropriate leadership preparation programming or in-service opportunities. Therefore, providing principals with the necessary knowledge, skills, values and attitudes, let alone the emotional support to lead schools
effectively, has become increasingly problematic in relation to the challenges faced by a dynamic and changing educational culture.

As leaders’ visions shift to suit the changing educational landscape, leadership training must also evolve. Some researchers (e.g., Bottery, 2006; Day, Harris, Hadfield, Tolley and Beresford, 2000), claim that what leaders do **not** need right now is more competency and skill-based training. Rather, they require greater emphasis in training programs on a holistic model of assisting potential, new or veteran leaders in clarifying their values, their principles and their educational philosophy, as well as providing emotional support especially designated for these chaotic times. For example, within a context of student achievement and accountability, low levels of trust among government, school boards, unions, teachers, parents and administrators pervade British Columbia, and have spiraled into problems of retention and recruitment at leadership levels. What some scholars (for example, Hargreaves, 2003; Earl, 1995) are now requesting is more emphasis on celebrating aspects of student learning not captured in external, quantitative forms of accountability. Leaders need to work towards developing reflexive forms of student assessment that involve teachers, students, and parents (Earl, 1995; Hargreaves, Earl and Schmidt, 2002). This requires leadership preparation programs that work towards transmitting an understanding of the meanings, forms, and implications of student assessment and accountability (Stiggins, 1991). Leaders must not only understand and promote sophisticated forms of accountability, but they also need to do so creatively by fostering teamwork and distributing leadership.

Bottery (2006) suggests that educational leadership preparation programs and leaders in our schools must now frame their curriculum and their work differently in order to harness prevailing negative emotions. Within this context, then, they should be given an opportunity to explore situations through experiential training (e.g., mentorships, internships) in safe environments where they can apply these values and principles. In response to the *BC Principals’ and Vice- Principals’ Needs Survey* (French, n.d.), principals and vice-principals indicated that their most important role was acting as instructional leaders, supporting and supervising effective teaching and learning practices. Other priorities included the following: nurturing and fostering communities of collaborative professional relations; creating learning communities; and communicating and consulting effectively with students, staff, parents, and the broader community. BC leaders inevitably find themselves competing with market-driven government agendas and negotiating their practices to align with special interest groups, the union, the Ministry of Education, parents, the public, and local boards of education, rather than their own vision of what is needed within their schools. In light of these challenges, BC principals and vice-principals believe that leaders, particularly new leaders, require training to develop skills related to managing competing agendas, strategies, and skills for communication with students, staff, parents and public relations, the media, and other community agencies. In addition, they need strategies for balancing their personal and professional lives, their emotions, as well as learning to manage resources and budgets, working with collective agreements, building schedules, dealing with legal issues, and progressive discipline. Apparently, it is the belief of our BC leaders that if these foundational issues are addressed, they would be better equipped not only to deal with reform challenges creatively but also able to think about these issues from critical and higher-order cognitive and emotional intelligence perspectives to help mitigate emotional imbalance. Indeed, the newly developed document, *Leadership Standards for BC*
Principals and Vice-Principals (2006), is organised around four leadership quadrants that address some of the aforementioned recommendations: moral stewardship, instructional leadership, organisational capacity, and relationships, which are intended to:

provide the kind of competencies that schools leaders require to engage staffs, students, parents and community members in education for the 21st century...[Furthermore] the concepts of core leadership practices, distributed leadership, organizational learning, emotional intelligence competencies, data informed decision making, and accountability are reflected in the leadership standards (p. 7).

When asked how best to learn the aforementioned skills, BC principals and vice-principals requested collaborative models of learning in cohorts so that real-life dilemmas could be discussed with respected colleagues and trained facilitators. This could enable them to participate in the various mentorship programs, internships, or coaching programs. In fact, these respondents urged that new leaders have a mentor relationship with more experienced principals or vice-principals in the early stages of their careers.

In addition to these recommendations, an understanding of fundamental global, market, and accountability issues is required to fully comprehend their impact on policy issues, educational issues, and the ways in which they begin to reconceptualise the roles and responsibilities of leaders and the effect on their emotions (Bottery, 2006). In doing so, a full appreciation of local culture and conditions within the larger global context is paramount. Globalisation, as a concept, for instance, is reflective of processes that serve as markers for our place and meaning within the larger society (Bottery, 2006). Fullan (2004) states that leaders must be aware of issues not only within their own locale but also how they relate globally. This he terms “ecological leadership”. The moral imperative, therefore, becomes one of an expanding moral circle of concern whereby leaders must broaden their own ethical concerns beyond the purely local context to include a global concern for all of humanity (Fullan, 2004). Discussions that incorporate morals, values, and ethics must become an objective for, not only leadership preparation programs, but also the entire school community since they influence organisations, pedagogy, and student instruction (Bottery, 2006). Along with this is the need for leadership preparation programs and leaders within their own schools to recognise the need for research-based decision-making training. The promotion of principal and teacher action research in both preparation programs and within schools enables educators to contextualise global issues, all of which should shape professional development agendas. By building the knowledge capacity among their own ranks, leaders are enabling their organisations to critically examine and argue global agendas (Bottery, 2006). But more relevant to the topic of this article, the emotional dimension and accompanying literature on the nature of emotions would benefit leaders as they attempt to transform and build critical knowledge capacities.

Despite these seemingly insurmountable obstacles, Bottery (2006) urges leaders to become vigilant about the causes, synergies, possibilities, and dangers inherent in our global society. Ironically, Bates (1995) and Bartlett et al. (2002) predict that possible negative outcomes of globalization may provide the venue to strategically foster socially critical and democratic interests. Furthermore, in doing so, they may de-naturalise the economic discourse of schooling.
and restore alternative versions of public education. Then they would not simply be relinquishing old definitions of practice and limiting educational opportunities, but exploring new opportunities—opportunities that may require courage and emotional intelligence to implement. All this occurs within a dynamic sociological context as leaders work to balance the struggle to work with, and sometimes against, opposing interest groups in their jurisdictions (e.g., parents, teachers, unions, etc.)

**Do we need to change the job description for our leaders?**

In order to accomplish the initiatives discussed above, Leithwood and Jantzi (1999) suggest that the role definition of leaders should not be so specific as to constrain them from using their own principled discretion. Hargreaves and Fink (2006a) argue that leaders must focus on sustainability. Particularly in an era of “quick fixes” what is needed most are long-term solutions based on reliable structures and values. Indeed, the *Leadership Standards for BC Principals and Vice-Principals* (2006) may very well help our BC leaders embark on some of the aforementioned recommendations by providing guidance, yet leaving enough latitude for leaders to inculcate their own personal stamp on the work they do in schools. Some challenges remain endemic to the BC context, such as lack of job security and increasing vulnerability in leaders’ roles and the emotional effects that come with them. What seems most troubling to principals in British Columbia is the tenuous relationship between the Teachers’ Federation and the Principals’ Association. Therein, principals are typically viewed as the outsider curtailing collaborative improvement in schools (Wallace, 2000). Conditions such as these leave relations between administrators and teachers strained. Studies of effective leadership in the early 1980s (e.g., Blumberg and Greenfield, 1980) indicated that the quality of a principal’s leadership was dependent upon the amount of responsibility, authority and constraints to authority. Furthermore, high quality leadership seemed shaped by the factors that created the constraints and boundaries of that role. Indeed, it seems that public-sector groups and teacher unions have influenced educational governance. This, in turn, has affected the degree of flexibility a principal may exercise in making decisions, which directly or indirectly affect the quality of education and the emotions of leaders asked to provide such quality education (Ueda, 1985).

**Where Do Emotions Fit?**

According to some critics, neo-liberal agendas have resulted in administrators becoming deskilled and driven by accountability, surveillance, and measures of performance leading to a counterculture of fear and lower levels of trust in the educational system (Giroux, 2000). When leadership is characterised by conflict, change, and ambiguity, intense emotional reactions often result (Schmidt, 2000). In BC, what is important to note, is that while teachers have a nexus of support due to a strong activist union, administrators on the other hand, are increasingly vulnerable to governmental, ministerial, and board mandates. Some educators claim that the fallout of this decision has perpetuated an “us versus them” paradigm among teachers and principals (Van Bergeyk, 2005). These challenges come after decisions were made to implement or increase school closures, teacher appraisal processes, and the influence of trustees, which resulted in increased labour unrest. Of course, all of these factors continue to challenge the

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2 The government of BC passed Bill’s 19 and 20 in 1987, which resulted in the exclusion of principals and vice-principals from the teacher federation (MacGinn, 1987).
principals’ role, their assigned level of responsibility, and their inherent authority (Van Bergeyk, 2005). As a result, opposing views concerning many policy and ideological issues exist in BC among the business sector, think tanks such as the Fraser Institute, the BC Teachers’ Federation, teachers themselves, principal associations, school boards, government bodies, and parents. Conflicting ideologies make the administrator’s role much more emotionally precarious as well as intellectually abstruse and challenging to his/her ability to prioritise responsibilities.

If we dig deeper into the currency of authority, the situation may appear rather bleak for BC leaders. In fact, the situation seems to mirror contexts outside the province, such as in the USA. There, although teachers are equipped with the academic credentials and leadership qualities, only a small percentage of teachers apply for leadership positions (Cowan, 2004). Blackman and Fenwick (2000) report that it is not education entirely that becomes a limiting factor in the principal shortage, but also emotional factors. While this paper is not specifically about the shortage of leaders in British Columbia per se, this is a critical factor, along with succession issues, when considering how best to confront the new order challenges facing today’s leaders along with the programmatic leadership preparations that are needed (Hargreaves and Fink, 2006b).

More specifically, scholars (e.g., Gronn, 2003; Fineman, 1993; Hargreaves, 2003), note that leaders are working within a role that is becoming increasingly conflicted and complex, resulting in role anxiety, emotional stress, and professional burnout. For example, principals and vice-principals are frustrated because they are being forced to manage the marketplace, curriculum change, and governance factors as a result of an increased emphasis on accountability; leaders are carrying the burden of emotional labour in greedy organisations that demand excessive physical and emotional work and commitment in order to reduce the costs of production (Fineman, 1993). These conditions typically lead to burnout and early retirement (Gronn, 2003; Hargreaves, 2003). Bates (1995) highlights the structural, relational, resource-based tensions faced by leaders that are a direct result of what he calls “fast capitalism” being mediated into schools. He also takes note of the undemocratic, anti-social, and inequitable means by which traditional schooling is being subverted, particularly with reference to cultural, social, civic, and aesthetic practices. Grace (1995) stresses that schools are increasingly being mired in contradictory possibilities that instill both confidence and doubt in school leaders.

While leaders’ varying responses to reform policies in general are due to the usual subjective nuances of human interpretation, other more specific social, economic and political factors of instability are surfacing. This seems due to an increasingly pervasive culture of fear and punishment leading to potential obstructions to the work ethic of education leaders if not addressed by pre-emptive leadership preparation programs. (Schmidt, 2009). As stated earlier, erratic, volatile or neurotic emotions are often the result of purposes that cannot be achieved (because they are unrealistic, unclear, mutually exclusive, or are constructed around purposes that belong to someone else’s agenda); feelings of power or powerlessness; and relationships that lack trust, all of which may result in anxiety, guilt, frustration or fear (Oatley and Jenkins, 1996). Haviland and Kahlbaugh (1993) note that “people . . . experience frustration, anger and despair as a result of their failure to achieve their goals which are unrealistic” (p. 315). James (1990) states that changes in self-esteem are determined not by accomplishment, but rather by the discrepancy between accomplishment and aspiration leading to anxiety and frustration. These
problems, when applied to leaders, become especially visible and compounded as they are faced with increasingly politicised roles. Leaders, then, may experience negative emotions due to their experiences with power and politics inside and outside the schoolhouse. Finally, leaders often experience negative emotions and concomitant feelings of isolation when there is an absence of emotional, or even empathic, understanding (Denzin, 1984). Woods (1983) suggests that often “the only relief for some . . . [i]s to aim for a measure of role distance, where the individual denies not the role but the virtual self that is implied in the role for all accepting performers” (p. 110). Like Goffman’s (1959) notion of managing a role, leaders may simply distance themselves from their faculty and merely go through the motions out of necessity rather than as something they enjoy doing. Worse, when leaders feel that they either lack skill or competence they might dismiss any possibility of supporting, guiding or reinforcing others out of the fear that comes with uncertainty (Schmidt 2000). Furthermore, “when conflict cannot be resolved . . . individuals will . . . abandon both goals and means and withdraw from the situation” (Calvert, 1975, p. 122). While conflict need not always be stressful (it may even be stimulating), more often it becomes an emotional burden. Hargreaves and Fullan (1996) maintain that “leading is a lonely profession” (p. 5) particularly when a leader’s decisions are constantly under scrutiny; in these situations, interactions between teachers and leaders become strained. As a result, trust and respect for leaders become diminished resulting in increased stress (Schmidt, 2000).

Indeed, stress on the job ranks as one of the primary inhibitors for educators seeking or maintaining school administrator positions (Cushing et al., 2003). Stress comes from many arenas including public criticism, high accountability demands, and high levels of responsibility while authority and flexibility are simultaneously reduced via union contracts and fiscal and legal requirements. Not to be ignored, job stress manifests itself in many ways but most obviously by causing health problems such as high blood pressure and weight gain as well as psychological symptoms of depression and anxiety disorders (Cushing et al., 2003).

In fact, when examining more closely the aspects of leadership that seem to generate the most anxiety, researchers (e.g. Schmoker, 1999) are finding that data use by principals tops the list since test data provide evidence of weakness in schools and the need for change. While it is often difficult to disentangle what causes more anxiety, that is, the use of data or change, cumulatively, both results create stress for both principals and teachers since change threatens extant routines and practices, and data can result in the termination of jobs and school closures. In these situations, principals often have to placate their faculty’s anxieties and fears about the use of data despite their own anxiety over the lack of training in leadership preparation programs when faced with gathering, organising, maintaining, and understanding data. Creighton (2001) believes that educators often fear statistical analysis since they have generally not been exposed to courses in statistical methods in leadership preparation programs. Lortie (1975) concluded in his studies of teachers’ work that they lack confidence in their own ability to raise student performance and, instead, rely heavily on the pressure and support of their administrators.

**Conclusion**

By way of summary it may be said that the leadership “landscape” is changing along with the shifting expectations for the position, the movement to define new standards for candidates, the complex balance between leadership and management skills, a nationwide focus on school-wide
improvement efforts, long hours, high stress, and an imbalance between authority given and the level of accountability expected (Ferrandino and Tirozzi, 2000). These factors have contributed to emotionally-inundated educational leaders. Further, Ferrandino and Tirozzi (2000) state that, overall, principals feel anxious about not having enough time to develop high achieving schools when having to “sell their school” to the public and parents. When taken in their entirety, accountability and its resultant marketisation highlight key obstructions to the work of education leaders. Indeed, a new era of globalisation has produced anxieties and a looming crisis of motivation where “the character becomes corroded, trust is withheld, and commitment is difficult to sustain” (Sennett, 1998, p. 31). Scase (1999) predicts that employee attitudes to work will become more short-term, instrumental, and cynical. When individuals do not feel trusted or valued, insecurity results. Within the cultures of compliance that leaders and their schools seem to exist, emotions can either be “deadly” (filled with fear, anger, apathy, envy, greed) or “dynamic” (filled with obsession, passion, delight, love, desire, trust). Leadership preparation programs are, more than ever before, key factors in preparing leaders of today, not only by including discussions about the nature of emotions as researched in the literature, but also by providing safe venues in which to discuss ways to face the changing landscape in education and, in particular, by preparing administrators to manage a complex role that has the potential of being both emotionally exhilarating or dangerously emotionally debilitating.

References


French, S. (nd), *BC principals’ and vice-principals’ leadership needs survey*, BC Educational Leadership Research.


*Leadership standards for BC principals and Vice-principals* (2006, November), Developed by the BCPVPA Standards Committee.


Schmoker, M. (1999), Results: The Key to Continuous School Improvement, Alexandria, Association for Supervision and Curriculum Development.


Stecher, B. and Kirby, S.N. (Eds), (2004), Organizational Improvement and Accountability: Lessons for Education From Other Sectors. Santa Monica, CA, RAND.


Principles of Andragogy in Practice:
Graduate Students’ Reflections on Learning Experiences

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Purpose

The purpose of this study was to explore how the learning process for adult graduate students could be facilitated according to best practice principles of andragogy. We address the question: What kind of expectations do students have regarding a research methods course (EDPS 509) focused on introductory qualitative and quantitative data analysis methods for achieving new skills essential for novice researchers?

Through the use of specific principles of andragogy, this paper will explore and summarize the graduate students’ learning experiences as they designed and implemented practical individual pilot study projects while enrolled in the EDPS 509 course. This study explores the graduate students’ personal experiences and reflections by documenting their insights on such topics as: (a) how they contributed to and supported their peers’ learning process, (b) how their peers and instructors contributed to and supported their own individual learning, and (c) how the learning environment impacted the process of learning.

Background and Context

The Department of Educational Policy Studies at the University of Alberta, offered a graduate course focused on enabling graduate students to (a) survey and practice different methods for data collection and data analysis and reduction and (b) determine best methods of data collection and analysis for their pilot studies. Students gained a better understanding in these areas, and were thus, able to further their own research projects. Establishing a safe and caring environment was a crucial factor for the students’ success. A safe and caring environment allowed the students’ to feel comfortable in their classroom environment and receptive to support from their instructors and classmates. This was achieved through written and oral feedback (from
the instructors and the students themselves) which helped the students’ to develop and refine their research projects.

The primary aim of the EDPS 509 course was to introduce students to the concepts and methods of data analysis that are appropriate for the study of educational research problems and issues. The purpose of the course was not to provide a total operational competence in any one method of data analysis, but rather, to provide an understanding of the nature of the various approaches that may be taken to reduce research data. There were three objectives for this course, namely to: (a) familiarize students with basic methods of data reduction frequently employed in qualitative studies and (b) in quantitative studies, and (c) further develop and refine data collection, analysis, and synthesis techniques appropriate for students’ research interests.

The pedagogical principles underpinning the conceptualization and implementation of the course are based in a commitment that all participants, students and faculty, bring and share different but equally critical pieces of knowledge and together to co-create a respectful and trusting educational environment where learning through practice was the norm. A fundamental premise established and reinforced in the learning environment centred on risk-taking and sharing. Through small group (groups of three or four) and whole group discussions students learned from each others’ successes and failures as they made sense of and applied theoretical research methods concepts, gleaned from readings and discussed in class, in their individual field-based research pilot studies. Such an environment maintained equality, respect, and dignity for all participants in the teaching and learning context where risk-taking was encouraged and identity explorations were safe. Creating and maintaining such an environment required establishing and maintaining the following norms: (a) people are of prime importance, and as such, bureaucratic needs must occasionally be set aside to first address students’ personal needs; (b) all students can
be successful, often accomplished by relating new concepts to students’ previous experiences and knowledge (i.e., Vygotsky’s notion of scaffolding); (c) the relationships between theory and practice are explored and made explicit through co-construction of understandings (i.e., developing and supporting others to develop analytic and synthetic abilities); (d) excellence is expected by everyone of themselves and their colleagues (i.e., constructive feedback related to conceptualizing and implementation of individual pilot study projects comes from both class peers and faculty); and (e) the collective expertise of the group far exceeds that held by any individual, including the instructors.

In addition to the face-to-face environment created which included the weekly class-time together as well as informal meetings among students and the instructors, a virtual online learning environment (Blackboard Vista/WebCT) was also created to serve as an asynchronous meeting space and a repository of class-materials (e.g., supplemental PowerPoint summaries of class discussions), supplemental readings, and additional enrichment resources such as video materials. These resources were identified and shared by students as well as generated from the course (e.g., segments of classes were video-taped and made available to students through video-casting).

**Theoretical Framework**

The theoretical basis for the analysis of graduate students’ experiences during their learning process draws on: (a) the concept of andragogy (Knowles, 1970, 1975, 1980, 1984; Marshak, 1983) and (b) reciprocal learning (Allen, 2003; Lambert, 1998, 2003).

The term *andragogy* became popular due to Malcolm Knowles’ work, which contended that a successful learning plan for adults should be based on a different set of assumptions than those of the traditional (pedagogical) learning model. In particular, his concept of adult learning
is based on the five main postulations; these are: (a) self-concept - a person moves from being dependent towards being a self-directed, (b) experience - a person accumulates a growing reservoir of experiences that becomes an increasing resource for learning, (c) readiness to learn - learning becomes increasingly oriented to the developmental tasks of person’s social roles, (d) orientation to learning - learning shifts from being subject-centred to being problem centred, and (e) motivation to learn - as people mature the motivation to learn becomes intrinsic (Knowles, 1984). Merriam and Caffarella (1991, p. 249) pointed out that Knowles’ concept of andragogy is an attempt to build a comprehensive theory or model of adult learning that is anchored in the characteristics of adult students. Marshak (1983) stated that andragogy is described by a problem project orientation; the use of experienced-based techniques; the facilitation of self-motivation to support learning; and, in general, the crucial role of the learner in acquiring new knowledge or skills. Andragogy means that instruction for adults needs to focus on the process and less on the content being taught (Tough, 1981). Instructors should adopt roles of facilitators or sources rather than lectures or graders. Mezirow (1990, p. 360) portrayed this specific type of educator as an “empathetic provocateur” where the instructor is both a committed co-learner and a caring guide while stimulating and motivating students to deeper learning and critical reflection. MacKeracher (1996) recommended establishing learner networks through small group and peer teaching techniques that lead to the formation of peer relationships and potential study partnerships and alliances. Such collaborative learning is foundational to adult education practice, where communicative interactions and an exchange of knowledge among peers and instructors is shared; thus students are able to renegotiate existing meanings, co-construct new meanings, and let go of unviable meanings (MacKeracher, 1996). Participatory and active learning teaching enables students to discuss, practice, and apply their learning individually and
collaboratively, rather then learning in a passive context that promotes information-giving teachings (Silberman, 1996). This model of involvement highlights a learner-centered approach which focuses on: the autonomy of the student, in terms of choice within the learning situation: responsiveness to the students’ desires and learning methods; full commitment to the act of learning; learning as a process and not as a possession (Thomas, 1991); developing a sense of competency; and organizing their meaning-making processes (Perry, 1970).

Many decades ago, Kurt Lewin (1948) advocated that learning environments should provide a sense of belonging, security, and freedom to make such choices. Therefore, this learning environment could reduce levels of distress and fear by building mutual trust, respect, safety (Knowles, 1975), and enhance self-esteem (Brundage, & MacKeracher, 1980). It is important to note the holistic learning approach, which means that the learning process concentrates on the emotional, relational, physical, metaphoric or intuitive, and spiritual abilities combined together with the cognitive, and intellectual elements (Griffen, 1988; MacKeracher, 1996).

On the other hand, this learning process might be viewed as complicated and painful, as it might create an emotional upheaval for the students, impacting their family and work commitments (Cranton, 1994). Researchers have expressed that “[l]earning through higher education is not just a mental journey; it also is a very treacherous journey engaging the heart and identity of the adult” (Kasworm, Sandmann, & Sissell, 2000, p. 458). Kasworm et al. (2000) stressed that postsecondary educational institutions, such as universities, should provide support that works with, instead of in opposition to, the adult life-world. Lave and Wenger (1991) declared that this deeper learning is best done in the learning communities where the being of the student is not denied but is a part of a situated and collaborative compromise.
One of the approaches which helps to create this favourable learning environment is reciprocal teaching. It is a cooperative learning instructional method, in which natural dialogue models are used to reveal the learners' thinking processes about a shared learning experience. Instructors foster reciprocal teaching through their belief that collaborative construction of meaning between themselves and their students will lead to a higher quality of learning (Allen, 2003). Students take ownership of their own roles in reciprocal teaching when they feel comfortable expressing their ideas and opinions in an open dialogue. The learning community is able to reinforce understanding of concepts, as well as to see, hear, and correct misconceptions that otherwise might not have been apparent to fellow community members. All members of the community have a shared responsibility for leading and taking part in the dialogue during the learning experiences (Hashey & Connors, 2003). Lambert’s (1998, 2003) work redefined leadership as constructivist learning which entails actively creating knowledge (Le Francois, 2000). Specifically, social constructivism emphasizes that learning occurs when people interact with one another in order to construct knowledge, which happens within collaborative learning environments (Barker, 2001). When defining leadership as constructivist learning, Lambert remarked that:

The key notion in this definition is that leadership is about learning together, and constructing meaning and knowledge collectively and collaboratively. It involves opportunities to surface and mediate perceptions, values, beliefs, information, and assumptions through continuing conversations; to inquire about and generate ideas together; to seek to reflect upon and make sense of work in the light of shared beliefs and new information; and to create actions that grow out of these new understandings. Such is the core of leadership. (pp. 5-6)

**Method and Data Source**

To investigate the facilitation of an adult learning environment described by trust, respect and risk-taking, we examined our individual practices as graduate students (3 master students at
different stages of their degree programs, of the total of 12 enrolled in the course). Reciprocal learning conceptualized by Lambert (1998) has been used to conceptualize this study. A constructivist pedagogy was used which respects multiple realities and allows one to “create mutual trust, hear each other, pose questions and look for answers together, and make sense of our common work” (Lambert, 1998, p. 18).

The main research approach used was autoethnography (Patton, 2002; Thomas, 1993). This was used to uncover and co-construct deeper understanding of how the adult learning environments facilitate reciprocal learning and teaching relationships. As expressed by Bullough and Pinnegar (2001), we were drawn to autoethnography as a form of self-study to “provoke, challenge, and illuminate rather than confirm or settle” (p.20). We examined our experiences and reflections around the establishment and maintenance of norms supporting individual and collective learning. This inquiry began in January 2010 and data collection and analysis were completed by August 2010. Data were created and collected through a series of open-ended format questions that students (co-authors of this paper) responded to. During the thematic analysis, we read and compared the data to categorize themes related to the purpose of the study (Berg, 2004; Merriam, 1998; Patton, 2002). Students’ verbatim quotes have been used to capture the significance of shared and diverse experiences and to support the conclusions.

Trustworthiness of the collected data and the following analysis was obtained through member checking of the thematic interpretations (Bogdan & Biklen, 2007). Each student verified, corrected, and elaborated upon the emerging themes and supporting quotes.
Students’ Expressions

This portion of the paper describes the students’ “wish list” for learning, it also examines whether the instructional approaches as implemented and content of the course fulfilled their needs and expectations. We also discovered the students’ points of view for specific learning experience and environment, including (a) how students’ contributed to their peers’ learning, (b) how peers/instructors contributed to students’ own individual learning, and (c) how the learning environment impacted the process. Finally, we also examine how well this course fulfilled students’ expectations regarding the learning of new research skills essential for novice researchers.

Expectations versus Reality: Students’ Words on the Learning Process

Students are well equipped to critique the value of their learning experiences in higher education and we should trust their insights and intuitions on these matters. In general, students are in a reasonable position to critique the more tangible, short-term components of their experience and more general aspects of the process of higher education. Students can be realistic arbiters on the degree of impact from the following: technology integration, the quality of teaching spaces – real and virtual, and the teaching facilitation skills of academic staff. Students’ posses a fairly straightforward vision for teaching styles they prefer. The fundamentals of effective teaching, clear goals, feedback on progress, transparent assessment requirements, and grading practices are keystones to their expectations. They also welcome personal interaction with instructors and being treated as individuals by instructors who show concern for their progress. These expectations thoroughly correspond with what the literature articulates as generating an effective higher education environment (e.g., James, 2002; Ramsden, 1992).
Students were asked what kind of expectations they had regarding the EDPS 509 course and for achieving new skills that are essential for novice researchers, and whether or not this course fulfilled them. If the students’ responded yes, we wanted to determine what exactly it was that helped them to choose their own approach for their individual research projects. The students’ expectations and reflections after having finished the course are described below:

Prior to participating in EDPS 509, I had minimal background knowledge surrounding both qualitative and quantitative research methods. I held high expectations of this course. I wanted to gain new skills essential for future research projects. I wanted to learn more about the effectiveness of using both quantitative and qualitative research methods together for research projects.

I wanted to gain more insight surrounding research interview processes. Prior to this course, I had minimal experience interviewing people for research purposes. I wanted to learn more about the different types of questions available [...] when forming an interview schedule. I wanted to heighten my questioning skills in order to keep interviews on topic while retrieving insightful information.

I wanted to heighten my skills required to observe an environment more thoroughly. I wanted to gain more knowledge as to what is worth writing down and what is not when observing an environment. I wanted to learn some effective note-taking techniques (such as how to keep from looking up and down all the time with the possibility of missing some important occurrences).

I wanted to learn more about statistics, populations, standard deviation, normal distribution, kurtosis, calculating the median, mode, and mean, analyzing residuals, regression lines, plotting data, and Z-scores. I wanted to gain greater skills working with numbers. I wanted to be able to understand what the numbers refer to when described in scholarly papers.

I especially enjoyed the courses assignments. I felt that each assignment built upon the previous assignment, and they were very practical assignments. Each assignment helped prepare me to write my pilot study, and my pilot study has helped me to write my Thesis. I also liked the order of the assignments. The semester started off by first engaging in qualitative research. [...] These were very practical assignments and very beneficial for me. [...] I had to learn to do interviews through experience and practice; it is not something that cannot be learned vicariously. [...] I also really appreciated the feedback I got on my assignments, because they were very applicable to my final assignment which was my pilot study. I was able to use the feedback to self correct myself for when I worked on my pilot study. I learned it was a lot harder to observe someone in a setting, and how to make good observation notes. It was very interesting to learn how to observe, and it led to even more questions that I would not have though of if I hadn’t taken to the time to sit and observe the situation. I am appreciative that these assignments came first before the quantitative portion of the course. Having the interview and observation assignments come first, helped me to learn how to conduct my data collection for my pilot
study. I was then able to work on my data collection and data analysis during the rest of the semester. The course then started quantitative research, and I liked that assignment built upon what we had learned that week. And that each statistical assignment built upon the previous assignment, reinforcing the concepts that we had learned. And lastly, I am thankful for the feedback I received on my pilot study. My pilot study has helped me decide how to proceed with my Thesis research and has been completely beneficial for me.

EDPS 509 exceeded my expectations! I gained a tremendous amount of new knowledge surrounding the major elements required in qualitative and quantitative studies. The subjects taught that helped me choose the mixed methods approach for my future research project were: understanding the importance behind standard deviation, normal distribution, regression lines etc... I also found comfort in observing environments of interest due to the class assignment and lectures. My interviewing skills are still improving however I know they are much more effective than they were prior to this course.

I expected to learn how to plan and execute a small scale study related to my thesis research. The course definitely helped me to do this.

I feel that I benefited greatly from taking the EDPS 509 course; without this course, I do not think I would feel as prepared as I do to write and finish my Thesis and I am very grateful for this. I am grateful because the knowledge I have gained from my EDPS 509 has been tremendously useful and advantageous to me.

Students also shared their preferences regarding how the course materials (e.g., textbooks, PowerPoint files, video files, etc.) and course activities (class time, use of Blackboard Vista/WebCT, etc.) were helpful in enhancing their learning in this course. In their words:

All the course materials and activities were helpful in my learning. The textbook provided me with the opportunity to learn in more detail interview and observation processes. Following class lectures, I went back to re-read the assigned chapters and was able to gain a deeper understanding of the material. When completing the first two assignments, the textbook was very useful. I was able to go back and ensure that I understood the types of questions used in interviews, learn more about sampling strategies. [...]

The PowerPoint files allowed me to go back and review the material learned during class time. The PowerPoint files were especially helpful with assignments B1 and B2 [introductory statistics] as they clearly identified the elements required when making the necessary calculations (e.g., standard deviation). [...]

The video files were extraordinary! I viewed the video files over five times each as I completed my assignments. In fact, the video files helped me find mistakes in my work prior to handing in my assignments. If I was not able to view the video files in slow-motion, as I did, I would not have recognized some areas where I made simple errors. I would have handed my work in with those mistakes still on the paper. This is the first
class I ever experienced video files. They proved to assist me in receiving 15/15 and 15/15 on two major class assignments. I want to make it known that I did pay attention in all my classes, but these video files allowed me to break the lectures down and hone in on areas that I may have misinterpreted.

The class time was well used. The instructors were fully prepared for each class. The class lectures lined up perfectly with the assigned readings and assignments. I believe the instructors provided us with ample time to ask questions whilst providing us with the perfect amount of information required to successfully complete the assignments.

WebCT provided me with the opportunity to view how my assignment marks related the class marks. WebCT also informed me when the video files were available and how to download powerpoint files. I used WebCT on a regular basis throughout the course. The course materials and activities helped to enhance my learning by providing me with many tools to be able to review the material after it was taught. Not all students learn the same way. I, obviously, learn by having the opportunity to review, review, and review even more the material being taught. Without the variety of class materials and activities provided by the EDPS 509 instructors, I would not have been able to learn as much as I did in this course.

I wish that each class had been video recorded, because I do not want to forget anything that I learned! I feel that everything I learned was important, and would like to one day be able to use all of the knowledge I’ve gained to write research documents. I thought the textbook for the qualitative portion was well written, and I still refer to it now. I enjoyed that all the documents used during the course were available to the students after the class. I have saved them, and I plan on referring to them whenever I need them. I did feel that the quantitative textbook was slightly confusing, but that could be my own lack of abilities for statistics. It was also very nice that my professors answered the weekly chapter questions, because I had a hard time answering all of those questions. I think the instructors did a good job of maximizing the use of WebCT.

The activity and class discussion was very advantageous to my learning on this topic. The textbook itself wasn’t overly helpful. But I did find that the chapters for the quantitative sections of our course that were on WebCT to be very helpful. I found I learned the most from talking to my two professors one on one, and from the powerpoint presentations that were given in class. WebCT was helpful, but mainly for accessing course readings and materials.

Finally, students were asked how - in their opinion - this course and/or content might be improved. What students would like to change or improve in this course is described below:

[...]I believe the intensity of this course prepared me for what is required in order to succeed in a PhD Program. I think the assignments were well prepared with ample time to complete them all. The course readings were sufficient. They challenged me to keep up with my work and to pay close attention to the “big ideas” in the literature.
I personally could have done with more feedback, but I am someone that is really interested in learning what my professors thought. I view my professors as experts, whereas, I am only a student and I am here to learn from them. So I very much value my professor’s opinions. But I’m very fanatical about feedback. I like that professors tell you what they liked or what they didn’t like. But I am someone that would like great detail in my feedback.

One thing that puzzled me on the first assignment (Interview) my instructors wanted to give us our assignment back before we handed in our second assignment (observation) because they wanted the feedback to help us write our second assignment. I found that my feedback for my interview did not in any way help me write my observation assignment. I think everything was so very well done! And there was so much that was covered in a short amount of time. Maybe it should be a 2 semester course. [...] I really enjoyed the qualitative research portion and the activities and group work. I do have one suggestion for the quantitative research portion. It would have been beneficial for me after every statistical assignment to go over a journal article that used that specific statistical analysis. I think this would have solidified how that specific statistical analysis is used and how to make sense of the data; or a supplementary activity that you can read or do on WebCT on your own time, or a supplementary class with an activity like that. I would have gone.

It probably would have been hard to generate our own data as a class to analyze, but that could have been fun and more meaningful because the students would be personally involved. But I understand that there are time constraints.

Maybe for the qualitative section, they could look at other qualitative data collection techniques? The interview was helpful, but maybe instead of the observation, they could do a focus group?

For instructors it was very important to know whether students would recommend EDPS 509 to other graduate students and “why?” The students’ voices are described below:

This is a great course to help you focus your research area and give you a concrete way to practice your research.

I would definitely recommend it and I have been. I talk about it to other students, and they were sad that they missed out on the opportunity of taking this class. At the end of the semester I presented my pilot study at research day, and a lot of the students were asking when I had time to do this during my course work and I explained it was part of my course work. I wish there were more classes like this! I’m thinking of doing my PhD studies, and I’m hoping that the department has something good like this on their course list. I tried to get into some similar classes outside of the department, but couldn’t get in because the other departments had to let their own students in first and there wasn’t any room for me. I think this class was really beneficial, and very memorable to me. Everything I learned was very applicable to my own study, and had prepared me for areas of interests I have and would like to explore in the future. I think this has been my favourite class. After having “graduated” from the class, I feel very prepared and ready
to engage in research and begin and finish my Thesis. It’s a wonderful feeling, and I think everyone could benefit from this class if they are writing a Thesis.

I would highly recommend EDPS 509 to other graduate students. In fact, I have already spoken highly of the two instructors and the course to a peer who begins his PhD Program in Fall 2010. I believe any graduate student who enrolls in EDPS 509 and is fortunate enough to have the two instructors I had will benefit from the phenomenal learning environment. EDPS 509 has provided me with the tools “to be dangerous” as I continue my journey toward becoming an educational researcher. I can now make sense of the numbers in scholarly papers. As well, I can justify the positive implications a qualitative study can generate.

Students who took EDPS 509 course wanted to gain new skills essential for their future research projects. They expected to gain new knowledge surrounding the major elements required in qualitative and quantitative studies and mostly they benefited from taking this course. Students perceived all the course materials and activities very helpful in their learning process. Mainly, the participants’ highlighted: (a) the video files, (b) the PowerPoint files, (c) Blackboard Vista/WebCT virtual learning environment, (d) class time use, and (e) the text book, as the most helpful course materials. Regarding changes which could improve this course, students suggested to: (a) give them more feedback, (b) work on some statistics contained in the articles, (c) generate “class” or “students” data and analyze it together, and (d) introduce other qualitative data collection, as well.

**How students contributed to their peers’ learning**

It is essential to the adult education practice and this graduate course, that each student will have the opportunity to engage in collaborative learning, to negotiate existing meanings, to co-construct new meanings, and to let go of unviable meanings (MacKeracher, 1996).

Throughout this course, the graduate students engaged in ongoing meaning making through collaborative dialogue, planning and writing with their peers. How and to what extent students contributed to their peers' learning is described below:
I provided engaged, constructive feedback throughout the course. In particular, a classmate and I helped each other edit our final projects, in order to enhance our own learning by learning from each other.

I consistently collaborated with my peers during EDPS 509. I ensured that my peers were able to collaborate during and after class time (e.g., I personally drove to some of my peers’ houses to pick them up so we could work collaboratively on assignments). Throughout the course, I asked and responded to questions appropriately during whole-class discussions. I do not believe I interrupted the flow of the class due to a question. I never talked to others while the instructors were teaching. I consistently gave my full attention and respect to the instructors when they were teaching. I believe I offered caring feedback to group members during small group discussions. When I noted that a group member made a mistake on an assignment question, I quickly pointed it out. As I reviewed the video files, I noticed there were some areas that my group members did not understand, so I contacted them to make sure they had an opportunity to learn from their incorrect responses prior to handing in their work. I never gave them the answers. I tried to teach them that what they had put down as an answer was not correct and strived to get them to understand why.

I was able to explain some things in greater detail that they didn’t understand during group work. I think possibly I was able to contribute to my peers’ learning during the times we were given class discussion times; I was able to give peer feedback during this time.

Students contributed to their peers’ learning process in a variety of ways, including: (a) contributing in class discussions; (b) helping each other to edit their final projects; (c) asking and responding to questions during the whole-class discussions; (d) collaboration with peers during and after class time; (e) providing constructive, engaged, and positive feedback; and (f) provoking reflective thinking. Meaning making and learning were improved within this collaborative learning community (Lave & Wenger, 1991).

**How peers and instructors contributed to students’ own individual learning**

The design of this graduate course reflects Lambert’s (1998) conceptualization of reciprocal learning (i.e., reflection, inquiry, dialogue and action) and Griffen (1988) and MacKeracher’s (1996) notions of holistic learning (i.e., the learning process addresses emotional, relational, physical, metaphoric or intuitive, and spiritual capacities in addition to cognitive and
intellectual capacities). Students described how their peers and instructors contributed to their holistic and individualized learning. Drawing on the students’ voices, the nature of reciprocal and holistic learning within this learning environment is described below:

I enjoyed the group work we did in EDPS 509, it was very beneficial. I found that peer debriefing helped me to see other perspectives and ways of looking at my own data. It was nice to hear what my peers had to say, we are in similar situations and can learn from each other. I liked that our instructors gave us an opportunity during class time to talk about our assignments and what questions we have or problems we had run into. It was very practical because if you found yourself in a similar situation, you would know how to handle it. I really liked that we were able to have different groups during the semester instead of the same ones all the time.

My peers contributed to my learning by (1) responding to instructor questions during whole-class discussions, (2) collaborating willingly in small group discussions, (3) providing constructive feedback on assignments, and (4) sharing their knowledge outside of class time on assigned topics.

The instructors were always good at pausing and asking if there were any questions. Also, if I had any questions not answered in class I was able to email either instructor and ask for help, and I would receive a prompt reply with an answer or an invite to talk about the question in person. For the quantitative assignments, the instructors held extra support classes to help any student with their assignment. Also, each instructor provided two sets of feedback on each assignment. This was beneficial to receive two different perspectives on each of the assignments.

At the beginning of the semester, the instructors had the class fill out a pilot study proposal form which was a rough outline of what your pilot study would entail. I really appreciated that we had an opportunity to fill out this sheet during the first week of class. I already had a good idea of what my pilot study was going to be about, so I think it was easier for me to fill out compared to some of my classmates who had not thought about what they wanted to do yet. Having already an idea of what I wanted my pilot study to be on before coming to class allowed me to benefit from the feedback on my proposal sheet. I knew what areas I had a good understanding of, and the areas that I would need to work harder on that semester. For instance, I had already written an introduction, literature review, and methodology section in a previous class, I knew that I would have to pay closer attention to the data analysis section because I lacked in that area.

The instructors provided support and feedback in so many ways. First of all, they both were positively responsive to students’ questions during class time. They never seemed to showcase a negative attitude toward any question aimed toward the topics being covered. They stopped the lectures when they thought the material was getting intense to ensure we understood the material. Secondly, after class the instructors did not run out of the
classroom with their books. They did not avoid any students who had questions after class.

Finally, both instructors made themselves available to meet with students outside of class time. As I stated above, their approachability was exceedingly high! Both instructors were very accessible when I had specific questions regarding the assignments. I met with one instructor on the weekend and the other during weekday office hours. Both instructors were willing to help out in any way they could. Their willingness to meet outside of class time definitely provided me with the opportunity to reach a higher level of learning in this course.

The feedback that the instructors provided was effective. Both instructors had individual ways of strategically assessing my work whilst providing constructive feedback. Although I did well in the course, I still had many questions surrounding my work because I wanted to learn from my areas of weakness. Both instructors communicated my areas of weakness in a positive manner (e.g., pointing out that my writing could have been stronger in my pilot study).

The instructors provided much support and feedback throughout the course, in person, via email, and in writing. It was so wonderful having 2 professors and receiving 2 sets of feedback! Whenever I had a question, I always felt like I could ask either professor, and I did, and I was always pleased with the help I received.

Students described many ways that peers and instructors contributed to their own individual learning, including: (a) illuminating and supporting students with their research topics; (b) sharing knowledge, expertise, and resources; (c) asking questions and providing feedback to clarify context used within the pilot study; (d) creating valuable networking opportunities; and (e) being courteous, and empathetic. In general, students felt that their learning was enhanced by individual and collective feedback and reflection.

How the learning environment impacted the process

From the beginning of the course, the students and instructors discussed and planned the creation and maintenance of a respectful learning environment. Adult learners should have learning conditions which enables self-directed learning available to them. The course instructors recognized this and sought to provide ongoing opportunities for the graduate students to
diagnose their needs, set personalized learning goals, design and implement learning, and reflect
on and evaluate their own learning (Knowles, 1984; Tough, 1981). Below are the students’
voices which illustrate how and to what extent this environment impacted adult learning:

The instructors created and maintained a climate of mutual respect by allowing us to share our feelings toward the topics being taught. When I had difficulty grasping certain concepts, the instructors were empathetic toward my level of understanding. They never let me believe I was out of place. They walked around when we were in small groups and assisted in any way they could as we were discussing the assigned topics. The instructors made me believe they were “partners in my education”. They held positive views of all the topics being covered while sharing their personal thoughts surrounding specific areas they personally believed were most effective (e.g., qualitative vs. quantitative research methods).

The instructors showed me a great deal of respect when I missed one class. The reason I missed that class was to present a research poster at a conference in Indianapolis. The instructors were happy for me when I told them of this opportunity!

There was always an open and relaxed feeling in the class. From the very beginning, both instructors were warm and kind, yet had high expectations for us. It was wonderful, because it made you want to work harder for them! We had many collaborative activities, and when we worked in small groups with other classmates, the activities were very student-directed. I felt like they were letting us take ownership over our own learning, and that was great.

I believe that both instructors endeavored to create and maintain a climate of mutual respect. I think it’s harder to learn in a poor environment, or to feel comfortable in coming to class or listening to an instructor that you do not respect. During the middle of the semester, the instructors had the students fill out a feedback sheet so that they were able to adjust their lessons to meet our needs and our desires. That was nice because it showed that they cared, and wanted the classes to be productive and meaningful for everyone. The instructors always asked if we had any questions during the lecture. Also, the instructors sent out an email after every course to review what we had done, and what we would be doing next class, and what we needed to do before next class. The professors also sat in on small group discussion to hear our thoughts, and answer any questions and were more accessible then large group discussions.

My peers created and maintained a climate of mutual respect by taking time to discuss topics outside of class time. My small group was very helpful as I gained many new insights from our discussions. I never believed I was asking a “bad” question during class. My peers would support me by agreeing that they shared the same difficulty as I did. This in itself helped create a trusting environment. I have taken some courses where I have asked questions that seemed to be “bad” questions as others would answer them
without giving the instructor time to listen to the full question. This type of scenario can force a student to never ask questions.

The students in this course were highly respectful to one another at all times during and after class time.

*My peers were very involved in the small group activities, and [...] we all gained a lot from them.*

*I felt that my peers endeavoured to create and maintain a climate of mutual respect. It was nice to have group activities where I got to interact with new people I didn’t know and learn more about them and their research interests. I felt very comfortable in the classroom, and enjoyed being there and working in groups.*

Together, the students and instructors endeavoured to create a learning environment that supported each student’s individual development. This learning environment was characterized as safe and respectful due to the: (a) establishment of trust, (b) recognition of both students’ and instructors’ expertise, feelings, and experiences, (c) accessibility of instructors and peers through face-to-face interactions and on-line or e-mail correspondence, and (d) opportunities for risk-taking, asking questions, and learning from successes and mistakes. Students discovered a sense of belonging and security (Lewin, 1948). Additionally, within a collaborative learning environment characterized by trust, respect and safety, students’ fear, frustrations and distress about the research processes were diminished (Brundage & MacKeracher, 1980). Trust was an integral factor which allowed students to feel comfortable collaborating and reflecting together. Once trusting relationships were established, the students were more open to feedback from their peers and instructors. When students had the physical and metaphorical space to dialogue, question, and evaluate their work in progress, learning became a dialectical process of consideration and reflection on alternative points of view and multiple theoretical perspectives that eventually led to more integrated understanding (Grundy, 1990).
In general, the results we have received in this study are very similar to the results obtained by PhD students in 2008 (Wright et al., 2009). It appears that the instructors who participated in this study were aware of how important it is to create such a student-centred, safe, supportive learning environment: a learning community was fostered by the participants based on the principles of adult learning in practice.

**Conclusions**

This paper summarized an empirical study of a higher education andragogical process that facilitated the development of basic research skills and understandings in participant graduate students. This was facilitated through preparation their pilot studies and familiarizing students with the basics of data analysis through the use of specific adult learning principles. Overall, the students’ experiences and perceptions of this learning environment were very positive. They would recommend this course to their peers within department or faculty. Furthermore, constructive feedback from students identified additional useful learning supports which will need to be incorporated into future course offerings.

Our findings describe how the learning environment impacted the process of learning and enabled reciprocal relationships. As well as, the students contributed to their peers’ learning and benefited from their peers’ and instructors’ contributions to their own individual learning.

While this course was viewed primarily as a positive learning experience, students’ voices illuminated how learning process could be intensified. Based on the findings and conclusions of this study, we offer the following suggestions for practice:

1. Recognize and respect the expertise and desire mature students bring to the learning environment by creating real and virtual spaces that are safe and respectful.
2. Face-to-face interactions, when possible, should be used to establish trusting relationships among students and instructors.

3. Active learning should be promoted through inquiry, collaboration and reflection.

4. Graduate students’ needs should be recognized and addressed through “just-in-time” learning to help them in their learning process – this can be facilitated through purposefully designed assignments that enable students to successively build knowledge, skills, and understandings they perceive as relevant and important for their educational and career aspirations.

5. Class groupings should be done with flexibility giving students a balance between choosing who they will interact with and rotate through groups to maximize exposure to diversity of perspectives.

6. Students should have access to a variety of different research perspectives and understand how each tool is best suited to address different types of research questions.

7. Instructors should assist students with making connections between theory and practice, novices are not able to make these connections easily and need, at least initially, the guidance that can be provided by more experienced instructors.

8. Students should be provided with formative as well as summative feedback on assignments – assignments should build on previous knowledge, either already possessed by the learners or acquired through class experiences/assignments designed to scaffold subsequent learning.
References


James, R. (2002). Students’ changing expectations of higher education and the consequences of mismatches with the reality. Responding to Student Expectations, OECD report, pp. 70-83.


THE GOOD BEHAVIOR GAME AS A MEANS TO TEACH APPROPRIATE SOCIAL SKILLS IN A CLASSROOM SETTING

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Social skills refer to learned behaviors that enable a person to interact with others in ways that evoke positive responses and decrease the likelihood of negative responses. However, not all children develop the same degrees of socially acceptable behavior and so may experience negative relationships with those they come in contact with in the school setting. (Elliott, Roach, & Beddow, 2008). As a result, distracting or disruptive behaviors have become the primary reason for referrals for disciplinary problems in the school setting (Wright-Gallo, Higbee, Reagon, & Davey, 2006).

Two basic distinctions of behavior in a classroom are appropriate or desired behavior versus a target or problem behavior. “A problem can be defined as the difference between what is expected and what actually occurs” (Upah, 2008). Appropriate classroom behavior is demonstrated by following adult instructions, being on task, and appropriately engaged in the assignment. Problem behaviors vary and include inappropriate verbal behavior, refusal to comply with task instructions, leaving seat, wandering from designated work area, and sitting and staring. Factors that affect and maintain problem behavior include antecedents such as task difficulty, contextual factors, or arrangement of the classroom, and contingencies such as attention (Boyajian, DuPaul, Handler, Eckert, & McGoey, 2001, Thompson, & Iwata, 2007, Piazza, Bowman, Construcci, Delia, Adelinis, & Goh, 1999, and O’Reilly, Edrisinha, Sigafoos, Lancioni, Machalicek, & Antonucci, 2007).

Once the antecedents and contingencies maintaining the problem behavior have been successfully identified, an effective intervention can be prescribed for the individual (Boyajian, et al, 2001). For example, if attention is a contingency, the intervention should include use of the most reinforcing form of attention for the individual, contingent on appropriate behavior (Kodak,
Northrup, & Kelley, 2007). In addition to external management contingencies, individuals can even be taught to self-regulate the problem behavior once instruction on accurate identification of appropriate or desirable behaviors has been given (Bolstad, & Johnson, 1972 and Ninness, Fuerst, Rutherford, & Glenn, 1991).

Relevant information on a target behavior(s) can be gathered through direct observation using a variety of assessment instruments (Hintze, Volpe, & Shapiro, 2008). It is imperative that the observations are conducted using standardized procedures with high interrater reliability and are objective in nature. Often, these procedures can be used to observe multiple behaviors concurrently (Hintze et al, 2008).

Several decades of research on functional behavioral assessments (FBA) have demonstrated FBA to be an effective procedure for identifying contingencies that maintain disruptive behaviors in a classroom setting (Wright-Gallo, et al, 2006, Mueller, Sterling -Turner, & Moore, 2005, and Reid, & Nelson, 2002). “FBA can be defined as a set of procedures that allows for the identification of relationships between the unique characteristics of the individual and the contextual variables that trigger (antecedents) and reinforce (consequences) behavior “ (Steege & Watson, 2008).

As previously mentioned, referrals for inappropriate behavior are common in schools. School psychologists associated with preschools and primary schools (K-2nd grade) have many referrals for children who need to learn social skills as they adjust to the school environment. When confronted with the observations by appropriate school personnel that a child needs help managing behavior at school, some parents are reluctant to proceed any further. However, many
parents recognize that their child needs additional help and willingly sign forms for the child to be observed and to begin an intervention.

One such child in a public primary school was observed and parents requested intervention because the child also demonstrated inappropriate behavior in the home. This child also demonstrated problems the previous year in kindergarten, including tantruming. His peers referred to him as “the bad kid” and many avoided interaction with him when possible. Observation procedures and an intervention plan were put into place following an individualized education program (IEP) meeting which included the parents.

The student was referred for assessment and treatment based on the following criteria: 1) a wide range of behavior problems according to teacher and classroom observations by various district personnel, 2) teachers were willing to participate and implement interventions, and 3) the parent or guardian provided written informed consent and permission for the student to participate. The school psychology candidate obtained permission from the parents and IEP team to employ additional behavior intervention plans (BIPs) that had not been attempted previously.

The student, identified here as Brent (fictitious name), presented as a 6-year-old male exhibiting various problem behaviors in the classroom. He was enrolled in the PACE (gifted and talented) program in the district. He was not under the care of a physician nor diagnosed with any medical or psychological disorder at the time of referral for prevention assessment or treatment.
Accessed by the IEP Team.

1. **Focal Point** is a software package designed to provide tools for conducting FBA procedures using notebook computers (Ninness et al., 2000).

2. The **Automatic graphing** (Alessi & Kaye, 1983) is a procedure that enables an observer to record ongoing behavior while simultaneously creating a graph representing the distribution of problem behaviors in the classroom setting.

3. **Informal interviews** were conducted with Brent’s parents and members of the IEP team to address Brent’s social needs.

4. A review of records included all of the discipline reports, achievement testing, and academic assessments that were compiled on Brent during his school history.

**General Procedures for the Development and Testing of FBA Hypotheses**

IEP team members included the following: principal, school psychologist, regular education teacher, instruction specialist, school counselor, school psychology candidate, and supervising school psychologist. The team reviewed the following assessment data (described above) in order to develop hypotheses regarding variables that might be interacting with Brent’s problem behaviors.

**Automatic Graphing Outcomes.** The *automatic graphing* procedure created by Alessi (Alessi & Kaye, 1983) and automated by Ninness (Ninness, et al 2000) enables the observer to record ongoing behavior while simultaneously creating a graphing presentation of what occurs throughout a session, across multiple sessions, or days of observations. The rotation scan is used when the comparison group and identified student are seated in close proximity to each
other. In this procedure, the observer attends to only one of the comparison students in addition to the identified student during each observation interval. During each interval, the observer rotates to the next comparison student but maintains concurrent observation of the target student. Following the observation, the graph can be drawn by hand or on a computer spreadsheet. Graphed outcomes from Brent’s automatic graphing/rotation scan procedure are illustrated below.

Disruptive behaviors included talking-out or making inappropriate sounds without the permission of the teacher, hitting or physically annoying classmates, leaving desk to do unassigned or inappropriate activities and tantruming. Figures 1-3 demonstrate rotation scan comparison of identified student with 3 separate sets of other students in the same classroom. Intervals were set at 10 seconds. Groups were changed every 30 minutes as part of normal classroom routine. Figure 4 shows combined rotation scans. The identified student exhibited the following behaviors during the observations: talking out while teacher was talking; poking a container of school supplies in front of him; taking a paper clip and putting it in his mouth, then bending it; turning to child seated next to him; poking neighbor with eraser end of pencil; wiggling pencil back and forth; and making distracting sounds with his mouth. He was also observed calling out his teacher’s name, tilting his chair, and pulling on student teacher and hugging and kissing her. The identified student was reported to tantrum at times when redirected, but this was not observed by the school psychology candidate.
The Good Behavior 7

Figure 1 Seated on floor in a group with teacher talking to entire class.

Figure 2 Seated at desk completing individual assignment

Figure 3 Seated on floor in small groups
Brent’s level of inappropriate and off-task behavior was clearly in excess of the comparison students throughout these 20-minute observations. These initial observations suggested that peers in Brent’s immediate proximity (comparison students) were not exhibiting off-task or socially inappropriate behaviors. This supported the teacher’s assertion that the other students in her classroom were in compliance with her general classroom management procedures.

Although the automatic graphing procedure provided only an overview of the identified student’s level of exhibiting problem behaviors relative to other students who are in close proximity, it did allow the observer an opportunity to take preliminary note of the conditions that might be associated with a student’s problem behaviors. During this time, the observer noted that Brent occasionally seemed to be responding inappropriately to gain peer attention as well as negative attention from his teacher.
Outcomes from Interviews During an interview with Brent’s parents, it was noted that Brent had a history of behavior problems and they seemed to have little control of him in the home. Brent’s parents participated in the IEP meeting and were fully in favor of developing a treatment package that included social skills training. Moreover, his step dad indicated that they might be interested in learning how to adapt these strategies to the home environment.

Review of Records Brent’s most recent assessments were reviewed by the school psychology candidate and her field-based supervisor. In general, these records indicated Brent is very capable academically, however, sometimes Brent is unwilling to initiate and sustain some academic tasks such as writing sentences. Brent is ranked as the number 2 student academically out of 17 total students. His developmental reading assessment score (DRA) score of 28 indicates he is reading at the second grade level.

FBA Outcomes and Data-Based Decision-Making Steps The FBA included a series of individualized steps that allowed data-based decisions with the objective of helping Brent to realize his academic and social potential. This process included the following: 1) general assessment of the student’s behavior, 2) development of hypotheses, 3) direct observation of the student’s behavior, 4) implementation of treatment, and 5) development of a maintenance program.

Step 1. General Assessment of the Student’s Behavior: Prior to conducting a functional assessment and baseline observation, an automatic graphing/rotation scan procedure (Alessi & Kaye, 1983) was conducted. This observation system allowed the observer to monitor and record
behavior of the student while using a comparison recording of all other students sequentially. This preliminary observation system allowed the observer to compare Brent’s behavior with others in the classroom and to establish a “local norm of behaviors” in that setting. As previously mentioned, Brent’s level of inappropriate and off-task behavior was clearly in excess of the comparison students throughout the 20-min. observations. Outcomes from this preliminary observation suggested that peers in Brent’s immediate proximity were not “continually” contributing to his target behaviors. However, the observer noted a few occasions in which this might have been a variable. Generally, this observation system supported the teacher’s opinion that other students in her classroom were in compliance with her classroom management plan, although there were occasions during which Brent appeared to be responsive to negative attention.

Step 2. Operational Definitions and Development of Hypotheses: The compilation of all assessments and preliminary observations suggested that Brent was most likely to demonstrate inappropriate and off-task behavior that fell under the general heading of disruptive, non-compliance with adults, and general “fidgeting” during class time. The operational definition of targeted behaviors included the following: aggravation of peers by poking or punching them, talking out without permission, throwing things, making noises with his mouth that disrupted others, calling others inappropriate names, and making inappropriate comments or writing notes that were not acceptable in school. General off-task behaviors included fidgeting or tilting his chair for longer than 5 seconds and playing with materials, out of seat, or engaging in non-academic activities (e.g. playing with school supplies or other objects in the room) for longer
than 5 seconds.

Based on a review of assessments, preliminary observations, and existing records, the school psychology candidate hypothesized that Brent’s problem behavior could be related to at least four different variables occurring in the classroom setting. These might be maintained by one of the hypothesized variables of teacher attention, peer attention, “self-initiated,” or academic escape. If the student’s behavior appeared to be related to an effort to gain the teacher’s attention inappropriately, “teacher’s attention” was to be recorded. If it appeared that off-task or disruptive behavior were being engaged in to entertain or gain the interest of peers, “peer attention” was to be recorded. If during the course of a specific academic assignment, the target behavior appeared to be an effort to avoid completion of work assigned by the teacher, the behavior was to be recorded as “academic escape.” The “self initiated” condition was to be recorded if the target behavior occurred when no other environmental variable was apparent to the observer. The operationally defined classroom circumstances, antecedents, and consequences are illustrated in Table 1.

<table>
<thead>
<tr>
<th>Circumstances</th>
<th>Antecedent/s</th>
<th>Consequence/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Teacher Attention” Maintained by negative reinforcement</td>
<td>Teacher present, but ignores Brent</td>
<td>Teacher makes a statement of “redirection” or reprimand to Brent</td>
</tr>
<tr>
<td>“Peer Attention” Maintained by negative reinforcement</td>
<td>Teacher present; academic materials may or may not be present</td>
<td>Peers show interest in Brent’s behavior</td>
</tr>
<tr>
<td>“Self-Initiated”</td>
<td>Academic materials may be present, but no particular instructions are conspicuous to observer</td>
<td>None are conspicuous to observer</td>
</tr>
<tr>
<td>“Academic Escape” Maintained by negative reinforcement</td>
<td>Teacher present; academic materials present; teacher provide instructions</td>
<td>Teacher redirects Brent</td>
</tr>
</tbody>
</table>
Step 3. Systematic Direct Observation of the Student’s Behavior: In the next step, a series of computer-facilitated direct observations were conducted in an attempt to identify the actual conditions that were most likely to be maintaining Brent’s problem behaviors. Subsequent to these direct observations, the FBA/baseline outcomes were to be graphed such that a treatment protocol could be developed by the IEP team.

Step 4. Implementation of Treatment: Treatment procedures were determined subsequent to conducting the FBA. Following a four-week period, a meeting of the team was held again to assess Brent’s progress.

Step 5. Development of a Maintenance Program: When the intervention strategies were determined to be effective, procedures were implemented for fading out much of the structure of Brent’s IEP with the target of making these skills a part of his school repertoire.

FBA and Baseline Baseline observational data were gathered in this student’s three regular education classroom settings. Data were collected by direct observations using the Focal Point software (Ninness et al, 2000) on a laptop computer. During 15 minute sessions, 10 second partial interval observations were conducted and any feature of the target behavior that occurred during a 10 s interval was recorded as an occurrence. The graphed outcomes from the FBA demonstrated that in most of the episodes in which Brent exhibited problem behaviors, the observer was unable to isolate and record particular antecedent or consequent events in the classroom setting. See figure 5. Although he demonstrated a high level of problem behaviors (approximately 65% of the total observed intervals), the teacher attention condition was recorded during 30 - 35% of all intervals.
The following graphs (Figures 6 and 7) show Brent’s heightened activity on the day his stepfather was to address his class. Brent was frequently out of his seat, going to the door to see if his father had arrived. Condition 5 is attention of stepfather while speaking to class. Teacher attention decreased during this session.
Figures 8-10 demonstrate Brent’s activity level during various activity levels after intervention was begun. The total off-task behaviors decreased from 65% to about 32.5 % during one session. Another day, during a math activity his total off-task behavior was 28% and during writing sentences, it was 59%.

![Graph showing activity levels](image)

**Fig. 8.** 30-second intervals during a 15-min period with teacher standing in front of classroom.

![Graph showing activity levels](image)

**Figure 9** 30-sec intervals during a writing activity  **Figure 10** 30-sec intervals during a math activity

On one occasion, two classes were combined to watch a Thanksgiving movie that lasted 40 minutes. With the exception of one female child in Brent’s regular class who is normally very quiet and compliant, Brent was the only child who was completely engaged in the film. With the
exception of adjusting his position after about 30 minutes, he was the most attentive and well-behaved child in the room. His total off-task behavior was only 1% of all intervals recorded.

![Figure 10. 30 s intervals during a 40-min Thanksgiving movie](image)

**Treatment by Teaching Self-Control Strategies.** The social skills training procedures were conducted by the school counselor in a small group setting during one session per week. The school and behavioral psychology candidate reviewed the intended social skills training, self-control, and classroom management strategies with the IEP team, and upon request of the team, the protocol was initiated. Social skills such as accepting redirection and accepting criticism, as well as not hitting fellow classmates were addressed by the school counselor. The school psychology candidate addressed raising your hand before speaking, asking for materials from fellow classmates politely, and completing tasks in the required time period. Immediately following, Brent was given instructions regarding how to correctly assess his own performance. The candidate provided feedback regarding the accuracy of these descriptions. Protocols were based on the good behavior game (Ninness, et al, 2000). The school psychology candidate gave instruction, modeled the desired behavior, and then role-played it for Brent. Brent then
practiced each behavior during three 15-min. sessions/week. During one session when a classmate wanted to accompany Brent to the practice session in another room set up for videotaping, he was able to remember to raise his hand every time a question was asked of them. However, in the second session by himself, he was only able to remember to raise his hand about 50% of the time.

These social skills and self-control procedures were instructed, modeled, rehearsed and role-played for approximately 15 minutes each school day. Contingent upon improving rehearsal and accurate descriptions of his own behavior, reinforcers such as high fives and allowing him to shoot a basket made from a paper wad were given for each correctly performed activity. Brent was asked to attempt to continue practicing his newly learned concurrent treatment of classroom management strategies.

![Treatment](image1.png)

![Baseline + Treatment](image2.png)

Fig 11 Combined sessions during first week of social skills training (week 2)

The school psychology candidate worked with the classroom teacher to employ a classroom management system to supplement the social skills and self-control training sessions in his regular classroom setting. The program was designed to generate more opportunities for Brent to
engage in appropriate interactions with his peers and allow him to have more opportunities to practice the skills he was acquiring during social skills and self-control sessions. It was decided to implement a dependent group-oriented (collaborative) contingency (Slavin, 2006). All members of the class were required to meet a particular behavior standard. For example, designated teams could share a variety of rewards if they exhibited the following types of behaviors: 1) worked quietly at their requested assignment; 2) raised their hands to answer the teacher’s questions; 3) raised their hands to request help; or 4) completed their assignments in the designated time period. Captains were chosen and the game was begun with small, tangible rewards for all members of the winning team. After two days, classmates voted on choices on a spinner to randomize rewards. Among the eight choices were singing songs, lunch with the principal, extra recess, and five extra minutes on math buckets. See figures 12 and 13.

Fig. 12 Week 3 Good Behavior Game
The Good Behavior

Overall, both social skills training and the Good Behavior Game demonstrated that Brent could learn and use more appropriate social skills than when first observed. The Good Behavior Game showed the greatest improvements while it was played. However, a short holiday break in the school schedule created a reversal. On the first day back, Brent’s off-task activity level had increased to 64% as depicted in figure 14. He appeared to enjoy attention from both teacher and peers. The school psychology candidate was able to pull Brent out and practice modeling and rehearsing social skills with another intern present to reinforce what had previously been learned.
Two days later, after Brent’s class had a new substitute teacher for the second day in a row, more data was recorded. This substitute had made an effort to give positive attention to Brent early as he had had a tantrum when she subbed earlier in the semester. His off-task behavior was measured at about 29% after she moved on to help other students. He also began pouting. The Good Behavior Game was reinstituted with Brent as one of the captains. After two unsuccessful attempts as captain, a third attempt proved to be successful as off task behavior was reduced to less than 10%. See figures 13-16.

The school psychology candidate participated in a meeting with the IEP team and Brent’s parents after four weeks of intervention. All parties reported an obvious improvement in Brent’s behavior. He no longer broke down in a tantrum when his behavior needed redirection. On one occasion, when his classroom teacher thought he was the victim of an incident, he openly admitted to the principal his part in the skirmish. In addition, when the Good Behavior Game is begun, instead of sitting under the table, he participates no matter whom the captain is in order to be eligible for a reward.
Conclusion

Research in applied behavior analysis has demonstrated that several methods of effective behavior change have been used based on identified antecedents and consequences in schools (Bear, 2008). This includes development of self-control by learning to choose appropriate behaviors over socially unacceptable one as well as the use of appropriate reinforcers. This study demonstrates that social skills and self-management skills can be learned once the target behavior(s) have been identified and an appropriate intervention plan is set up. The current study identified attention as a contingency and the student was trained to practice behaviors that resulted in positive attention in the classroom setting.
References


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BACK TO THE FUTURE SHOCK: A NOSTALGIC LOOK AT ALVIN TOFFLER’S 1970 VISION OF THE FUTURE.

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The future ain’t what it used to be.
Yogi Berra, American baseball player
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Abstract

This paper exams Alvin Toffler’s 1970 book, *Future Shock*, from the vantage point of forty years in the book’s future. While emphasis of this paper will focus on Toffler’s work in regard to educational profession, it would be hard to make such an examination without referencing some of Toffler’s general ideas. Toffler’s work seems to have as much, if not more meaning today than it did in 1970 due to the fact that the rate and degree of technological change is exponentially greater now than it was then. Just like Toffler predicted.

It is not the purpose of this paper to offer a line by line analytic fact check of Toffler’s predictions in *Future Shock*. Rather this paper will consider specific statements made and ideas expressed by Toffler and let the reader determine the longitudinal merit of his work.
Back to the Future Shock: A nostalgic look at Alvin Toffler’s 1970 vision of
the future.

Introduction

The object of this paper is to examine the relevance of Alvin Toffler’s
1970’s best selling work, Future Shock in the world forty years into its future.
Specifically the major objective of the paper will be concentrated on what, if any,
implications Toffler’s work has for educators today. This may be especially
relevant as we are moving further and faster into using technology as a driving
force in educating people.

The reader is urged to reflect upon their own vision of how we as educators
should teach our student as we face escalating challenges resulting from our
rapidly changing world fueled by technology. This paper will attempt to serve as a
catalyst to prompt discussions that may be as relevant today as they were to Toffler
in the 1970s. In turn it is hoped that these discussions will in some way help in the
quest to improve the way we educate people, especially in regard to the way we
use various technologies to do so.

It is abundantly clear that technological change has escalated exponentially
since 1970 and Toffler’s book, Future Shock, was published. In retrospect this
work seems to be uncannily accurate. A criticism of Future Shock may be that it
was overly dramatic, but this does not diminish the fact that the work accurately
predicted our Internet related world in the years prior to microprocessors, the common use of computers and the Internet itself. These things were science fiction material at the time Toffler wrote Future Shock.

Toffler clearly did not offer a positive critique of the way American schools were educating children in the 1960s and 70s. Neither did he seem to offer any great hope for them in the future he painted in *Future Shock*. While remaining cognizant that this paper is written from the vantage point of forty years into Toffler’s future particular emphasis will be given to his view of education.

This paper aspires to offer the reader an opportunity to reflect upon the near science fiction changes technology has had on education since 1970. This may serve to inspire others to look into the future just as Alvin Toffler did. This seems especially appropriate in the field of educational leadership where there is such high value placed on the need for educational leaders to have vision. After another reading of *Future Shock* it was clear to the author of this paper that educators in 1970 would have had as a hard time envisioning what education would look like in 2010. It is very likely that this will be true of educators today trying to envision what education will look like in 2050.

A secondary benefit of this work may be to introduce people to Toffler’s body of work who were still “in the future” when *Future Shock* was first published.
His ideas seem to stand up to the test of time. At least for now they do, but who knows in 2050?

And now, back to the Future Shock

The Amazing Criswell opens the Edward D. Wood, Jr. film, *Plan 9 From Outer Space*, with the following monologue: “We are all interested in the future for that is where you and I are going to spend the rest of our lives. And remember, my friends, future events such the mysterious, the unexplainable, that is why you are here” (*Wood*, 1959). While the academic wisdom of quoting Edward D. Wood, Jr. from a film that is described by many as the worst motion picture ever made could be debated, the fact remains that Woods’ prediction delivered by Criswell is nonetheless true, albeit simplistically true.

Eleven years after the premier of *Plan 9 From Outer Space* Toffler offered another view of the future. In 1970 Toffler’s *Future Shock* was published and Toffler and his ideas became a slice of pop culture that was seemingly worthy of serious intellectual consideration. Perhaps it would be more accurate to portray Toffler’s work as a scholarly work that captured the public’s imagination and thus became a part of the early 1970’s pop culture.

*Future Shock*, the book, became such a national phenomena that cultural icon Orson Wells stared in and narrated the Alex Grassholf film adaptation of Toffler’s *Future Shock*. The film of the same name was released in 1972. This
movie was written by Toffler and Ken Rosen but seemingly did not catch the public’s fascination in the same way *Citizen Kane (1941)*, or for that matter *Plan 9 From Outer Space (1959)*. Unlike *Citizen Kane* the movie *Future Shock* has not stood the test of time and it appears as an odd comic parody of itself.

*Future Shock* (the movie) is readily available for anyone wishing to see it via a technology that was not even dreamed of when the movie was made. Anyone interested can find the film available free of charge on You Tube. At the time of this writing the You Tube link to the film was:

http://www.youtube.com/watch?v=6Ghzomm15yE. Copies of the book can be economically obtained in many used bookstores as well as online.

While Toffler addressed many aspects of the future this work will primarily concentrate on his ideas on the subject of education. However, reference to other aspects of Toffler’s work be considered.

Clearly Toffler was not the first to predict potentially dire consequences lurking in the quantum shadows cast by the future of human existence. However his work drew mass attention to the topic of the impending challenges for human kind. Similarly he was certainly not the first to warn us that our efforts to educate the masses were alarmingly antiquated and becoming more so at noticeably escalating rate.
For example, in 1966 John Goodlad seemingly anticipated the information explosion and suggested that the focus of public education would need to change. He expressed the view that the purpose of public education will increasingly be “to teach young people to learn….But then, everyone -- children and parents alike -- will have the identical problem keeping reasonably up to date in a world of exploding knowledge.” (p 245). Toffler agrees with Goodland’s concept and offers the idea that the entire construct of data explosion is even more complicated and what is relevant in the present may quickly become irrelevant. Toffler wrote

“Given further acceleration, we can conclude that knowledge will grow increasingly perishable. Today’s ‘fact’ becomes tomorrow’s ‘misinformation’. This is not an argument against learning facts or data-far from it. But a society in which the individual constantly changes his job, his place of residence, his social ties and so forth, places an enormous premium on learning efficiently. Tomorrow’s schools must therefore teach not merely data, but ways to manipulate it. Students must learn how to discard old ideas, how and when to replace them. They must, in short, learn how to learn.” (Toffler, 1970, p. 414)

One year prior to Toffler’s Future Shock Postman and Weingartner (1969) suggested that our structure of formal education lags behind the advances of society, and therefore is often reactive, rather than proactive. Writing in their then controversial book, Teaching as a Subversive Activity (1969) they summarized the American educational system in this way:

One way of representing the present condition in our educational system is as follows: is it as we were driving a multimillion dollar sports car, screaming, ‘Faster! Faster!’ while peering fixedly into the rearview mirror.
It is an awkward way to try and tell where we are, much less where we're going, and has been sheer dumb luck that we have not smashed ourselves to bits -- so far. We have paid almost exclusive attention to the car, equipping it with all sorts of fantastic gadgets and an engine that will propel it at an ever increasing speed, but we seem to have forgotten where we wanted to go in it. Obviously, we are in for a helluva a jolt. The question is not whether, but when. (p. xiii)

Toffler echoed this point in *Future Shock*. He wrote “yet for all this rhetoric about the future, our schools face backward toward a dying system, rather than forward to the emerging new society. Their vast energies are applied to cranking out Industrial Men-people tooled for survival in a system that will be dead before they are” (p. 399). If Toffler is correct that our educational systems are producing industrial men it may be that he is also correct in his thinking that “the present administrative structures of education, based on industrial bureaucracy, will simply not be able to cope with the complexities and rate of change inherent in the system just described” (Toffler, 1970, p. 407).

Even with his pessimistic view of the future of American education Toffler does discuss the fact that the system is changing. He notes that “it would be a mistake to assume that the present-day educational system is unchanging. On the contrary, it is undergoing rapid change. But much of this change is no more than an attempt to refine the existent machinery, making it even more efficient in pursuit of obsolete goals…..what has been lacking is a consistent direction and a logical starting point” (1970. p.405).
Perhaps change is a constant that school systems must embrace in order to meet the needs of educating the masses. Nearly thirty years later *Future Shock* Waldron, Collie & Davies (1999) offered their opinion “schools must change. They must change to keep pace with the world in which they exist. More important, they must adapt to help young people better understand themselves and their world, a world that is becoming more complex by the day. If we truly care we will…." (p. 144).

Fitting well into the Tofflerian model we can point to the fact that not only is their world more complex everyday it is continually happening at a faster rate of speed. Feather (2000) reported that “the Internet is spreading across society and into our lives faster than any previous medium. To reach 50 million North America uses, radio took 38 years and television took 13 years. The Internet reaches 50 million people in only 5 years. Moreover, Internet use is growing five times faster than television and ten times faster than radio.” (p. 37).

Toffler’s ideas from *Future Shock* continue to be in vogue with many leading educational minds. For example, thirty-six years after the publication of *Future Shock* renowned British educator Sir Ken Robinson, speaking at the TED conference in Monterey, CA in February 2006, remarked that educational institutions are still wrestling with a future that is as impossible to fully anticipate as it will be for people to adjust to. During his presentation Sir Robinson states
that “it’s education that’s meant to take us into this future that we can’t grasp. If you think of it, children starting school this year will be retiring in 2065. Nobody has a clue, despite all the expertise that’s been on parade for the past four days, what the world will look like in five years time and yet we are meant to be educating for it. So, the unpredictability, I think, is extraordinary.” These words could have been spoken by Toffler in 1970.

Like so many other major thinkers on modern education Robinson’s words are congruent with Toffler’s work in *Future Shock*. Toffler wrote that “tomorrow’s individuals will have to cope with even more hectic change than we do today. For education the lesson is clear: its prime objective must be to increase the individual’s ‘cope-ability’-the speed and economy which he can adapt to continual change” (p. 403).

More specifically addressing the needed changes in our educational thinking Toffler quotes Psychologist Herbert Gerjuoy of the Human Resource Research Organization who said “The new education must teach the individual how to classify and reclassify information, how to evaluate its veracity, how to change categories when necessary, how to go from the concrete to the abstract and back, how to look at problems from a new direction-how to teach himself. Tomorrow’s illiterate will not be the man who can’t read; he will be the man who has not learned how to learn.” (Gerjuoy quoted in Toffler, 1970, p. 414).
Even with all the learning that has to take place with regard to changing technologies there are still qualities that Marsh (2007) hopes is not lost in the transition to the new ways of learning within our formal institutions of education. March wrote that “educators have a responsibility to develop such strategies if we want to provide their students with meaningful education in the age of whatever, whenever, wherever. Self-awareness and the construction of a meaningful life are just good ideas. In a culture permeated by the new www these traits will be essential to counterbalance the lure of self-absorption that leads to despair” (p. 216).

Among the various criticisms of the American educational system Toffler’s writing indicates that he was not impressed by the curriculum of American schools. Even though he acknowledged that the American school system was changing. He suggested that among the changes the system was holding onto concepts that are questionable. He wrote “Anyone who thinks the present curriculum makes sense is invited to explain to an intelligent fourteen-year-old why algebra or French or any other subject is essential for him. Adult answers are almost always evasive. The reason is simple, the present curriculum is a mindless holdover from the past.” (P. 410). It can be argued that in some ways it still is.
In 1970 Toffler expresses the view that in the future, which is now the present, students should be more involved in the leadership dimension of the educational process. He stated that “students must be involved from the very start-and not merely as co-opted rubber stamps for adult notions. Young people must help lead, if not, in fact, initiate, these councils so that ‘assumed futures’ can be formulate and debated by those who will presumably invent and inhabit the future” P. 404. Thirty-seven years on Prensky (2007) agrees with Toffler. Prensky wrote "as educators, we must take our cues from our students, 21st-century innovations and behaviors, abandoning, in many cases, our own pre-digital instincts and comfort zones." (p. 217). This may be somewhat problematic. Nelson, Palonsky, & McCarthy, 2004 argued that while our educational opportunites are changing daily due to technology, but that our educators’ mindsets are not changing as fast.

Prensky (2007) also addresses the idea that our educational institutions are not keeping pace with the changes to education via opportunities provided by emerging technologies. Prensky stated:

Pragmatically, our 21st-century kid’s education is quite bifurcating. The formal half, ‘school,’ is becoming an increasingly moribund and an irrelevant institution. Its only function for many students is to provide them with a credential that their parents say they need. The informal, exciting half of kid’s education occurs ‘afterschool.’ This is a place where 21st century students learn about their world and prepare themselves for the 21st-century lives. It is revealing that one of the most prevalent student demands regarding technology is to keep their schools computer labs open until midnight and for us to stay out of their way while they are there. (pp. 219 to 220).
McCain and Jukes (2001) also argued that that education has not kept up with the transformations in our world and is now in the mode of trying to catch up in order to keep from becoming irrelevant. Specifically, McCain and Jukes wrote that “educators today are victims of their established mindsets. This is certainly not to say that they are not intelligent, but rather it is to say that they work in a system increasingly disconnected from the rest of the world. Worse, there is little if any pressure to connect, let alone keep up, with the rest of the world” (McCain and Jukes, 2001, p. 72).

Keeping with the Toffler-like theme Prensky (2007) wrote that "educators have slid into the 21st century -- and into the digital age -- still doing a great many things the old way. It's time for education leaders to raise their heads above the daily grind and observe the new landscape that's emerging" (Prensky, 2007, p. 217). This may be true, but Carr-Chellman and Carr-Chellman (2007) argues that it is not easy to keep up with the changes that educators face. They wrote it is now cliché that at this increase of access “has changed the way we live our lives, but there are some important truths behind the cliché, especially as educators are pressured to adopt new and emerging technologies as a panacea to systemic challenges" (p. 23). Furthermore they assert that "our current cultural scene is a picture of access to put Prometheus to shame, and the burden on educators to shape the use of these accessible resources is tremendous" (p. 35).
The thoughts of the prior references indicate that it is widely assumed that the formal institution of education, and the educators that work within, are not keeping up with the unparallel rate and volume of change that technology is ushering in. However, this does not seem to be the case with our children, they are believed to be keeping up with the changing technologies very well (Tapscott, 1998). Feather (2000) breaks it down this way: “...peek into any teenager’s room and you’ll glimpse the paradigms of the future” (p. 25).

This is especially important because Tapscott wrote that some children are technologically savvy enough to find ways to bypass school and home security features (1998). As an example Tapscott used the results of a survey that was conducted on Freezone and quotes a 10-year old female as saying "My mom doesn't let me e-mail, so I am busy contemplating a scheme" (p. 37). She is probably correct in that she will devise a scheme to get around the wishes of her mother, and she is not alone. Two-thirds of the kids in this survey reported that they were more proficient at the computer than their parents (Tapscott, 1998).

Henry Kelly, president of the Federation of American Scientists, put this disconnect between formal institutions of education and their students into a sobering reality when he stated that ‘the cookies on my daughter's computer know more about her interest than her teachers do’” (March, 2007, p. 220). March agrees with Kelly and wrote that “it helps even less that a great deal of our teachers
and administrators have no idea what a cookie or blog or wiki even is” (2007, p. 220). March also believes that schools of the 21st century desperately need to find ways to integrate the technology rich after-school lives of our children live into the curriculum (2007). If this idea of fully integrating the new technologies into our schools is to be realized in a way that maximizes its promised potential, while at the same time keeping children safe, it must include high levels of trust, communication, patience, and large amounts of money yearly.

Just like Toffler did thirty-one years before Bolman and Deal (2001) warned that humankind needs to be aware of the changes that are largely due to technological advances. Being a bit more specific as to how this may impact people they argue that these changes may impact our spirituality. In their unique book, *Leading With Soul* (2001), they wrote that “today’s stressful and turbulent world compounds the risk of stunted souls and spiritual malaise” (p. 38). Toffler seeming anticipated this was well and in Future Shock he wrote “to create an environment in which change enlivens and enriches the individual, but does not overwhelm him, we must employ not merely personal tactics but social strategies” (p. 383).

Regarding diversity in a school’s curriculum Toffler warned that extreme to either standardization or diversity may not be the best choice for schools. He wrote “A fight must also be waged to alter the balance between standardization and
variety in the curriculum. Diversity carried to its extreme could produce a non-society in which the lack of common frames of reference would make communication between people even more difficult than it is today” (p. 411).

Sir Ken Robinson speaking at the 2010 TED conference also addressed the idea of standardization, and was as critical as Toffler. He says that we have built modern education on linearity and conformity. In his speech he said “we have built our educational systems on the model of fast foods.....where everything is standardized....and we have sold ourselves into a fast foods model of education. And it’s impoverishing our spirit and our energies as much as fast foods are depleting our physical bodies.”

Toffler defines more narrowly his view on what a curriculum that is making an effort to prepare students for the future. In such curriculums Toffler wrote that the “range of subject matter should be broad enough so that apart from dealing with the ‘know’ (i.e., highly probable) elements of the super-industrial future some provision would be marked for dealing with the unknown, the unexpected, the possible. We might do this by designing ‘contingency curricula’-educational programs aimed at training people to handle problems that not only do not exist now, but which may, in fact, never materialize.” (p. 412)

He also suggested that the curriculum should maintain a common core of curricular items to be mastered by all students. “While all students should not
study the same course, imbibe the same facts, or store the same sets of data, all students should be grounded in certain common skills needed for human communications and social integration.” (p.413)

So, did Toffler see hope for humankind in the future? Yes, but clearly in his thinking some would cope better than others. “The people among us who keep up with change, who manage to adapt well, seem to have a richer, better developed sense of what lies ahead than those who cope poorly. Anticipating the future has become a habit with them.” (Toffler, 1970, p. 419). Furthermore, he wrote that “the problem is not, therefore, to suppress change, which cannot be done, but to manage it. If we opt for rapid change in certain sectors of life, we can consciously attempt to build stability zones elsewhere” (p. 379).

Yet Toffler’s view of survival of the future fittest may not be as clear as it appears. He put it this way:

In the light of theory of the adaptive range, it becomes clear that an insistence on continuity in our experience is not necessarily ‘reactionary,’ just as the demand for abrupt or discontinuous change is not necessarily ‘progressive’. In stagnant societies, there is a deep psychological need for novelty and stimulation. In an accelerative society, the need may well be for the preservation of certain continuities.” P. 393.

How does one close such a debate as to the future. Well, one that begins with quoting from an Ed Wood, Jr. flim has only one place to go to get the definitive wrap up quote, and that is naturally from country music. Specifically Brad Paisley’s song *Welcome to the Future*. Where he laments that he wishes his
grandparenets “could see this now, caused the world they saved has changed.” He also puts it this way:

    Hey, everyday is a revolution.
    Welcome to the future.
    Hey, look around it's all so clear.
    Hey, wherever we would go, well we’re here
    Hey, so many things I never thought I'd see happening right in front of me.

And for me? Maybe I don’t want to give up just yet. Maybe I need to push back to the future and start seeing all those things that I thought I’d never see, because Paisley is right, it’s happening right in front of me. And to bring full closure to it let me restate that Ed Wood Jr. was right, this future right in front of me is where I will spend the rest of my life. Hey, I guess Brad is right too. We’re here.

Welcome to the future.

**Conclusion**

In 2010 we have the advantage of reading Toffler’s work and doing an instantaneous fact check. Toffler was primarily writing about how societal changes due to an accelerated rate of technology would create situations that are difficult for people to adjust to. The result would be to create a dissonance unlike any humankind has experienced.

Clearly much of his work regarding technological changes have seeming been prophetically accurate. His work regarding change is also quite accurate. Without the benefit of completing a total fact check it would appear that overall
Toffler should get a lot of credit for his insight and vision. Whereas the movie may have been overly dramatic, the book is founded the work of many people who Toffler awards proper credit. The work is basically a scholarly work with perhaps a hint of bias. Yet, the bias of 1970 seems to have translated into ideas that are primarily correct in 2010. Even Nostradamus would be impressed.

**Editorial Opinion**

My first opinion is that I have a lot of nerve offering an editorial opinion on the 1970 work by Alvin Toffler, *Future Shock*. I have long admired this work and have recommended it to most graduate classes of educational leadership I have taught. While he would never recall it I met Mr. Toffler after a speaking engagement at Marshall University in Huntington West Virginia as he toured to support the release of *Future Shock* during the 1970-71 academic year. OK, I shook his hand and we spoke, but he did two things I recall. He looked into my eyes, and he actually spoke to me. This may sound odd, but to me it represented two important things he did not want humanity to lose. If that is not true, I don’t want to know.

My second opinion is that in regard to my thinking Toffler was, and still is right on the money. I have been a nomad and have averaged moving about every other year. The fact that I have been a Superintendent of Schools in two states help explain that. I have zig-zagged back and forth between public education and
higher education and as a result have had many jobs over the course of my career.

Early in my career I was a technology initiator. I was eager at every turn to grab all the technology I could find whether it be dish television, a computer, the Internet, games, etc. Yet, even with my best efforts technology passed me by and I realized that it was pulling away from me at an ever increasing speed. Finally I gave up the chase and found myself just wanting the world to stay as it was. I had all that I needed, and none of it needed to change.

Yet, as we all know, it kept expanding, increasing in scope and speed, and was always changing. The only thing that remained constant was the change. My personal and professional world was always expecting me to retool and relearn.

Over the years my students became wired to the Internet during my lectures and have data bases available that far exceeded what I could bring forward from the inner recesses of my mind. Every word I say is subject to instant fact check. Oddly enough my reasoning is that this is good and should help me to be a better teacher.

Then one night it hit me, after talking about it all these years I was a victim of future shock. I reached a point where I did not want to talk to automated answering systems, I was not wanting to try and process the multiple news sources that were present on the screen when I watched the news or a sporting event on television, there are devices in my car that can talk to me and I just want them to be
silent. Furthermore my phone takes pictures, shows movies and can beat me at chess. The list goes on and on.

Here is my point. To me Toffler was, as the kids say, spot on. However these same kids do not seem to be showing signs of being future shocked. They text. They network socially online. They don’t have to use a map because they have devises that can direct them to most any place on Earth. This list goes on and on as well.

So, maybe Future Shock is like other generational changes. My parents did not understand my love of 60s rock music. I am sure they never resolved the idea that John Lennon was the Walrus and Frank Zappa warned us that brown shoes don’t make it.

Still, it could be that humankind has simple begin to evolve faster spurred on by technological changes that Flash Gordon would have trouble keeping up with. Or it could be that the newer generations have simply learned to use skills as infants that I am trying to master in my 50s. But, never mind, I have learned how to find Brad Paisley’s videos on YouTube and I think I will watch Welcome to the Future again, and if I have time maybe even see if I can find Orson Wells and the movie Future Shock.

Perhaps John Nesbitt was right in his 1984 best seller Megatrends. He wrote that “when high tech and high touch are out of balance, an annoying dissonance
results” and “high-tech dissonance infuriates people. It’s even worse when you again use the technology of the telephone to call a warm friend and instead get more technology” (p 41). What you may get is Future Shocked.

References


Citizen Kane (1941). RKO Pictures.


Comprehensive training is an essential element of successful tutoring, especially for the non-professional peer tutors. There is mounting evidence of the positive impact tutor training has on overall quality and effectiveness of academic support programs. As Boylan (2004, p. 49) states: "Regardless of what sort of tutoring is being provided or where it is housed, the most important aspect of successful tutoring is tutor training." At the same time, academic literature points to an overall unevenness in the quality of training programs in post-secondary settings.

The author developed a model for delivering a research-based, cross-disciplinary training program for peer tutors working in a large, 4-year public university in western Pennsylvania. All tutors are undergraduate students who will be helping their peers with course work in a variety of disciplines—biology, chemistry, mathematics, nursing, physics, Spanish, as well as social sciences. Training occurs via a formal 1-credit course, which all prospective tutors must successfully complete before the start of their paid positions. However, this model can be replicated through a series of non-credit workshops or seminars, and within a range of formats (face-to-face, self-paced, or online). In this model, training focuses on how tutors convey subject-related information as they guide students toward success with course work. Prospective tutors rehearse and evaluate peer-helping techniques, the same techniques that they will apply in their jobs.

**Training Features**

**Theoretical Frameworks.** Content is based on theoretical models of learning and includes pedagogy vs. andragogy (Knowles, 1980); psychosocial development (Chickering, 1993); information processing (Dembo, 1998); social constructivism (Vygostsky, 1978); collaborative learning (Casazza, 1998); cognitive domains (Bloom, 1956); cognitive process instruction (Lochhead & Clements, 1979); assessment techniques (Cross & Angelo, 1988); and Jung’s
personality types and learning preferences (Lawrence, 1993). When prospective tutors learn why particular peer-helping practices are recommended, they are more likely to follow-through with implementing these practices in their work with students.

**Organization.** Each training session mirrors appropriate methods for presenting material in a peer-led tutorial session and includes:

- *Opening activities* to introduce content and focus participants’ attention.
- *Activities within sessions* to assess participants’ understanding of sub-topics.
- *Closing activities* to sum up content and check for understanding and learning.

Importantly, during training the supervisor models the same practices that tutors should implement in their sessions. Thus, participants experience the organization and sample the procedures that are associated with effective peer-led tutorial sessions.

**Application.** Using personal experiences and examples, content is related to real situations. Participants try out a range of activities, including problem-solving scenarios, case studies, role-playing and structured observations of experienced tutors’ sessions. As a culminating activity, participants lead their own tutorial session.

**Learning Strategies.** A range of strategies that promote active learning are combined within training sessions—setting goals, managing time, taking notes, textbook reading, creating study guides, and preparing for exams. Participants analyze their own learning styles, practice learning and study strategies, and familiarize themselves with ways to introduce these strategies into tutorial sessions.

**Self-reflection and Self-monitoring.** Participants are held accountable for their development as a tutor—similar to the process of self-regulation and responsibility that they will be conveying to students. Prospective tutors receive opportunities to practice, reflect upon, and assess their performance. Furthermore, they are expected to put in time, effort, and thought during training—the same ingredients that a college student should utilize when learning new and important subject matter.

**Training Topics**

The overall theme of the training model is “key characteristics of effective tutorial sessions.” As part of this theme, the major topics are:
• **Role of a tutor.** Training sessions cover material and techniques related to tutors’ roles as facilitators of learning. Participants read about, observe, and practice guiding students away from dependency and toward becoming independent, self-regulating learners.

• **Active learning.** Included are the importance of proactive learning and the transfer of crucial learning skills. The emphasis is on integrating strategies for *how to learn* difficult subject matter within tutorial sessions.

• **Critical thinking and questioning skills.** Prospective tutors work on incorporating advanced thinking (i.e. analysis, evaluation, and application) and higher-level questioning into tutorial sessions.

• **Assessing learning.** How do tutors know if a student truly understands information? As part of the training, participants work on incorporating ongoing and informal assessment of learning, that is, evidence that students understand and remember key content.

• **Collaborative learning and group work.** Included is the value of shared experiences and shared contributions in the learning process and ways to create cooperative learning situations and collaborative learning activities.

• **Tutoring as a proactive process.** Prospective tutors work on maximizing student learning in one-on-one tutoring sessions through assessing student’s needs; recommending, demonstrating, and applying strategies; breaking down content and evaluating learning; and developing a plan for application.

• **Diversity among students.** An emphasis is placed on recognizing and valuing the diverse student population present in higher education today. Through role-play and case studies, participants practice how to welcome and lead students with differing cultures, religions, sexual orientations, learning disabilities, physical limitations, and so on, with the goal of creating a comfortable and productive learning setting.

• **Working online.** Included are recommended adjustments in preparation, communication, and learning strategies and assessment for participants who will be working in online tutorial settings.

In conclusion, via this model, participants gain valuable knowledge and practice for their upcoming roles as peer tutors. Well-trained tutors approach their jobs as prepared, skillful, and confident academic leaders. Ultimately, effective training of tutors strengthens the overall quality and success of an academic support program.
Bibliography


Internet Addiction: Toward a New Understanding of Emptiness

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Abstract: Internet Addiction (IA) is both the most rapidly growing addiction and the least understood (Watson, 2005). For counselors, treatment issues surrounding the disease are also growing. At the forefront is the lack of understanding concerning treatment protocol to manage the challenging recovery and maintenance stages after the behavior of IA has been controlled. This article will discuss Viktor Frankl's Logotherapy as an effective approach to treating IA.
Title of the submission: A STUDY OF THE PARENT-TEACHER INTERACTION BETWEEN IMMIGRANT MOTHERS AND EARLY CHILDHOOD TEACHERS.

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Abstract

The purpose of this study will be to explore the interaction between immigrant mothers and early childhood teachers. In order to understand the process of the interaction between immigrant mothers and early childhood teachers, this study will employ qualitative research as the research method. The participant will be an early childhood teacher now and purposive sampling will be used to select six subjects from Kaohsiung city and Tainan city in the south of Taiwan. In this study, the data collected will be derived from in-depth interviews.

Based on the finding of this study, the researcher hopes to offer the advices to Taiwan’s government authorities and school authorities to assist with early childhood teachers and immigrant mothers how to communicate with each others.

Besides, in the future, it is expected that the Ministry of Education
of Taiwan may invite professional experts and scholars, early childhood teachers, and government officials to meet and discuss how to establish a multicultural education curriculum to train all early childhood teachers to be more efficient culturally responsive in teaching children of immigrant mothers and communicating with immigrant mothers. For school authorities, they should make long-term and short-term plans in sequence to promote early childhood teachers’ awareness of multicultural education. Then, early childhood teachers should be use of efficacy strategies to practice multicultural education in kindergarten and can have better interactions with those immigrant mothers.
Title of the submission: A STUDY OF PRACTICE OF MULTICULTURAL EDUCATION OF KINDERGARTEN TEACHERS.
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Abstract

The purpose of this study will be to explore practice of multicultural education in kindergarten. In order to understand the process of practice of multicultural education in kindergarten, this study will employ qualitative research as the research method. The participant will be an early childhood teacher now and purposive sampling will be used to select 10 subjects from Kaohsiung city in the south of Taiwan. In this study, the data collected will be derived from in-depth interviews and field observation.

Based on the finding of this study, the researcher hopes to offer suggestions for Taiwan’s government authorities and school authorities to assist early childhood teachers promoting their percipience concerning multicultural education.

Besides, based on the finding of this study, the Ministry of Education of Taiwan should make long-term policies to assist early childhood teachers to practice multicultural education in all kindergarten. For school authorities, they
should make long-term and short-term plans in sequence to promote early childhood teachers’ awareness of multicultural education. For teachers, they should be use of efficacy strategies to practice multicultural education in kindergarten.
The Global Forum: Engaging Students and Instructors Worldwide in Addressing the Future of Humanity & the Planet

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ABSTRACT

THE GLOBAL FORUM refers to a conference, symposium, seminar or meeting involving students, instructors and experts at multiple campus and off-campus locations. This innovation enables live ("real-time") dialogue across schools and universities world-wide. THE GLOBAL FORUM integrates multiple communications technologies, including video conferencing, webcasting, chat and other social networking tools. In this workshop, the results of several GLOBAL FORUM events are reviewed, including "The Global Forum on the Future of Nuclear Weapons" and "The Global Forum on The Future of Space Exploration." THE GLOBAL FORUM evolved into institution-wide events across the Webster University network of 108 campuses world-wide. Multi-national camaraderie, collegiality and solidarity resulted from the planning and implementation of THE GLOBAL FORUM. Organizers and student participants alike sensed they were involved in summit meetings which were shaping the common future of humanity. Teachers and other educators who participated in THE GLOBAL FORUM events were inspired to use THE GLOBAL FORUM methods and strategies to bring their students in touch with authentic ("real-world") issues, and become personally engaged in voice and in action. THE GLOBAL FORUM is not only a technology innovation: It is an innovation in global communication, a tool for building cross-cultural understanding. It is an innovation in teaching and learning. THE GLOBAL FORUM raises awareness and transforms consciousness at all levels: personal, family, community, national, and global.
Introduction

Webster University uses the term “THE GLOBAL FORUM” to refer to a conference, symposium, seminar or summit meeting that is webcast live (in “real-time”) and is open to public participation via chat and other social networking tools. This innovation enables live (“real-time”) dialogue across schools and universities world-wide. THE GLOBAL FORUM integrates multiple communications technologies, including video conferencing, webcasting, chat and other social networking tools.

This workshop enables participants to: (a) identify the integration of multiple communications technologies that make it possible to conduct a multi-continent conference, meeting, or seminar; (b) to review the lessons learned from several GLOBAL FORUM events, including: “The Global Forum on the Future of Nuclear Weapons,” “The Global Forum on The Future of Space Exploration,” and “The Global Forum & Student Summit Meeting on Global Citizenship.” (c) describe the actual and expected learning outcomes and impact on students who participated in THE GLOBAL FORUM, and (c) identify the strategies and methods for designing and conducting THE GLOBAL FORUM-type events on other topics.

Background

Webster University is an independent, international university with 108 domestic and international campuses. Its enrollment of 22,000 students worldwide, include 28% of students matriculating in 100% online programs. Since 2000, Webster University has offered online graduate degree programs. Online courses now give students the opportunity to complete degree and certificate programs regardless of their geographic proximity to a Webster University campus.

Since 2005, the School of Education has also offered hybrid courses which combine online learning with international travel. These courses such as “Education in China”, “Humanitarianism & Internationalism,” and “Global Issues: Japan”, involved a full-term online course, with a 5-10 day mid-term study tour to Southern China and Hong Kong, Geneva, or Japan (Tokyo, Kyoto, Hiroshima).

Multiple electronic communications technologies have been embedded in the delivery, the instructional methods, and the content of most Webster University courses, whether they are online, hybrid with international travel, or traditional in-classroom classes. But advances in interactive web and social networking technologies, such as video conferencing, webcasting, blogs, wikis, chat and discussion tools, have accelerated the inclusion, integration and embedding of technologies in the courses. The newest interactive-social web technologies enable instructors and students to magnify and amplify their learning resources and learning opportunities. These technologies, which have been integrated into THE GLOBAL FORUM, make it possible to dialogue and collaborate with a wider network of not only peers and colleagues, but also experts, leaders and policy-makers on the topics of study.
Evolution of “THE GLOBAL FORUM”

A predecessor to THE GLOBAL FORUM was a lecture by Jack Dorsey, co-founder of Twitter, presented by the School of Business and Technology and the School of Communications.  (http://www.webster.edu/jackatwebster/)  The event originated from the Webster University-St. Louis campus, with a live video webcast open to the public and an open Twitter channel for viewers online or in the auditorium. Although this event was not associated with classes, it illustrated how the integration of video webcasting and a social network technology like Twitter can have a broader reach, and enable participants (both online and in the auditorium) to comment, ask questions or otherwise be “heard” by the speaker and the audience.

The idea for THE GLOBAL FORUM: ON THE FUTURE OF NUCLEAR WEAPONS originated when the Webster University class “Global Issues: Japan” visited Hiroshima in Summer 2009. The students toured the Hiroshima Peace Memorial Park and Museum. They heard testimony from a Hiroshima A-bomb witness-survivor, and participated in a seminar led by Steven Leeper, Chairman of the Hiroshima Peace Culture Foundation. The students became concerned about Leeper’s observation that the human family will soon decide one of two courses: whether we will get rid of nuclear weapons, or to let everybody have them.

Moved by their experience in Hiroshima, the students felt compelled to share what they had learned with their Webster University student peers and classmates across North America, Europe and Asia. They suggested that Webster University conduct a globally webcast forum to raise student and citizen awareness about this issue. They reasoned that this would be a way to reach Webster University students and faculty located at the 108 campuses worldwide.

THE GLOBAL FORUM event that developed from this was titled “Mr. Truman Meets Hiroshima on The Future of Nuclear Weapons, 1945-2020.” (http://eagle.webster.edu/Mr_Truman_Meets_Hiroshima) The two-hour program involved a videoconference meeting between The Harry S. Truman Library & Museum (Independence, Missouri) and The Hiroshima Peace Memorial Museum (Japan). The meeting was streamed live to the global audience with a video webcast and open Livestream Chat, Facebook and Twitter channels. The program on the video webcast included:

- “The Future of Nuclear Weapons: Voices & Images.” This video was a student team project in an undergraduate video editing and production class.
- Introduction and welcome remarks by: Dr. Elizabeth (Beth) J. Stroble (President, Webster University), Dr. Michael Devine (Director, Harry S. Truman Library & Museum), and Gov. Bob Holden (Former Governor of Missouri and Director of the Holden Public Policy Forum).
“The Historical Context: Truman, Hiroshima & Nuclear Weapons,” Dr. John D. Chappell (Associate Professor of History, and author of *Before the Bomb: How America Approached the End of the Pacific War* (1997)).

“Hiroshima’s Take on the Future of Nuclear Weapons” included a statement from Dr. Tadatoshi Akiba (Mayor of Hiroshima); recollections by Mr. Kenji Kitagawa (survivor/witness to 1945 Hiroshima A-bomb); and commentary by Steven Leeper (Chairman, Hiroshima Peace Culture Foundation)

Dr. Chappell and Satoko Norimatsu (Director, Peace Philosophy Centre, Vancouver, B.C.) monitored the online comments and moderated the questions and discussion period.

“Reflections, Synthesis and Action Steps” by Dr. Roy Tamashiro (Professor of Education), and Gov. Holden.

THE GLOBAL FORUM evolved into an institution-wide event on other topics. Its aims were:

1. To raise awareness about a predefined global issue among students at Webster University, other schools and universities, and the world-wide citizen public.
2. To engage experts and policy makers in the meeting to describe the controversial dimensions of the global issue, and
3. To enable students and citizen public participants to dialogue with each other and the guest lecturers to share reflections, and collaborate on conclusions and action steps to address the selected global issues.

THE GLOBAL FORUM directly involved graduate and undergraduate Education courses, but also courses on nursing, history, international studies, international business, international relations, human rights, and political science.

Other GLOBAL FORUM events ([http://webster.edu/theglobalforum/](http://webster.edu/theglobalforum/)), completed and upcoming, include:


• Open seminar and discussion originating from Webster University-Space Coast Campus on November 1, 2010 (Coordinated with the Launch of NASA Space Shuttle STS-133 Mission): THE GLOBAL FORUM ON THE FUTURE OF SPACE EXPLOARTION. Live global webcast with open UStream Chat channel.

• Multiple International Studies and Education classes at Webster University and citizen public in North America, Europe & Asia. February 8, 2011 THE GLOBAL FORUM AND STUDENT SYMPOSIUM ON THE MEANING OF GLOBAL CITIZENSHIP AT WEBSTER UNIVERSITY. Live global webcast with open UStream Chat channel.

• Multiple classes in School of Education, College of Arts & Sciences, School of Business & Technology, School of Communications and global citizen public: March 31, 2011 Women’s Rights as Human Rights: Education—Security—Economics, Webster University’s Spring Human Rights Conference. Live global webcast with open Chat/Facebook/Twitter channels.

Methods and Strategies for Conducting THE GLOBAL FORUM Events

It is possible to conduct THE GLOBAL FORUM events with easily accessible, low-cost web-based tools. Webcasting tools such as Ustream (www.ustream.tv) and Livestream (www.livestream.com) include the software to produce and transmit live video and audio, recorded video, screen images containing text, graphics, photos and other images. They include live chat and interface with other social networking tools (Twitter, Facebook, etc.), so any webcast viewer can also contribute comments and questions. The webcast is accessible on any desktop, laptop or tablet computer connected to the internet. It is also accessible on handheld devices (e.g. iPods) and smart phones.

Whether they took part in-person or online in THE GLOBAL FORUM, the teachers and other educators had intimate experience of a global issue in “real life.” The dramatic testimony of the Hiroshima A-bomb survivor-witness, as well as the openness of the Harry S. Truman Library & Museum to embrace these accounts as part of its documentation and archiving mission inspired teachers to, in turn, use THE GLOBAL FORUM methods to bring their students in touch with authentic (“real-world”) issues, and feel personally engaged in voice and in action toward seeking solutions. The video conferencing, webcasting and social networking tools are accessible and affordable for any teacher to assemble and conduct GLOBAL FORUM format events with their students.
Significance and Impact of “THE GLOBAL FORUM”

THE GLOBAL FORUM combines several electronic communication technologies to enable students in classes held at multiple Webster University campuses to dialogue and collaborate with experts and policy makers on significant global issues. The open Chat/Facebook/Twitter channels give students at any campus or off-campus locations the same opportunity to participate in the dialogue as the students in the classroom or auditorium where THE GLOBAL FORUM is originating.

THE GLOBAL FORUM application goes beyond infusion of the technologies into the instructional method and content of the “Global Awareness Education” course. The technologies are *integrated and embedded* into the instructional design and content of numerous courses in education and other disciplines, held at multiple Webster University campuses. THE GLOBAL FORUM effectively organizes the multiple electronic communication technologies and distance learning tools for application in any course environment: the traditional face-to-face classroom, online classes or hybrid (online plus international travel) classes.

The implementation of THE GLOBAL FORUM: ON THE FUTURE OF NUCLEAR WEAPONS was accomplished through the networking, collaboration, and cooperation of universities, museums, government offices, organizations, and individuals across the USA, Canada and Japan. The multi-national camaraderie, collegiality and solidarity that developed out of this collaboration have priceless value in advancing cross-cultural understanding. The leaders and organizers of the event and student participants alike sensed they were involved in a summit meeting that was shaping the common future of humanity. For many, THE GLOBAL FORUM will be an unforgettable experience.

THE GLOBAL FORUM is not only an innovation in technology. It is an innovation in global communication, a tool for building cross-cultural, human understanding and empathy, a tool for raising awareness about the interconnectedness and interdependence of human and planetary systems. THE GLOBAL FORUM is an innovation in teaching and learning. It is a tool that evolved from the creative energy of faculty and students in the School of Education. But its impact and value transcend teacher education: THE GLOBAL FORUM is a tool that has potential to raise awareness and transform consciousness at all levels: personal, family, community, national, and global.
Expanding Student Vision: A Project in Community Activism

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Abstract
Interior design students will generate a community action plan that creates design solutions for impoverished community residents. The project objective will focus on establishing dialogue among local officials, professionals, business-owners, residents, and students to enhance community efforts in raising living standards for the impoverished. The design will be used as a tool to provide innovative solutions to home, neighborhood, or community problems.

Project methodology will include three stages. First, students will investigative the community and locate areas where living standards are poor. Secondly, students will identify key individuals and groups who might impact the solution. Thirdly, students will orchestrate dialogue among key players; therefore, students must create an open and non-threatening atmosphere conducive to idea exchange. Students’ participation in meetings will provide opportunities to interact with the community, share research findings, and offer problem-solving strategies.

The project outcome could have a national impact, serving as a model for educators when responding to students’ desire for activism. It should foster a healthy relationship among pre-professionals, community leaders, and the underserved community while addressing priority areas of research, well-being, safety, and best practices for social justice. By thus infusing design education with service learning, students will attain heightened insight into interior design’s potential for good at all levels of society; education and humanitarianism will intermingle. Finally, data collected during the project may inform future community actions and provide further discourse among educators about community service projects and post-secondary curriculum.
Math Snacks: Using innovative media to address conceptual gaps in mathematics understanding

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“Math Snacks” are clever, engaging and focused technology-based resources designed to help learners access in a unique way the concepts behind frequently misunderstood mathematics skills and knowledge. Based on research and thorough assessment of existing gaps in knowledge, the final tools are developed by math educators and mathematicians partnering with game developers and animators. Users of “Math Snacks” integrate technology (web, animation, video, iPhone and iPod) into their math curriculum by using developed tools as pre- and post- class activities, as part of a lecture and as resources for out-of-school learning. All completed materials are available for free at http://www.mathsnacks.org. Further support for students include supplemental materials and Web 2.0 portals (Facebook, Twitter, Blog).

The Math Snacks project addresses the problems middle grades students have learning mathematics by focusing on basic conceptual understandings of mathematics that are a foundation for further advanced learning. The concepts to be developed into innovative media are selected for two reasons: because the concept to be learned is a key to mathematical intellectual development and because it is also a concept that has been missed across a large number of students based on test and observational data. It is also likely to be a concept that the teacher finds difficult to teach. The following article suggests the need to refocus mathematics on core concepts, and to address first those concepts that are the most difficult for most students.

Research supports students learning core fundamental understandings of mathematics, a critical content area which students need to master in order to take advanced courses in the STEM field and eventually become knowledgeable citizens and workers in the 21st century. One of the reasons mid-school students lack a conceptual understanding of mathematics may be the relatively undefined and unstructured U.S. curriculum, poor assessments, and the low level of mathematics knowledge required for teachers. As Ginsburg, Leinwand, Anstrom, and Pollock, (2005) suggest in a book comparing the Singapore and U.S. curricula, the U.S. lacks a centrally identified core of mathematical content which could help focus the country’s various curricula and teaching systems. National assessments are not utilized as formative assessments for teaching. These authors state that the U.S. “textbooks emphasize definitions and formulas, not mathematical understanding” (p. ix). The same authors continue, “The Singapore texts are rich with problem-based development in contrast to traditional U.S. texts that rarely get much beyond exposing students to the mechanics of mathematics… the Singapore
illustrations also feature a concrete to pictorial to abstract approach: “Many students who have difficulty grasping abstract mathematical concepts would benefit from visual representations of mathematical ideas” (p. xii).

Mathematical content is stored in the mind as a concept image (Tall & Vinner, 1981) A concept image is defined as “the total cognitive structure that is associated with the concept, which includes all the mental pictures and associated properties and processes”, while the concept definition is defined as “form of words used to specify that concept.” For example, the formal definition of a fraction is “any number that can be put into the form \( \frac{a}{b} \) (also sometimes written \( \frac{\ell}{\omega} \), where \( a \) and \( b \) are numbers and \( b \) is not 0” (McKeague, 2008). A possible concept image of this definition would be the usual pie cut into four pieces. When you ask students to tell you a fraction they will think of certain numbers such as \( \frac{1}{2} \) or \( \frac{1}{3} \). The Math Snacks products, by using technology, can tap into multiple representations of a concept and provide another concept image to the student in order to deepen conceptual understanding. As Moreno & Mayer (2007) suggested, “Multimedia supports learning by providing additional graphical illustrations.”

If U.S. students are to be more successful in life, they must begin with a strong foundation in core mathematics concepts and skills, which, by international standards they presently lack. Singapore, whose students ranked first in the international comparison of student mathematics performance at the 8th grade (TIMMS, 2008), provides such a foundation to students. Other high-scoring countries, such as Japan, also have clear national systems that define what topics are to be covered and then cover them in depth at each grade level (Takahashi, Watanabe, & Yoshida, 2004). In the U.S. there are current efforts to develop a focus on core understandings at specific grade levels. Examples include the Focal Points proposed by the National Council for Teachers of Mathematics and the new National Common Core Standards. The Math Snacks project provides a key set of topics to be explored and understood within a developmental framework of conceptual understanding that moves from the 6th- 8th grade levels.

**Initial Analysis of Gaps**

An analysis of over 24,000 student scores in 3rd - 8th grade in high-need NM districts showed consistent areas of weakness. In addition to receiving lower scores with the open-ended questions, students had trouble with multiple-choice questions demonstrating understanding (as opposed to just choosing a numerical answer) (Korn & Wiburg, 2008). For example, while students can measure, they don't score well in a section of the New Mexico Standards Based Assessment that requires explanation their understanding of a concept like measurement. Overall, student scores were weak in demonstrating conceptual understanding in topics that include: number systems and operations, fractions and decimals; and moving between numerical, tabular, and graphical data describing linear relationships. The Math Snacks are being developed to address these topics along with the concept of variables.

New Mexico’s Standards-Based Assessment (NMSBA) has been shown to correlate well with the NAEP national assessment (Aligning mathematics assessment standards, 2008).
The test is given yearly to all students in grades 3 through 8, and again in 11th grade. Fifty percent of the points on this test are reserved for short-answer or open-ended questions. In other words, students must write about their understanding of the mathematics they are doing, draw or interpret tables or graphs, or explain their thinking in answering a problem. In every district in the state, students score lower on the half of the test that includes open-ended items than they do on the multiple-choice section of the test. While students can generally use procedures correctly, they don’t demonstrate an understanding of the reasons for doing them. (I would move this paragraph to explain validity of test to before the other paragraph in this section to show the test is valid)

The Potential of Media

As Gee argues, games and newer electronic learning environments provide opportunities that both engage students and require a demanding kind of “reading and writing” that builds literacy and thinking skills (2004). A recent synthesis of research (Heid and Blume, 2008) describes how technology can be used for the teaching and learning of mathematics. Within this research series, Olive and Lobato (2008) describe how the use of technology aides students in understanding rational number concepts. They present six research studies in which students gained understanding of rational numbers through the use of technologies from virtual manipulatives to videos to game environments. Students were able to understand the concepts of equal parts to whole, and the use of multiplicative reasoning, when using computer-based environments that allowed them to take apart and rebuild representational pieces of objects.

Clements, who has done extensive work with young children and computers, suggests that for children, representational objects on a computer are seen as a manipulatives. They find such representational objects as easy to use at an early age as blocks and chips. He and colleagues (Clements, Sarama, Yeilland, & Glass, 2008) describe the use of a modified LOGO environment to help students learn geometry. Interactions with media around mathematical topics have the potential to help students fill their conceptual gaps in understanding. As Atkinson (2005) states, “Creating multimedia presentations that encourage learners to build coherent mental representations enhances learning.” (p. 404) These mental representations are exactly the concept images. Some concept images must be dynamic and interactive in order to fully understand the capabilities of concepts. For example, when talking about a number line, to have students actually go on a computer and zoom in and out of a number line would greatly enhance the concept image of infinite numbers between two chosen numbers and the strength of the tool that is a number line. Notice that in a classroom, a teacher without access to a computer projection image would have to draw numerous number lines to display the same message which would be time consuming and also would not support free exploration with a number line as an object. This scenario in the classroom is typical of a static concept image. Pilone & Pilone (2009) suggest “You can change the scale on your number line without affecting the values on that number line.” Assisting middle school students with more concept images, like an expandable and contracting number line, will help students to be better prepared for algebra and move from number lines to a coordinate plane.

The Math Snacks grant researches and evaluates the potential of short animations and
games in helping learners understand concepts before or after engaging in more formal classroom learning. The products are also meant to be used anywhere and at any time after school, at home or on the school bus. According to the cognitive theory of multimedia learning (CTML), combining spoken text with dynamic graphics should promote learning with understanding (Atkinson, 2005). In a preliminary study carried out by the NMSU Learning Games Lab, 20 mid-school youth were loaned iPods with only educational content on them — they were not allowed to put their own music or games on them. Content included educational videos, such as documentaries, and age-appropriate animations. Researchers found that youth spent approximately 10 minutes a day with the material in the first week. When they found an animation or video they especially enjoyed, they shared it with their peers, and often with their parents as well. According to Robert Rubenstein (1994), students fourteen years of age or younger have a working memory with an attention span of 5-10 minutes, which correlates with the length of the time involved with watching or playing a Math Snack. The six resulting pilot animations are popular with students and teachers.

From Gaps to Goals to Math Snacks

Combining our knowledge of the gaps introduced above, along with an understanding of the potential of media in classrooms, the development team then created mathematical goals and objectives to guide the multimedia development of products for the first two years. These goals are influenced not only by the gaps analyzed, but from qualitative interviews with students and teachers, and from the extensive experience of educators on staff in teaching mathematics in schools. The first year goals concentrated on number sense, with multiple representations of numbers, the use of the number line as a tool, and solving situated problems using operations. The goals for next year are still being refined but include variables with an emphasis on why they are important and powerful in mathematics.

The development team also gives plenty of thought to the pedagogical usefulness of the product along with the mathematics involved. For example, learner and teacher guides are included with every Math Snack, and the development group decided that a two page guide would suffice since the guide’s include inquiry questions and based more on conceptual learning than traditional math practice. The guides do provide application of the concepts as well as conceptual questioning; aiming at personalization such as “Can you give me an example of how this Math Snack applies to your life?” The guides also provide stimuli for further student exploration. One Math Snack, the Bad Date shows three scenarios- one in which the male talked almost all the time; one in which the female dominated the conversation and one in which their conversations can be coded as a desirable one-to-one ratio. At the end of the animation, the number of words spoken by the female and the male on the date was 57:56, until the male said “Bread!” A conceptual question that arose was “What if the male did not say ‘Bread’? This asks students to examine when approximation and accuracy are important for using mathematics in everyday life.

Once the goals are settled on, the development team brainstorm products that would address some of the goals. In the brainstorming meeting, every product that is introduced
for possible development must correspond to the agreed goals, which also reflect extensive research on the mathematics learning gaps. For example, one of our products in development is an interactive number line so that students can realize the potential of a number line and the expansiveness of real numbers. This product is linked to the goal of number sense and in particular the number line as a scalable tool. The use of technology makes possible exciting interaction with a movable number line. It is important because it brings to life the number line, which has been shown in textbooks or provided in lectures only as a stagnant image. A teacher in a classroom cannot draw on the board a dynamic magnification or expansion of a number line.

Each product is tested by the Learning Games Lab on campus, where students from local schools are invited to play or watch the product. A video closet is provided so students can walk into the closet at any time and report to a video camera what they did and did not enjoy. They are also asked to make suggestions for improving the games or animations. Then the products are used in pilot classrooms where project staff works with volunteer teachers to test the Math Snack in a classroom where more feedback is gathered. All products are tested multiple times through successive revisions and teachers are invited to suggest how the Math Snack can help them to teach concepts. Finally, a quality assurance group headed by external advisors met with the development team twice a year to give a more formal critique of the appropriateness and usefulness of the product prior to production.

**Incorporating the Math Snacks with Teachers**

Researchers (Hill, Rowan, & Ball, 2005) have found that teacher mathematics knowledge is positively related to student achievement. Many middle school teachers have had very little opportunity to learn deep mathematics in their teacher education programs in the U.S. Unlike teachers in other countries, they have not been required to pass high levels of mathematics as part of teacher preparation, nor do they receive continued professional development in learning mathematics for teaching (Ginsberg, *et. al*, 2008). Math Snacks modules allow best practices of a guest expert to virtually come into the classroom in order to share mathematics with the teachers and students via media.

In the summer of 2010, the math specialists working in the Math Snacks group were invited by the principal of Sunrise Elementary School to run a Math Snacks camp in their school. This principal then corresponded with the principal of Mesa Middle School to hand pick 8 teachers for the camp, and in turn each teacher picked 4 or 5 students from the school representing different demographics. The camp ran for 5 days, with two teachers taking 8 students and one math snack product as an area of focus from mathematics. The focus areas included: ratios, measurement, number line and scale factors. The model of the Math Snacks professional development was very innovative and had proven successful in previous grants with teachers. The teachers would spend time working with students to develop their ability to use technology to teach mathematics in the morning and then would use the afternoons to critique and modify what had happened with the students. A final project was done by the groups focused on the mathematics topic of the selected Math Snacks. For example, one group chose the snack “Number Rights”, an animation centered around people carrying number placards.
on a number line. The purpose was to help students recognize that numbers like -3.4 or ½ have actual places on the number lines. The students in the group chose a number on the number line, and built a house on their number. Each family member living in their house was a different numerical representation of their number. For example, if their number was 3 \( \frac{2}{3} \), their mother was 3. \( \overline{6} \), while their father was \( \frac{8}{3} \). Students also made up neighbors, or numbers that were living “close” to them. The group incorporated technology by setting up a website with separate pages for each student and their numerical family, and presented the website to their real family at the end of the camp. Many of these students presented their number family in both English and Spanish.

The students learned math by using the technology, however, it was the teachers who really learned the most mathematics. Prior to the summer academy they were not aware of many of their own misconceptions about math concepts. One example involved a teacher learning the difference between a ratio and a fraction. The students asked if a ratio could be written in the same way as a fraction. A ratio is defined as the comparison between two quantities. So if you compare 2 boys to 3 girls or 3 girls to 2 boys, the ratio is 2:3 or 3:2. But it depends on how you label the ratio. Similar exploratory questions were prevalent in the lesson plans of teachers for each of the mathematics topics.

The teachers loved the fact that they had ample time to cover one topic area of mathematics, and absolutely enjoyed the incorporation of technology, in particular, the *Math Snacks*. As the teachers debriefed their morning lessons with students they continued to learn and to suggest new ideas they wanted to add to their lessons. Two teachers emphasizing scale factor, wanted to add the fact of scaling down by 5 to scaling up by 1/5. These experiences enhanced the concept images of the teachers, which in turn will hopefully be passed on to the students they teach. Concept images are the key mathematical ideas that are easily retrievable in a student’s mind, and we must strive to introduce as many as we can. Math Snacks aims towards that goal.

**Conclusion**

The Math Snacks project uses the results from the NMSBA which is aligned with the TIMMS international study to identify educational gaps in mathematics. These gaps assist the development team to create goals, which guide them to produce Math Snacks. Highly engaging, these snacks tap into the potential of multimedia learning. One by-product of this engagement would be that teachers understand the importance of a student’s concept image. Hopefully Math Snacks will be able to provide students with another concept image that accurately portrays the important math concepts students need to be successful.

**References**


for the Japanese course of study: Arithmitic (Grades 1-6). Madison, NJ: Global Education.

Title (#1223): American Foster Youth & School Dropout Rates

Author: Melissa Porter Masoner
University of Kansas Doctoral Student
Education Leadership and Policy Studies

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Abstract: This paper and power point presentation show the challenges to academic success of foster care youth in one typical Midwestern American city while pointing to some promising national education practices. The overall school dropout rate in American public schools is of great concern today, yet the over 50% dropout rate for youth in foster care is far worse and receives relatively little attention.

Although safety is the short-term priority for an abused or neglected child, an education is the best long-term solution to this costly individual and societal problem. Education enables an abused child to gain the skills and ability to pursue happiness as society has promised. Educators, child advocates, families, and students themselves must look deeper into the causes and implement solutions to the foster care education crisis.
Title: Toward Better Collaboration in the Education of Students with Fetal Alcohol Spectrum Disorder (FASD): Perspectives of Teachers, Administrators, Caregivers, and Allied Professionals

Presenters: Jenelle Job, MEd, Educational Psychology, University of Alberta
Belina Pasula, MEd, Edmonton Regional Educational Consulting Services
Deborah Brandell, MEd, Special Education, Edmonton Public School Board

Abstract: The present study addresses the call for increasing the voice of teachers, administrators, caregivers, and allied professionals in research. In particular, our findings report on the strengths and challenges in the working relationships among key stakeholders involved in the education of students with Fetal Alcohol Spectrum Disorder (FASD).

The current study employed a qualitative research approach to allow for depth and rich understanding of the experiences of individuals supporting students with FASD with respect to learning and assessment. Eleven focus groups and three interviews were held (total $n = 61$) between April 2009 and May 2010. The focus group protocol included questions about the experiences specific to each role and successful strategies for effective communication. The audio recordings were then transcribed verbatim, and a preliminary analysis generated summary reports that were provided to interviewees for member checking.

Thematic analysis yielded four major themes: relationships (i.e., enhancing the communication and collaboration between school personnel and families), strategies (i.e., classroom strategies and curriculum adaptations designed to provide students the specialized programming they need to be successful), supports (i.e., supporting children and their families through school personnel involvement in student programming and provision of academic and community resources to aid in healthy child development), and professional identity (i.e., how school personnel understand their roles in the education of students with FASD and the importance of professional development, identity, and knowledge of FAS for effective teaching).

This project is an important step towards increasing links between research and practice in the education of students with FASD. Engaging stakeholders in this type of research not only allows for the generation of evidence-based practice but also encourages opportunities for learning on the part of our research participants. The resulting optimization of educational and assessment practices helps to inform theory and equip teachers, administrators, caregivers, and allied professionals to better meet the needs of students with FASD and their classmates within the school environment.
Elementary Pre-service Teachers’ Perceptions of the Use of Problem-solving Skills in Mathematics and Art

“A rose by any other name would smell as sweet…”

William Shakespeare

Introduction

With apologies to William Shakespeare, “a problem by any other name still enhances critical thinking.” Problem-centered learning, whether in art or in mathematics, provides students rich experiences that transfer to situations beyond the classroom. Preparing students for success in the ever-changing, fast-paced world requires attention to developing effective skills in problem solving and critical thinking. When young artists decide on an appropriate media for depicting their emotional response to a situation or a particular form and structure for a sculpture, they are enmeshed in solving problems, using reasoning skills, making and testing conjectures, and finally coming to terms with the inconsistencies around them to create a unified whole. Mathematics students also wrestle with content and concepts as they work to solve problems to derive a way to find the product of two two-digit numbers in their heads or develop a process for locating a water delivery-system equidistant from the four communities it is intended to serve.

Eisner (2002) defines problem in art as “a situation in which students’ existing conceptual and technical repertoires are inadequate for coping with what they confront, and as a result they are challenged to think in new ways about how to grapple with the problem” (p.96). As students attempt to solve the problem, they experiment with ideas analyzing the results. They hold fast to the methods that lead to success and continue to make modifications to the ones that miss the mark. A problem in mathematics is defined in similar terms. Van de Walle (2010) defines a problem as a task that is not readily solvable, has no prescribed method for solving, and does not reflect a specific “correct” solution method. He states that “a problem for learning mathematics has three features: 1) It must begin where the students are, 2) The problematic or engaging aspect of the problem must be due to the mathematics that the students are to learn, and 3) It must require justifications and explanations for answers and solution methods” (p.33). For the purposes of this study, a problem will be defined as an open-ended task that requires deliberation,
may be solved using multiple strategies, a variety of approaches, and may have multiple solutions.

Based on observations of experts, there are ways to determine whether a teacher focuses the learning in her classroom on a problem-centered approach or on one more traditional approach. One of the determinants points to creating a balance between problem solving as the center of learning and the experiences developed for the students which allows them to struggle with challenging problems, examine and create better solution strategies and providing them the appropriate information at critical times to enhance student achievement (Hiebert & Wearne, 2003). Art experiences provide opportunities for problem solving and decision-making that enhance skills of communication and creative thinking. Students must make enumerable decisions as they arrange, design, paint, or draw deciding on subject matter, materials, color, shape, value, texture in an attempt to express their ideas. There is a constant ebb and flow of evaluation and reorganization as a piece evolves (Jenkins, 1980). Most of the problems encountered and solved through a students’ production of artwork parallels their experiences in life. By facing and solving problems and then implementing the solutions in their artwork, students grow as human beings and in their ability to handle situations they will face in the future (Cane, 1951). The effective teaching of both mathematics and art lies in the teacher’s ability to create a problem-centered environment in which students experience learning through a hands-on, inquiry-based approach.

If a problem-centered approach is the most beneficial for student learning, then it is imperative that pre-service elementary teachers learn through a similar experiential, problem-centered, inquiry-based approach. Current research indicates that student achievement is significantly impacted by teachers’ content knowledge and their attitudes toward the content they teach (Schunk, 1995; Clarke, 1985). Metzler and Woessmann (2010) found that teachers’ expertise in subject matter content exerts a significant impact on student achievement that can be measured statistically and quantitatively. When teachers lack strong content knowledge, they are hesitant to incorporate problem-solving, inquiry-based lessons into instruction because the solutions their students develop may not follow the same conventions the teachers learned. When teachers do not emit a positive attitude toward a content area or teach with enthusiasm, the students’ reflect the
same lack of interest and exhibit lower achievement levels in those content areas. Although most elementary teacher preparation programs include strict guidelines for content mastery, these programs fail to provide opportunities for the pre-service teachers to use that information in problem-centered situations in ways reflective of the techniques they should incorporate in their own future classroom settings.

In comparisons with students from across the globe, the United States’ scores fall well below those of countries in which content mastery and the fine arts are an integral component of the educational system. To prepare elementary pre-service teachers for the classroom, many pre-service programs require classes in the fine arts and physical education. Requiring courses in art production and courses on integration of the fine arts and physical movement into the elementary curriculum, provide these elementary pre-service teachers with the knowledge they can utilize to enrich the elementary curriculum and, thus, enhance student learning.

When elementary pre-service teachers learn content and pedagogy though a problem-centered, inquiry-based approach, they are more likely to use those same approaches in their own classrooms. The more opportunities they have to create their own knowledge base, the better prepared they will be to create learning environments in which students can, in turn, create their own knowledge. Art lessons, when incorporated into the elementary curriculum, provide students with an outlet for creative discovery, emotional release, critical thinking, and problem solving. When teachers review students’ artwork, they often can see characteristics of emerging intellectual acuity, particularly in the areas of mathematics and social maturity. Teachers need to be acutely aware of the critical thinking and problem-solving skills that evolve as students complete art projects. These are the same skills that are important components of a strong, problem-centered approach to learning mathematics. When students incorporate critical thinking and problem-solving skills throughout the curriculum, their learning is enhanced, their abilities to represent ideas in multiple ways are increased, their communication skills are refined, their sense of reasoning is improved, and they begin to make connections between what they learn in the classroom and what they will experience in the world outside the classroom.

The purpose of this study was to explore elementary education pre-service teachers’ perceptions of their use of problem-solving skills in both art and in mathematics. The
question guiding this research was: Do elementary pre-service teachers’ use the same approach to solving problems in art as they do in solving problems in mathematics? This is a descriptive study representative of survey research in which subjects responded to items focusing on statements regarding approaches to solving problems in mathematics and art production. The responses on the 4-point, Likkert-type scale were analyzed for trends in responses as they relate to the research question. Demographic data was collected and is presented as well. The subjects were drawn from a sample of convenience of the pre-service elementary teachers enrolled in a required course, Introduction to the Visual Arts in the Curriculum.

Methods

There were 44 subjects who participated in the project and responded to the twenty-seven statements on the survey. Two of the subjects (4.5%) were also concurrently enrolled in a mathematics content course, Geometric Structures, and the first mathematics method course, Teaching Mathematics at the Primary Level. Fifteen of the subjects (34%) were enrolled in the Visual Arts in the Curriculum course and another of the required mathematics content course, Mathematical Structures. Eleven (25%) of the subjects were enrolled in the Visual Arts in the Curriculum course and Geometric Structures. Three of the subjects (6.8%) were enrolled in the Visual Arts in the Curriculum course and the Primary Level Mathematics Methods course, but not a mathematics course. Almost sixty percent (59%) of the subjects had taken one or both of the two required mathematics content courses in previous semesters.

Of the previously mentioned courses, three are taught through a problem-centered approach. The Visual Arts in the Curriculum course has a lecture component and an art production lab in which the elementary pre-service teachers complete a variety of projects. The art production lab is problem-centered and the elementary pre-service teachers are presented a task to complete. They are free to decide what approach they will take and how they will complete the task. The Teaching Primary Level Mathematics methods course reinforces teaching mathematics through a developmentally appropriate, hands-on, problem-centered, inquiry-based, experiential approach. The Geometric Structures mathematics course is founded on an inquiry-based approach in which elementary pre-
service teachers are presented problems to solve and must make and test their own conjectures to derive a variety of geometric concepts and principles.

Results

Descriptive statistics were calculated for each of the twenty-seven statements. After reading each statement, each respondent could select from four levels of agree: 1 – Strongly Disagree, 2 – Disagree, 3 – Agree, and 4 – Strongly Agree. The following tables report the number of responses for each level, the mean, and the standard deviation. The statements have been grouped by similarity: mathematics-related statements, art-related statements, and creativity-related statements. Following each table, a brief discussion of the data is presented.

Table 1

Data for the Mathematics-related Statements

<table>
<thead>
<tr>
<th>Mathematics-related statements</th>
<th>Strongly Disagree</th>
<th>Number (Percent)</th>
<th>Strongly Agree</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am always aware of my thinking when I solve math problems.</td>
<td>0</td>
<td>7 (15.9)</td>
<td>27 (61.4)</td>
<td>10 (22.7)</td>
<td>3.07</td>
</tr>
<tr>
<td>3. I always follow the same steps when I solve math problems.</td>
<td>1 (2.2)</td>
<td>10 (22.7)</td>
<td>22 (50.0)</td>
<td>11 (25.0)</td>
<td>2.98</td>
</tr>
<tr>
<td>5. Before I solve a problem in math, I plan the steps I am going to follow.</td>
<td>4 (9.1)</td>
<td>20 (45.4)</td>
<td>17 (38.6)</td>
<td>3 (6.8)</td>
<td>2.43</td>
</tr>
<tr>
<td>6. I am aware of the strategies I use to solve math problems.</td>
<td>0</td>
<td>21 (47.7)</td>
<td>17 (38.6)</td>
<td>6 (13.6)</td>
<td>2.66</td>
</tr>
<tr>
<td>9. Some people are born with a “math mind” and some aren’t.</td>
<td>0</td>
<td>3 (6.8)</td>
<td>22 (50.0)</td>
<td>19 (43.2)</td>
<td>3.36</td>
</tr>
<tr>
<td>11. When completing a math problem, I keep track of my progress and change my technique or strategy when I encounter a difficulty.</td>
<td>2 (4.5)</td>
<td>10 (22.7)</td>
<td>28 (63.6)</td>
<td>4 (9.1)</td>
<td>2.77</td>
</tr>
<tr>
<td>16. I check my work while I move from step-to-step in completing math problems.</td>
<td>0</td>
<td>9 (20.5)</td>
<td>26 (59.1)</td>
<td>9 (20.5)</td>
<td>3.00</td>
</tr>
<tr>
<td>17. Successful mathematical problem-skills can be taught to anyone.</td>
<td>0</td>
<td>5 (11.4)</td>
<td>25 (56.8)</td>
<td>14 (31.8)</td>
<td>3.20</td>
</tr>
<tr>
<td>22. It is not helpful to have a plan before trying to solve a math problem.</td>
<td>21 (47.7)</td>
<td>21 (47.7)</td>
<td>2 (4.5)</td>
<td>0</td>
<td>1.57*</td>
</tr>
</tbody>
</table>
Most (84%) of the respondents are aware of their thinking as they solve problems in mathematics although they (75%) seem to follow the same steps each time. There seems to be some agreement that respondents do not actually plan the steps they will follow to solve a problem, nor are they aware of the strategies they use when solving their problems. They do try to keep track of their progress and check their work as they move from step-to-step to complete their work. Almost 90% of the respondents believe that problem-solving skills can successfully be taught and that it might be helpful to have a plan before you begin your work.

Table 2

Data for the Art-related Statements

<table>
<thead>
<tr>
<th>Art-related statements</th>
<th>Strongly Disagree</th>
<th>Number (Percent)</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I check my work while I move from step-to-step in completing art projects.</td>
<td>0</td>
<td>6 (13.6)</td>
<td>14 (31.8)</td>
<td>3.18</td>
</tr>
<tr>
<td>10. Having a plan before solving a problem in completing an art project is not helpful.</td>
<td>17 (38.6)</td>
<td>22 (50.0)</td>
<td>1 (2.3)</td>
<td>1.73*</td>
</tr>
<tr>
<td>12. Before I start a project in art, I always plan the steps I will follow to complete the project.</td>
<td>1 (2.3)</td>
<td>11 (25.0)</td>
<td>13 (29.5)</td>
<td>3.00</td>
</tr>
<tr>
<td>15. I am always aware of my thinking when I solve problems in art.</td>
<td>2 (4.5)</td>
<td>6 (13.6)</td>
<td>12 (27.3)</td>
<td>3.05</td>
</tr>
<tr>
<td>19. When completing an art project, I keep track of my progress and change my technique or strategy when I encounter a difficulty.</td>
<td>1 (2.3)</td>
<td>5 (11.4)</td>
<td>10 (22.7)</td>
<td>3.07</td>
</tr>
<tr>
<td>20. I see ideas in pictures rather than in words.</td>
<td>1 (2.3)</td>
<td>7 (15.9)</td>
<td>17 (38.6)</td>
<td>3.18</td>
</tr>
<tr>
<td>23. I always follow the same steps when I complete an art project.</td>
<td>7 (15.9)</td>
<td>30 (68.2)</td>
<td>1 (2.3)</td>
<td>2.02</td>
</tr>
<tr>
<td>26. I am always aware of the strategies I use to complete projects in art.</td>
<td>1 (2.3)</td>
<td>10 (22.7)</td>
<td>8 (18.2)</td>
<td>2.91</td>
</tr>
</tbody>
</table>

Over 80% of the respondents check their work while they work on problems in art, are aware of their thinking and the strategies they use, and keep track of their progress.
when they are solving problems in art. They also support the idea that having a plan is very helpful, but rarely follow the same steps when completing an art project. Thirty-six (81.8%) of the respondents see ideas in pictures rather than words.

Table 3
Data for the Creativity-related Statements

<table>
<thead>
<tr>
<th>Creativity-related statements</th>
<th>Strongly Disagree</th>
<th>Number (Percent)</th>
<th>Strongly Agree</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Creativity is something you are born with.</td>
<td>1 (2.3)</td>
<td>10 (22.7)</td>
<td>21 (47.7)</td>
<td>12 (27.3)</td>
<td>3.00</td>
</tr>
<tr>
<td>13. Creativity is a skill that can be taught.</td>
<td>1 (2.3)</td>
<td>8 (18.2)</td>
<td>30 (68.2)</td>
<td>5 (11.4)</td>
<td>2.89</td>
</tr>
<tr>
<td>21. Solving problems in math requires creative thinking.</td>
<td>1 (2.3)</td>
<td>7 (15.9)</td>
<td>28 (63.6)</td>
<td>8 (18.2)</td>
<td>2.98</td>
</tr>
</tbody>
</table>

These three statements were included to give respondents an opportunity to think about the creative process. Thirty-three (75%) of the respondents agreed or strongly agreed that creativity is an attribute that a person is born with, although almost 80% felt that creativity is a skill that can be taught. Surprisingly, they also supported the statement that solving math problems requires creative thinking.

Table 4
Means for Related Statements

<table>
<thead>
<tr>
<th>Mathematics/Art Related Statements</th>
<th>Strongly Disagree</th>
<th>Number (Percent)</th>
<th>Strongly Agree</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am always aware of my thinking when I solve math problems.</td>
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<tr>
<td>15. I am always aware of my thinking when I solve projects in art.</td>
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<td>6 (13.6)</td>
<td>24 (54.5)</td>
<td>12 (27.3)</td>
</tr>
<tr>
<td>2. I check my work while I move from step-to-step in completing art projects.</td>
<td>0</td>
<td>6 (13.6)</td>
<td>24 (54.5)</td>
<td>14 (31.8)</td>
</tr>
<tr>
<td>16. I check my work while I move from step-to-step in completing math problems.</td>
<td>0</td>
<td>9 (20.5)</td>
<td>26 (59.1)</td>
<td>9 (20.5)</td>
</tr>
<tr>
<td>3. I always follow the same steps</td>
<td>1 (2.2)</td>
<td>10 (22.7)</td>
<td>22 (50.0)</td>
<td>11 (25.0)</td>
</tr>
<tr>
<td>Mathematics/Art Related Statements</td>
<td>Strongly Disagree</td>
<td>Number (Percent)</td>
<td>Strongly Agree</td>
<td>Means</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>-------</td>
</tr>
<tr>
<td>8. I can correct my errors in art projects easier than I can when solving math problems.</td>
<td>4 (9.1)</td>
<td>15 (34.1)</td>
<td>16 (36.4)</td>
<td>9 (20.5)</td>
</tr>
<tr>
<td>14. I can correct my errors in solving math problems easier than when completing art projects.</td>
<td>9 (20.5)</td>
<td>16 (36.4)</td>
<td>15 (34.1)</td>
<td>4 (9.1)</td>
</tr>
<tr>
<td>9. Some people are born with a “math mind” and some aren’t.</td>
<td>0</td>
<td>3 (6.8)</td>
<td>22 (50.0)</td>
<td>19 (43.2)</td>
</tr>
<tr>
<td>17. Successful mathematical</td>
<td>0</td>
<td>5 (11.4)</td>
<td>25 (56.8)</td>
<td>14 (31.8)</td>
</tr>
</tbody>
</table>
problem-solving skills can be taught to anyone.

10. Having a plan before solving a problem in completing an art project is not helpful.

<table>
<thead>
<tr>
<th>Number (Percent)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 (38.6)</td>
<td>22 (50.0)</td>
<td>4 (9.1)</td>
<td>1 (2.3)</td>
<td>1.73*</td>
<td></td>
</tr>
</tbody>
</table>

22. It is not helpful to have a plan before trying to solve a math problem.

<table>
<thead>
<tr>
<th>Number (Percent)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 (47.7)</td>
<td>21 (47.7)</td>
<td>2 (4.5)</td>
<td>0</td>
<td>1.57*</td>
<td></td>
</tr>
</tbody>
</table>

11. When completing a math problem, I keep track of my progress and change my technique or strategy when I encounter a difficulty.

<table>
<thead>
<tr>
<th>Number (Percent)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (4.5)</td>
<td>10 (22.7)</td>
<td>28 (63.6)</td>
<td>4 (9.1)</td>
<td>2.77</td>
<td></td>
</tr>
</tbody>
</table>

19. When completing an art project, I keep track of my progress and change my technique or strategy when I encounter a difficulty.

<table>
<thead>
<tr>
<th>Number (Percent)</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (2.3)</td>
<td>5 (11.4)</td>
<td>28 (63.6)</td>
<td>10 (22.7)</td>
<td>3.07</td>
<td></td>
</tr>
</tbody>
</table>

The data presented in Table 4 represents the grouping of like statements. Similar statements reflect similar views. For instance, respondents agree that they are aware of their thinking whether they are solving mathematics problems or art problems. They check their progress as they work through problems in both areas and they believe that even though some people might be born with a "math mind," they can be taught to successfully solve math problems. Statements where this is a difference between the responses, include following the same steps to solve problems. Thirty-three (75%) of the respondents always follow the same steps when working math problems, but only 7 (15.9%) follow the same steps in solving problems in art. Responses were almost equally split between disagree (54.5%) and agree (45.4%) on planning the steps they would follow to solve math problems, but thirty-three (75%) always plan steps to solve an art problem. They also seem to be more aware of the strategies they use in art then they do when solving math
problems. The responses were consistent for statements suggesting that they way they solve problems in art is very different from the ways they solve problems in mathematics and that errors are easier to correct in art than in mathematics. This group of subjects seem to be very visual in their learning style, are better at solving problems in art than in mathematics, and would rather teach art than mathematics. Further statistical analyses might provide additional insights into the data and reflect correlations that might exist between statements.

Implications

The results indicate that the elementary pre-service teachers do seem to use the same approach to solving problems in art as they do in solving problems in mathematics. The results indicate that they are becoming aware that the problem solving skills they are learning in the visual arts course and in the mathematics courses are very useful in solving problems. One implication for future work is to assist elementary pre-service teachers in seeing that problem-solving skills are comparable experiences in not only art and mathematics, but in other subject areas as well. If they become excited about the process of solving problems, learn strategies that are helpful in solving problems, and learn to determine effective ways to evaluate not only the process, but also the solution, they are more likely to develop a learning environment in their own classrooms that reinforce the ideas of problem solving and critical thinking. Although these elementary pre-service teachers do not recognize problem-solving strategies as common structures in both art and mathematics, they do believe the process solving problems is important. Future studies will focus on helping elementary pre-service candidates identify problem solving and critical thinking skills within the elementary curriculum, learn to employ those strategies themselves to solve problems, and to learn how to develop meaning activities that integrate these processes throughout the instructional environment.
References


Assessing the Impacts of Experiential Learning on Teacher Classroom Practice

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Abstract

This paper focuses on the professional development of formal science educators through extraordinary experiences that occur within the realm of informal science learning. For many years the University of Colorado Denver (UCD) has offered programs that take teachers on “science learning journeys” to Africa, South America, through the Pacific, and many U.S. destinations through its Experiential Science Education Research Collaborative (XSci). On these adventures, teachers gain direct, first person experiences of unique and often challenging environments and multidisciplinary science within those settings. Such professional development opportunities for teachers are widespread as summer programs through a variety of informal science learning organizations nationwide. However, there is currently a lack of in-depth qualitative research investigating the actual benefits and interpretive nature of such programs as personal and professional “extraordinary” science learning experiences for the individuals who participate in them. The research agenda for the XSci Collaborative examines the experiences of educators engaged in informal extraordinary professional development experiences in order to understand the personal processes that make them extraordinary and valuable. Specifically, the primary research approach is to examine the interpretation of these experiences by teachers as case studies under the conceptual framework of a phenomenology. This approach utilizes several data sources, including teacher-created digital stories and video documentaries as personal narratives of their extraordinary experience; journals completed throughout the experiences, post experience interviews, classroom observations and student interviews.

Introduction

Although many formal and informal institutions offer experiential learning opportunities there is little in the literature about the value of informal science professional development approaches as lived experiences, how they are interpreted by educators, how meaning is made and communicated, and how such experiences are integrated into the identities and practice of those who choose to participate in them. Knowing this information informs designers of informal and experientially based science teacher professional development programs, the field of education researchers, and educators themselves about the nature and reflective processes involved. These outcomes promote better construction of such experiences in the future and contribute to the research base of these programs.
Background and Rationale

An emerging trend in science educator professional development is experiential learning through what can best be described as immersive and extraordinary informal experiences. Examples include fieldwork with scientists, experience in research labs, and STEM-oriented exploration, travel, and adventure. Experientially based learning strategies in general have a long history rooted in the early work of John Dewey (1938), and later evolved in work by Piaget (1950), Kurt Hahn (1957), Paulo Freire (1970), Vygotsky (1978), Kolb (1984), Jarvis (1987), and many others. Experiential education is best understood as a philosophy of education, in contrast to learning methodologies such as didactic or rote learning that are mostly concerned with knowledge delivery. In contrast, experiential education is concerned with learning from direct first-person experience and a holistic perspective that goes beyond content to include the construction of knowledge, attitudes, beliefs, and transfer of learning. Itin describes experiential education as a process where “Learners are engaged intellectually, emotionally, socially, politically, spiritually, and physically in an uncertain environment where the learner may experience success, failure, adventure, and risk taking” (1997). Quay asserts that learning through experience occurs at the level of the individual (constructivism), the small group (social constructionism), and culture (cultural discourses) (2003).

Although experiential learning outcomes have been receiving increased attention in the last decade (Baldwin, Persing, & Magnuson, 2004; Ewert & Sibthorp, 2009; Keys & Bryan, 2001), little research has been done to identify specific personal gains conferred by such extraordinary informal science learning experiences to educators. Instead, the majority of research into experiential learning specifically for teachers has focused on using hands-on, inquiry-based learning approaches with pre-service teachers within the context of formal teacher education programs (Gilmer, Hahn, & Spaid, 2002; Windschitl, et al, 2003). The research that does exist for informal and immersive experiential programs is often in the form of program-specific evaluations. These efforts have come part of the way in defining the benefits of such experiences, yet they have typically lacked a strong research-oriented theoretical underpinning as well as innovative research approaches for a broad-spectrum analysis of personal benefits from such experiences.

Important questions remain for the field regarding the benefits of extraordinary informal and experientially based education programs for teachers. Does it impact their practice or sense of personal and/or professional identity in meaningful ways? If so, how is that meaning made? What is the essence of these experiences that makes them extraordinary? And ultimately, if the meaning of such experiences is created through individual reflection and interpretation, what is the process of constructing an extraordinary learning experience for oneself and others? We generally address these questions through a case study research approach under the broader umbrella of a phenomenology study. Our goal is to focus on the lived experiences and individual meanings constructed by participants engaged in extraordinary professional development experiences from their respective points of view in the form of narratives, while also considering what the experiences may have in common as phenomena unto themselves (i.e. the essence of the experience for all involved), if such commonalities can be found.

Case study research, as discussed by Creswell (2007) examines an issue or event (in this study, an experiential learning opportunity), “through one or more cases within a
bounded system” (p. 73), and implies a methodology as well as describes the research products. The bounded system here is defined from when the teachers sign up for the professional development experience to several months (or even years) after the completion of their personal narratives communicating their experiences. In these studies, each teacher’s professional development experience are treated as a separate case in order to maintain his or her individual story and point of view.

The approach is informed by identity theory and what Psychologist Dan McAdams has referred to as “the narrative study of lives” in his book *The Redemptive Self* (2006). This approach considers the internalized life stories people create to make sense of their lives as “narrative identities” and the notion that such narratives determine what we do and how we make sense of what we do. In the parlance of identity theory, this can be tied to the concept of identity construction, agency, and the resultant social behavior.

Additionally, an overarching phenomenological structure forms the research context for the case studies, and is intended to consider the question of what the different teacher experiences might have in common that makes them “extraordinary,” if anything. To answer this question, we seek to describe the essence of the extraordinary experience through the elements that transcend the individual cases and apply to the experiences commonly or as shared elements emerging from the individual case studies (Creswell, 2007). We use van Manen’s hermeneutic phenomenology approach (1990), which considers the interpretation of lived experience through various “texts,” (which can include multiple data sources) and seeks essential themes to describe and represent the nature of a given experience in broad and specific terms.

Importantly, this technique goes beyond mere description to also integrate the interpretation and interpretive processes of the researcher regarding the meaning of the lived experiences, rather than attempting to *epoche*, or bracket out, the researcher’s point of view (van Manen, 1990; Husserl, 1931). The theoretical basis in conducting this research is rooted in constructivism as described by Piaget (1950), Bruner (1961), Vygotsky (1978), Bransford, Brown, & Cocking (2000), Kim (2005), and others. This stance is reflected in the operational definition of “experiential education” as a starting point for considering the extraordinary learning experiences in this program:

A transactional learning strategy in which educators and learners co-engage in direct experience and focused reflection, in concert with private personal interpretative processes on the part of the learner, to construct knowledge, develop skills, and contextualize the meaning of the experience.

In a teacher experiential learning scenario then, the professional development trainers or designers are defined as the “educators” and the teachers being professionally developed are defined as the “learners.” Given this stance, we actively look for events, instances, and reflections in which the process of knowledge construction and meaning making is taking place. This may include evidence of, or references to: collaborative learning and deep personal introspection (Brooks & Brooks, 1993, 1996); the existence and evolution of mental frameworks, structures, or schemas (Zemelman, Daniels & Hyde, 1993); and narrative accounts of development of or changes in identity (Henke, Chen, & Geis, 2000).
For this last component, identity, we apply tenets of identity theory. Identity theory is built upon the notion that society is organized and has patterns. The self emerges within the context of this organization through what Stryker dubbed “structural symbolic interaction” (1980) through the use of language and symbols based on shared meanings within a society or culture. William James (1890) posited that there are as many selves as there are positions that one might hold in society and as there are groups who respond to and interact with the self. We each have multiple identities, each one an agent capable of choice, action, and role taking (e.g. parent, friend, teacher). Therefore the notion of identity is somewhat distinct from the person owning them, but describes avenues for behavior and transactions within society based on shared meanings within particular cultural structures. In this capacity, “professional identity” – an educator for instance – is a role-based designation and is endowed with all the accoutrements, expectations, and responsibilities one understands it to mean.

But identity is also a theoretical construct existing in the mind of the individual and gives rise to the sense of self. Self is a person’s consciousness of his or her own being (Burke 2009). It allows each of us to reflect on and evaluate ourselves as both subject and object, planning and modifying on this construct to bring about desired future states. This is personal growth. Further, the self is born out of social interaction and experiences within the environment and most notably the complex structure of society and culture (Mead 1934). Because we can each assume different positions within society, the self reflects these by way of multiple identities. Therefore, the self can assume agency through identities, and is in part comprised of the sum total of those identities – which are fluid throughout our lives.

Viewing constructivism through the lens of identity theory, we take the position that the learning of new things can go beyond incorporation into an internal framework for understanding to actually inform, modify, and become integrated into a person’s identity. In short, the construction of new knowledge is, in fact, identity construction. While constructivism stresses the building of understanding through an ongoing process of linking new ideas and information within internal constructs or schemas based on previous learning, identity theory goes one step further to then also incorporate the self into the equation in the form of the relationship of the knower and the known as an essential element to learning, meaning making, and personal growth. Viewing professional development as a form of identity construction is important because it changes the notion of teacher training from one of content or methodology training to consider the larger relationship of the educator to new knowledge and its integration into his or her self perceptions.

**XSci Application**

In setting up experiential activities certain organizational considerations and areas of outcomes are investigated in the research.
**XSci Experiential Learning Definitions**

**Defined Experiences**

Clearly science interest, skills, and knowledge are developed in many places, at many times, and through many mechanisms. The driving questions commonly determining selection of experiential learning sites are: what things are to be learned and experienced and how these experiences will be supported, amplified, or expanded at different times and in different environments? So in our approach we determine what is the role of the experience, both as an entity in itself and as an addition to other formal educational experiences. There is a need for knowledge, derived from both practice and research, about how these different settings work together. To meet these objectives our partnerships includes a range of experiential opportunities extending from internships with the museum and national park system, research with NASA, NFS and others, and extraordinary field experiences to expand content understandings and challenge participant.
Experiential Learning Characteristics

XSci experiential learning is a process through which a learner constructs knowledge, skill, and value directly from an experience within the environment. In many respects it is not unlike situated learning or place based learning. Content learning within these environments occurs when carefully chosen experiences are supported by reflection, critical analysis, and synthesis. Experiences are structured to require the learner to take initiative, make decisions, and to be accountable for the results. The results of the learning are personal and self constructed preparing for and leading to future experiences and learning. Understandings are developed and deepened. Shared experiences within a group or cohort influence this learning. Lave and Wenger (1991) suggest that individuals learn as they participate by interacting with a community, its history, assumptions and cultural values, rules, and patterns of relationship; the tools at hand, including objects, technology, language and images; the moment’s activity, its purposes, norms, the practical challenges. Shared knowledge emerges from the interaction of these elements. Activities that involve professionals in open and dynamic discussion, mutual problem solving and/or collaborative learning draw the participants into a community of learners or professional cohort and contribute to a deeper understanding of the science concepts and content expressed during the experience. The increased content understanding enhances the professional efficacy of the participant resulting in more confident practice.

The use of a field site considers this theoretical base in planning meaningful activities. The field experience is designed to meet all of following program objectives.

A) Increased understanding of science content and concepts through first-person experience
B) Extraordinary experience as determined by participant as extraordinary
C) Learning personal and self constructed
D) Challenging, high stakes with possibility of failure
E) Participation within a cohort as part of a community of learners

Participant Impacts

Narrative Identity

We explain experiences to ourselves in the form of narrative. Narratives form our identities. The relationship between narrative and identity is an internal transaction. Narrative provides input to identity as the form and method of identity construction. In turn, our sense of identity thus formed contributes back to our evolving narrative through the output of meaning or how we make sense of our relationship to the experience and potentially to other experiences. The best teachers have the best stories, giving them the opportunity to form incredible stories and thus incredible identities. It’s not what they tell students but how they view the related content they teach students and model the understanding.
Content Understanding

The complexity of content and its relationships are best understood through direct experience with that content. Situating the learning in extraordinary experiences create deeper understanding of content vs. memorized content routinely accomplished through textbook use. Although students are not participating in the experience, their teachers have and in the process better understand the content they teach. In addition the descriptions of the content delivered through first person narration may better inspire the students and model for them an exciting and positive way of relating to science.

Professional Self

The quality of a teacher resides in their experiences. These expertises are developed through a combination of their formal and informal experiences. Formal and informal experiences contribute to content depth and profundity, content application understandings, pedagogical knowledge and use, and professional interactions all resulting in a strong teacher sense of professional self. Identity is revealed in the form of a sense of agency, which in turn results in social behaviors- what they actually do as educators and how they do it.

Content Communication

The transfer of content understanding to students is impacted by the depth of teacher understanding of that content. The more experience the teacher has relating to the content the better they are in relating it to a range of students. In addition the ability to engage student through first-person stories about the content enhances their understanding and interest in understanding the content. Modeling the way the teacher thinks about and understands the content helps students understand this content and gives them examples for approaching future content.

Personal Relevance

Self is people’s consciousness of their own being. Each reflects on the desired future state. This is personal growth. It allows each to evaluate themselves as subject and object, planning and modifying on this construct to bring about desired future states. Continued monitoring of participants following an extraordinary experience to determine if they seek out other experience and continue growth.

Student/Colleague Outcomes

Inspiring through Stories

The most influential classroom teachers are those who can effectively take their students on extraordinary journeys of discovery, whether of the mind, spirit, or body. Teachers themselves derive inspiration from their own extraordinary life experiences and
endeavor to bring them into the classroom in ways that engage students in the process of inquiry through a variety of creative methods and tools.

Inquiry Process Understanding

Many teachers only experience with inquiry stems from coursework labs following detailed directions with predetermined results and when presenting inquiries in their classrooms follow this model. Learning how to do and thus lead inquiries they must experience true inquiry (research). Inquiry by its nature contains a certain amount of dissidence, many times demonstrating out as frustration by students. A teacher’s recognition of this and not allowing the feeling to end the experience is important. Guiding the students to work through the experience utilizing proper scientific approaches to come to correct understanding.

Modeling Involvement

An important part of teaching is when a teacher models how to deal with content and make sense of phenomena. An expectation that all students bring a problem-solving schema to content is false. We would expect that eventually students develop these skills but many need this modeling before that happens. Another aspect of modeling is a teacher’s love of science and curiosity to learn more. This can be contagious and lead to a co-creation of a science identity.

Co-creating Science Identity

Science identity construction, like any form of identity construction is based on experience, agency and role taking. An area of research interest relating to the teacher’s professional (science) self is whether enhancement of self may result in co-creation of science identity with their students. Generating excitement, modeling science inquiry, retelling personal experience, all may contribute to a classroom community that values science and create student science identities that encourage their interest and future involvement in science learning.

Content Engagement

The more tools a teacher has to deliver and understand content the more likely they will engage students. The more experiences the teacher has with the content the better they understand it and the more likely they will expand the ways they are able to express understanding. Teacher stories enrich the content delivery. Relying entirely on textbooks and worksheets to interest and engage students is usually unsuccessful.

Attitude for Sustained Learning

Generally participants in ongoing experiences already have a positive attitude toward sustained learning. Whether those that participate in the first experiential activity continue to seek out additional experiences is part of our research agenda. For those that
Methodology Explanation

Regarding the case study and phenomenological aspects of this research, we follow a general model for data collection common to qualitative research, as identified by Madison (2005), Huberman and Miles (1994), and Wolcott (1994). This includes a phase of collecting and organizing the data for analysis, a phase of applying a coding and condensing process to reduce the data into themes and categories, and a phase of representing the data as findings using a variety of tools (narratives, discussions, figures, etc.). Typically, these phases form a data analysis spiral and occur in an interrelated and iterative fashion, rather than a linear one (Creswell, 2007).

Data collection occurs before, during and following the extraordinary experiences. We use purposeful sampling in selecting participants for the research from these trips who are willing to take part in the study, including some who create video documentaries or digital stories of their experiences.

For the purposes of this research, given its emphasis on narrative interpretation, it is not necessary to control for the variety of experiences teachers might have. After all, even on the same trip, teachers will invariably have very different experiences. What is important for the study is that participants have what they would call an “extraordinary experience.” Then the research questions regarding the nature of the experience and their interpretation of it can flow. Also, since the study will focus on extraordinary professional development experiences related to science, it is critical that all experiences studied include science learning in some way (although not all educators included have to be science educators).

Examples of such experiences include teachers travelling to Peru and Easter Island where they journey through the Andes mountains, visit the ancient city of Machu Picchu, hike part of the Inca trail, and explore the remnants of a society that depleted their natural resources ages ago, leaving only majestic stone statues on Easter Island as evidence of their existence. Another example is teachers travelling to Africa to climb the largest free-standing volcano in the world – Kilimanjaro, travel through the Serengeti – one of the last great wilds on the planet – and visit AIDS orphanages and villages beset with social, economic, and health challenges.

For some, these experiences represent first time encounters with foreign travel, different cultures, even the ocean, or represent a personal challenge. In any case, such experiences are potentially transformative experiences and provide numerous opportunities to touch teachers in unique and highly personal ways, and this is the criterion important to the research.

The role in the research is to conduct the data collection and analysis through interviews, reviews of narrative journals, review of online group sharing via Facebook, and the review and deconstruction of teacher-created video documentaries or digital stories.

We recognize that the participating teachers are not seasoned film/digital story makers and will be learning the editing software and post-production process to some extent while they develop their documentaries. Therefore we assist them in technical
ways as they complete their films. We are careful to give general guidance and options in such cases, rather than specific interpretive input.

Alternatively, our experience as designers of similar professional development experiences greatly informs the research approach and questions identified, providing potentially important insights. The identification and inclusion of our own interpretation of the data and the stories presented by the teachers is part of the reason we use a hermeneutic phenomenology structure. To facilitate this we keep a reflexive journal throughout the research process and incorporate it into the final report.

We gather a wide range of data in this research approach to allow for comparison and triangulation across the different experiences and to examine congruency among the different forms of data for validation. Data sources include: 1) iterative and recorded participant interviews and observations (immediately post-experience, during and after the video editing process, and several months post-experience); 2) participant travel journals as written narrative forms; 3) teacher-created video documentaries as multi-dimensional narrative forms, and; 4) shared narrative threads (including comments, stories, photos, and videos) typically posted among groups on Facebook.

The interviews are individual, semi-structured, guided interviews focused on open-ended questions to allow for the emergence of themes and identification of themes. Each are video recorded for later transcription and open-coding analysis, and I we take observational notes during the interview process.

The review of the participant travel journals involve treatment of them as narratives using narrative analysis and an open-coding approach to identify emergent themes and categories, and to include significant quotations and comments that represent them. We impose a narrative structure *a priori* for teachers to use when writing their journals in order to facilitate narrative form. During this process we rely heavily on the reflexive research journal to compose reactions to and interpretations of the narratives, make metaphors, and attempt to relate emerging themes to the theoretical base of constructivism and theoretical framework (Wolcott, 1994).

Regarding the analysis of the video documentaries as data sources, we use a narrative analysis approach that considers each film as a holistic story as well as a deconstruction of its elements in order to better elucidate the multi-dimensional meaning of the films. This approach in informed by two previous approaches. The first was described by Yussen and Ozcan (1997) and examines five elements of plot structure: characters, setting, problem, actions, and resolution. The second was described by Clandinin and Connelly, (2000) and examines three dimensions: interaction (personal and social), continuity (past, present, and future), and situation (physical places or circumstances). Under this framework, we apply a visual coding strategy to examine the imagery chosen by the video creators to identify visual themes and categories, a verbal-linguistic coding of dialogue and/or narration based on a textual transcription of each film to identify text-based themes and categories, a scene-by-scene plot mapping approach to create a conceptual map of each film to examine the sequential order of “scenes” chosen or developed by the video creators, and finally a running narrative commentary in which video creators comment in real-time about their choices and what they were “going for” in their documentaries. This is modeled on the “director’s commentary” option common on DVD movies as part of the special features menu and is recorded for video playback with commentary.
Finally, the shared narrative threads on Facebook involves a review of the postings by group members from each extraordinary experience as different threads. For example, a given posting of a comment, story, photo, or video typically initiates a thread in the form of responses and additional postings. These threads can be identified, mapped, and coded and then compared for emergent themes and agreement or disagreement among responders. Additionally, the impact of this form of sharing and response generation can be included in the guided interviews to examine their impact on the post-trip framing of the experience. This approach represents a new area of data collection.

Once the initial data collection is completed, we embark on an iterative interpretation process, which will include each participant and apply both the case study design and the phenomenological framework. For the case study approach, we apply the design described by Stake (1995), treating each individual participant’s experience as a separate case and using the multiple data sources discussed above to formulate a detailed description of each case. This description includes each case history, chronology, day-by-day activities, significant events, interpretations, and will synthesize the themes initially identified from the various data sources into comprehensive emergent themes. The result is a within-case analysis of each case (Creswell, 2007).

Following this step is a cross-case analysis to examine the emergent statements and themes across all the cases and consider the different extraordinary experiences as shared experiences, or phenomena. The overriding issue addressed by this phenomenology approach is what it means to have an extraordinary professional development experience. We use van Manen’s hermeneutic phenomenology approach (1990), which considers the interpretation of lived experience through various “texts” and seeks essential themes to describe and ultimately understand the common experiences of the participants. For this research, the “text” for analysis includes all of the data sources described above. From these sources, significant statements revealing how the teachers experienced the phenomena of the extraordinary experiences will be identified across the cases. From this analysis, we identify the themes and meanings which seem to be shared among all participants and yield an understanding of what each experience was like, what made it extraordinary, and how meaning was made and identity constructed by participants in their interpretation of their experiences. The result are detailed written descriptions of what they experienced (textural description) and the context (internal or external) that influenced how the extraordinary experiences (structural description). These descriptions will be compiled into a composite description that represents the “essence” of the experience shared among all the participants. This hermeneutic approach integrates the interpretation and interpretive processes of the researcher regarding the meaning of the lived experiences, rather than attempting to bracket out, the researcher’s point of view.

During this process we share the initial findings with participants as a starting place for the co-construction of the final interpretation of the data until it accurately represents the personal experience for each participant to their satisfaction. This includes member checking in the form of additional interviews and collaborative data review sessions, culminating in the final deliverables describing their experiences as represented in the different data sources. Further, we actively seek to identify discrepant information and explore its meaning within the context of the study in collaboration with participants.
as a form of negative case analysis.

Summary

The intent of XSci is to elucidate the meaning of and processes for constructing extraordinary learning experiences for oneself and others. We focus on extraordinary professional development experiences for educators, with the point of view that teachers are uniquely attentive to learning processes and are well equipped to help us, as the researchers, articulate their constructions of identity and meaning and significance regarding these experiences. However, there is currently a lack of in-depth qualitative research investigating the actual benefits and interpretive nature of such programs as personal and professional extraordinary experiences for the individuals who participate in them. If a teacher goes to Africa and climbs Mount Kilimanjaro, how does it matter to them as professional educators? Does it impact their practice or sense of personal and/or professional identity in meaningful ways? If so, how is that meaning made? What is the essence of these experiences that makes them extraordinary? And ultimately, if the meaning of such experiences is created through individual reflection and interpretation, what is the process of constructing an extraordinary learning experience for oneself and others?

References


1. Title of the submission: (Submission 1234) “Strategies to Decrease Burnout in Physical Educators with Coaching Responsibilities”

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TITLE
“Strategies to Decrease Burnout in Physical Educators with Coaching Responsibilities”

ABSTRACT
One of the most prevalent concerns educators face is the threat of burnout. This chronic condition occurs when demands exceed an individual’s ability to cope, instilling a sense of being overwhelmed, which can produce either a psychological, emotional, or physical withdrawal from a stressor (Smith, 1986). Unable to cope, burnout is likely to occur.

The physical education profession has been shown to experience less burnout than other professions, but is not immune to burnout. When physical educators take on other responsibilities, which is often the case, the dual role of teacher-coaches has been found to have many incompatible characteristics (Kosa, 1990).

The dual roles of physical educator/coaches create unique challenges for the individual. It is important to create awareness of these issues in order to better treat and prevent burnout. If left untreated burnout can lead to leaving the profession, becoming distant in the profession, or not giving the necessary effort to complete the tasks it takes to be a physical educator (Drake & Hebert 2002; Wuest & Bucher, 1999). While burnout affects the teacher, the effects of burnout can cause the learning environment to suffer which ultimately affects the students.

The goal of this presentation is to create a greater awareness so that physical education professionals and others can; 1) identify potential causes of burnout in physical educator/coaches, 2) identify potential symptoms of burnout, 3) identify
potential coping mechanisms for burnout, 4) present strategies to prevent and deal with current burnout.
Title of the submission:
Relationships among Self-Regulation, Peer competence, Play and Leadership of Preschool Children.

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Abstract
This study explored relationships among Self-regulation, Peer Competence, Play and Leadership of preschool children. Instruments were the Korea-preschool Leadership Scale (Lee & Choe, 2008), Korea-Self regulation Scale (Lee, 2003), Korea-preschool Peer Competence Scale (Pak & Lee, 2001), Korea-preschool Play Scale (Chi, 2007) constructed by the researcher. Participants were 214 mothers of preschool children (M=75 month) and 10 preschool teachers in Seoul. They responded to questionnaires; data were analyzed by correlation and multiple-regression.

Major results showed there were First; positive correlations among Leadership of children's and Self-regulation (r=.15, p<.05), Peer Competence(r=.61, p<.01) and Play(r=.51, p<.01), also positive correlations between Peer Competence and Play(r=.77, p<.01).

Second; (1) Leadership was predicted by sociability of Peer Competence, (2) Leadership was predicted by leadership of Peer Competence, (3) Leadership was predicted by self-control of Self-regulation.
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Submission title: ‘I’ll find you on Facebook’
Adapting methodology frameworks to investigate the level of social and pedagogical inclusion of student with Social, Emotional and Behavioural Difficulties.

Format: Paper presentation

Abstract
Formal methods of interview and data collection can be of limited usefulness when it comes to investigating the lives and school experiences of students with Social, Emotional and Behavioural Difficulties (SEBD) (Travell, 1999; Department for Education and Skill, 2005). First, the constraints of formal interviewing are in themselves off-putting, ‘boring’ ‘uncool’. There exists, secondly, amongst these teens a high degree of awareness of their psychological and pedagogical ‘label’ (Dudley-Marling, 2000). Students with SEBD are highly aware of the perception teachers have of them and remain very weary of any attempt to record, analyse or obtain data that might confirm or corroborate previously established diagnosis or disciplinary rulings. Finally, if the intention of any study is to investigate the genuine, private and subtle interactions which students with SEBD entertain with their peers, the investigative methods used by researchers must be just that: subtle. Data collection must remain non-intrusive, respectful and centered on these young people’s own notions of what was relevant and not.

This is why the idea of mirroring principles of ethno-methodology for the purposes of investigating the level of inclusion achieved by children who are ‘at risk’ is appealing. Ethno-methodology has developed in indigenous contexts where researchers have had to realise and acknowledge that traditional Western research framework, even when they are qualitative, may be ill-adapted to the idiosyncrasies of a particular sub-group or culture (Smith 1999; Wilson 2001; Fredericks 2007; Jordan, Stocek, Mark, & Matches, 2009). It manifests itself in practical terms as the desire to make the research process as respectful of cultures, languages and knowledge of the indigenous participants as possible and involves reflection on the actual parameters of mindful research in an indigenous context.
In practical terms this means that individuals collecting data from the students with SEBD must similarly be respectful of the relevance attributed by the students to the different forums they use and to the nature of various exchanges, even if these do not rank equally in their own value systems. Individuals in interactions with the students with SEBD must also try to mirror registers of language used by the students to facilitate reciprocal exchanges; they must be instructed to demonstrate interest in the various technological and communication tools frequently used and mentioned by the students. An ethno-methodological approach may also mean that the researchers collecting and recording data have to venture into new media platforms, such as online games or social networking sites, and may need to engage on these platforms. The key value becomes participation and observation rather than directive questioning. This ‘blending in’ process seems essential considering the intangible nature of the exchanges being sought out.

The paper will consider the outcome of such reworking of traditional methodological format in light of the lessons learnt from ethno-methodology – from the perspective of SEBD but also in the more general context of inclusive education, where each ‘millennium’ learner (Keefe, 2008) is increasingly becoming a hybrid learner, drawing skills and knowledge from the classroom but also from a much wider array of technological avenues.

REFERENCES


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Plagiarism has been and is a perennial academic integrity problem at all levels of education. Communication technologies and distance learning settings are two-edged swords: fortunately, through the growing global presence of telecommunication options, students and teachers have increased their educational opportunities through many asynchronously- flexible course readings, discussions and online assignments; learners and educators cross time zones and political boundaries with cyber-ease according to their personal time schedules while meeting mandated timelines. Communication technologies and distant learning settings have opened the educational door to more students who need and have access to more diverse learning options. Communication technologies and distant learning settings also have opened the door to more professors who can utilize more teaching strategies and delivery modes while providing more individualized mentoring assistance to their students.

Unfortunately, communication technologies and distant learning settings have exacerbated the problem of plagiarism by permitting more anonymity and more ethical misunderstandings, especially in cross-cultural environments. While, it would be naïve not to accept the fact that a percentage of students do intentionally plagiarize or “cheat” for a seemingly unlimited number of reasons, other students unintentionally commit academic integrity infringements. It is essential to be able to identify both types. Students who unintentionally-cheat may do so for three legitimate reasons: [1] misunderstandings due to cultural academic integrity protocol – what was acceptable study strategies in their own cultures do not necessarily match the expectations of the new cross-cultural environment; [2] misunderstandings of newly integrated special needs students, as students on the autistic spectrum, who display cognitive processing challenges such as not being able to intellectualize multiple perspectives, other than their own. In other words, they have no Theory of Mind; and [3] students who have misunderstandings of plagiarism due to a combination of both cross-cultural and cognitive processing challenges.

Traditionally too often institutions through their designated course professors focus on the delivery of the course content; however, many of today’s current online learners have differentiated learning styles as well as differentiated cultural backgrounds and differentiated former learning opportunities. Institutions and professors cannot simply assume that pedagogical cultural contexts and constructs in all cross-cultural academic settings are similar. This is not the case. Because of this misconception, students can be unjustly accused of plagiarism and other academic integrity infringements. Dire consequences can lead up to course failure, resulting in a negative impact to the student’s course transcript. Student retention rates increase.
So, what can be done to address this academic integrity cross-cultural dilemma, especially with the problem of plagiarism? First, this interactive session in a collaborative format will define, discuss and present the concept of plagiarism and its many permutations across cultures. Next, the session will address the importance of college policies regarding academic integrity and the methods in which they should be shared and explored with students. Finally, researched suggestions and a recommended survey instrument will be presented in order to provide a framework for distance education professors to meet the needs and understandings of their students on this subject. In conclusion: never assume, always assess attitudes and expectations, of both the students and the teachers. Possibly, by emphasizing, the student’s role and responsibility in self-monitoring academic integrity, plagiarism online and in traditional classroom settings, will decrease and, ideally, disappear from academia.
Examining How the Enacted and Assessed Curriculum Can Be Informed by Studies of the Textbook Curriculum Using the Articulated Learning Trajectory Construct

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**Introduction**

In this paper, theoretical and conceptual frameworks are presented that highlight the relationships among the enacted, assessed, and textbook curriculum, as well as the role of learning trajectories in explicating the connections among these curriculum. In particular, I argue that the construct of an articulated learning trajectory (ALT) developed by in a previous study (Olson, 2010) for mathematical content analyses of textbooks offers a fruitful framework through which connections can be examined among these three areas of the school curriculum. That is, in conducting a mathematical content analysis using the ALT construct, the features of the textbook curriculum (i.e., the scope and sequence of mathematical topics) are examined in-depth; the resulting data and narratives can then inform the field and researchers as to what content teachers actually enact, and what content is important to assess.

I maintain that the ALT construct provides for in-depth examinations and explication of the ways in which textbook authors present and develop mathematical content. In short, an articulated learning trajectory is defined as follows:

> The articulation of a hypothetical learning trajectory in curriculum materials, namely in textbook sequencing within a grade level and across grade levels….an ALT is a learning trajectory that goes beyond the situated predictions of student learning associated with a HLT. (Olson, 2010, p. 67).

The examination of ALTs across and within grade levels is focused on the development of a particular topic or content. For example, in a previous study (Olson, 2010) I focused my examination of ALTs within middle grades mathematics textbook series around the development of algebraic thinking constructs specifically related to authors use of patterning concepts. The following section relates specifically to the theoretical and conceptual frameworks that guide connections among the various school curricula. However, selected brief findings from this study will be explored later in this paper.

**Frameworks**

**Situating the Textbook Curriculum**

Two frameworks specifically situate the role of the textbook curriculum, through which, ALT examinations, and connections to the enacted and assessed curriculum can be better understood and developed. In particular, scholars at the Center for the Study of Mathematics Curriculum (CSMC) developed a conceptual framework (Figure 2) that identifies various aspects of the school curriculum. Within this framework, I argue that the focus of mathematical content
analyses studies should be within the realm of the textbook curriculum. By identifying the content that students have the opportunity to learn, and in what sequence it was presented, assessments can be further analyzed to determine whether or not the knowledge assessed was in fact the knowledge that was likely developed through the use of a particular textbook.

Remillard (2009) also provides a theoretical framework (Figure 1) through which one can identify interactions among aspects of teaching and learning mathematics. In particular, this framework illustrates the ways in which the textbook curriculum interacts with the practice of teaching (i.e., of enacting the textbook curriculum). Specifically, the usefulness of mathematical content analyses utilizing the ALT construct is that such efforts highlight the topics, tasks, and structure of textbooks, which in turn inform examinations of the enacted curriculum by providing a robust understanding of nature of curriculum resources. Furthermore, Remillard’s identifies the need to examine the features of the textbook curriculum as follows:

The fact remains that each curriculum program has a number of features (some of which may seem trivial to the researcher or developer) that might figure significantly in how a teacher interacts with it….we lack conceptualizations of what these features might include, which are needed before we can study how these features matter. (p. 90)
Situating Learning Trajectories and the Textbook Curriculum

In a summary report on a conference to identify avenues for future research, collaboration, and development of curriculum materials with regard to the Common Core State Standards for Mathematics (CCSS) (2010), Confrey and Krupa present a theoretical framework (Figure 3) for examining the instructional core, the center of which is focused on learning trajectories. This framework is based on current research related to explicating learning trajectories for learning mathematical content, and provides an orienting lens for my work.

In the framework presented by Confrey and Krupa, the intended curriculum and implemented curriculum are evident at one vertex of the learning trajectory triangle. However, I argue that these two parts of the school curriculum in the model in Figure 3 are directly related to...
the *textbook curriculum* and the *tasks, topics, and structure* aspects presented in Figure 1 and Figure 2, respectively. In other words, I maintain it is through the interaction of the learning trajectories presented by the authors via the *textbook curriculum* (i.e., ALTs) that differences in the tasks, topics, and structures can be identified that affect teachers implementation of a particular curriculum, as well as how accurately assessments assess the knowledge that was developed through the use of one textbook versus another.

**A Brief Examination of ALTs**

The data presented in this section are from a study of ALTs related to the development of algebraic thinking constructs through the use of patterning concepts within four middle-grades mathematics textbooks (Olson, 2010). These data are presented to provide substantive examples of the ways in which studies on the enacted and assessed curriculum can be informed by descriptions of authors use, presentation, and development of mathematical content within and across grade levels. Specifically, I present data from two textbooks: Saxon Math, Course 1 (Hake, 2007) and Math Thematics, Book 1 (Billstein & Williamson, 2008). Both of these textbooks are intended to be the Grade 6 textbooks for the middle-grades textbook series of which each are a part.

Through the examination of ALTs in this study, elaborate narratives were developed and a final summary narrative of the ALTs in each textbook trajectory was developed. The two summary narratives of Saxon, Course 1 and Math Thematics, Book 1 are particularly illuminating with respect to the potential for dramatically different opportunities to learn that are provided to students of these textbook series.

In the Grade 6 textbook of Saxon, the authors generally utilize pattern recognition and extension constructs in the first three-fourths of the textbook, and pattern generalization constructs in conjunction with variable and function concepts in the final one-fourth of the textbook (Olson, 2010). In fact, according to Olson, function concepts are *only* found in the latter one-fourth of the textbook. In other words, Olson provides the following summary narrative related to ALTs in Saxon, Course 1 related to pattern concepts and algebraic thinking constructs:

However, the data overall suggest that the authors engage students with pattern extension constructs in the majority of the material. These problems often take the form: given a pattern of numbers, describe the pattern and find the next term(s). Along with the repetitious inclusion of these instances throughout the text, the authors include groupings in the final one-fourth of the textbook that incorporate pattern generalization constructs, patterns in numeric contexts, and variable concepts in the context of function tables. (p. 155)

In contrast to the way in which the authors of Saxon, Course 1 present this mathematical content, the authors of Math Thematics, Book 1 include patterning concepts in Grade 6 as follows:

…the authors provide students with material related to determining a rule for a sequence in the first part of the textbook, which overlaps with the bulk of the material related to function concepts and pattern generalization constructs. Moreover, the authors generally incorporate variable and function concepts in
problems associated with pattern generalization constructs. (Olson, 2010, p. 212)

The authors of Math Thematics also incorporate variable and function concepts within the first one-fourth of the textbook. Furthermore, Olson identifies every instance that involves pattern generalization constructs and algebraic thinking concepts to be within the first three-fourths of the textbook, the precise opposite of where the Saxon authors position the same content.

**Discussion**

Clearly, within these two textbooks, each of which are part of middle-grades textbook series, the authors not only include content represented in different ways, but at different points in the textbook. It is my assertion that merely the different textual position of similar concepts will dramatically impact the implementation of this content. Furthermore, because of the difference in textual location of similar content, the assessment measures used to identify the knowledge acquired by students using one textbook versus another, might be very well skewed by various factors, such as, when the assessment is given (e.g., before or after the three-fourths mark of the textbook).

What is not discussed thoroughly in this paper is the fact that along with the difference in textual position, there is a dramatic difference in the nature of the instances of patterning concepts that the authors include in these textbooks. This fact is alluded to by the quote regarding the Saxon textbook, in that the general “form” for the presentation of pattern concepts is given, namely: given a pattern of numbers, describe the pattern and find the next term(s). This format for patterning concepts in Saxon, is not necessarily indicative of the format in the Math Thematics textbook. Although, some patterning instances in Math Thematics certainly embody the prevalent format of the Saxon book, the authors of Math Thematics engage students in vastly more geometric contexts for patterns. Subsequently, much of the work with patterning in Math Thematics relates to drawing connections between the numeric context of a pattern and the associated geometric context of the same pattern.

Clearly then, this fundamental difference in the presentation of pattern concepts between Saxon and Math Thematics, combined with the difference in textual location for key instances of patterning, lead one to question the struggles that a teach might have moving from one curriculum one year (say Saxon in 2010) to another curriculum in the following year (say Math Thematics in 2011). One likely would expect the teacher to supplement the Math Thematics curriculum with an abundance of patterning problems that are similar in format to the Saxon problems, but which they likely perceive as being largely absent in the Math Thematics textbook. Conversely, if a teacher went from Math Thematics to using Saxon, she or he might very well feel compelled to heavily supplement patterning concepts related to variables and functions early in the year, perhaps due to a lack of understanding that the Saxon textbook will cover such concepts, but not until first three-fourths of the textbook has been covered (assuming a teacher progresses linearly through the textbook; an assumption I believe to be valid).

Given the differences in the textbook curriculum identified by in my study (Olson, 2010), I argue that it is crucial to continue to utilize and refine my framework for mathematical content analyses using the ALT construct. Such studies are critical to understanding the nature of teacher supplementation of the textbook curriculum, as well as informing the overall picture of the nature of the content and sequence of the enacted curriculum and assessed curriculum.
References


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Using the Language Arts to Teach Cultural Humility to the Youngest of Our Learners

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Background
The concept of “cultural humility” suggests that we engage in an ongoing process of self-awareness and self-reflection to recognize, understand, and respect different beliefs, values, and practices. It suggests being open and flexible to accept the cultural differences, to learn from others about their cultures, and to build relationships on similarities. The increasingly diverse population of the United States requires a
more inclusive approach to teaching our young children that not only commits to the understanding of cultural history, background and experiences of both our teachers and students, but can also be tailored to the individual’s cultural framework.

The concept of cultural humility has been an effective one in the medical field, yet in education our terms of “tolerance,” “acceptance,” “diversity” and “multicultural education” are the basis for cross curricular development of what is taught to our children, yet they do not truly convey what our children need. It is believed that the introduction of the term “cultural humility” is a better descriptor of the kind of curricular engagement we want to use with our youngest learners. Moreover, extending the concept of cultural humility to our youngest students suggest the development of lifelong, reflective learners by effectively weaving an attitude about cultural differences into every teacher-student encounter.

A common approach to diversity education focuses on learning about specific ethnic and racial differences. While there may be patterns of beliefs and common experiences within racial and ethnic groups, there are many layers that make each individual unique. The humbleness it engenders enhances student/parent/teacher understanding of unintentional and intentional bias while broadening the acceptance of “other” through valuing input from this learning community interaction.

According to Hall (1976), the most important part of culture...is that which is hidden and internal but which governs the behavior encounter.” This quote speaks to the unseen yet powerful nature of culture. It is hidden and internal, yet is what helps shape our behaviors and interactions with others. Mis-understandings, false assumptions, lack of communication and understandings can arise more easily when people are operating from differing core beliefs. As Linda Hunt, Professor of Anthropologicia at Michigan State University has stated:

“Culture does not determine behavior, but rather affords group members a repertoire of ideas and possible actions, providing the framework through which they understand themselves, their environment and their experiences...Culture is every changing and always being revised within the dynamic context of its enactment.

“Additionally...individuals choose between various cultural options and in our multicultural society many times choose widely between the options offered by a variety of cultural traditions. It is not possible to predict the beliefs and behaviors of individuals based on their race, ethnicity, or national origin.”

Projected Research

In conjunction with The Center for Holocaust and Humanity Education of Cincinnati and its Executive Director, Sarah Weiss, this project of studying Cultural Humility and its implication for teaching the youngest learners (ages 5-8) was initiated in late spring of 2010. The focus and desire of the projected research was to develop meaningful opportunities for teacher mentors and the children they influence, a repertoire of ideas and possible actions that learners can choose from to form their own understanding of themselves and their world.

As we move through the day, our own lives reflect the cultural maze we encounter without even thinking about it. Our personal culture is shaped by our ethnicity and skin color, but also by our class,
age, experiences, physical abilities, gender, languages(s), religion, politics, education, sexual orientation, socio-economic status, and residential status. Cultural humility is developed in our young children in much the same way. This study is reflective of the needs of parents, educators and society as we impact the lives of the young (ages 5-8) who believe in us and we in turn in them as our future culture of world citizens.

Over the past five months we have been collecting information from a specifically focused data base of teacher/educators in both public and private schools from the tri-state areas of Ohio, Kentucky and Indiana. The school districts included, urban, suburban and rural communities. The response data to date is about 25% of the 800+ surveys sent. A second wave of requested information has been sent and the return date is scheduled for the end of October 2010.

The following 14 questions were determined important for the beginning of this research and were sent as a survey to determine the needs and desires of teacher/educators to effectively present material related to cultural humility both in and out of their classrooms. As part of this research, a similar survey is planned for parent/guardians of the same population.

**Teaching Tolerance Survey**

Please respond to the following survey questions regarding tolerance and inclusion as you experience it in the schools. Thank you in advance for your time and effort to complete this document.

**Demographic Information:** Please respond to each item as accurately as possible. Mark one response for each question unless otherwise noted.

1. **Gender:**
   - female
   - male

2. **Age:**
   - 20-25
   - 26-30
   - 31-35
   - 36-40
   - 41-45
   - 46-50
   - 51-55
   - 56-60
   - 61-65
   - 65 +
3. **Race:**
   - Black or African American
   - American Indian or Alaskan Native
   - Hispanic or Latino American
   - Asian American
   - Caucasian or White
   - Middle Eastern
   - Racially Mixed
   - Other _______________________________

4. **Religious affiliation (optional)**
   _____________________________________________

5. **I teach in a:**
   - Public School
   - Private School
   - Private Religious School
   - Charter/Community school

6. **I have been a teacher for:**
   - 0-5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - 21-25 years
   - 26-30 years
   - 30 + years

7. **My primary content area is:** (mark all that apply)
   - Language Arts and Reading
   - Social Studies
   - Math
   - Science
   - Early Childhood Generalist (I teach across the curriculum)

8. **In what way do you currently incorporate lessons on citizenship rights and responsibilities into your curriculum to help your students learn tolerance, inclusion, and acceptance of diversity? This includes, among other things, devoting classroom time to providing opportunities for students to demonstrate the ability to make choices and take responsibility for personal actions, and discussing qualities of good citizenship such as trust, respect, honesty, fairness, and compassion? (Please mark the response that best applies to you.)**

   **A. Use Extensively.** My school district provides a model curriculum and resources on tolerance, inclusion, and acceptance of diversity for me to use. (If so, please identify
the products and publishers:

_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

B. **Use Somewhat.** I use commercially produced educational products that my colleagues and I have identified for use within our classrooms. Those items include resources from organizations like, **Character Counts, The Character Council of Greater Cincinnati and Northern Kentucky, and/or Just the Way You Are.** (List the organizations and/or programs from which you use resources, including those listed above.)

_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

C. **Limited Use.** I have created some of my own resources that I find most effective. (Please describe below.)

_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

D. **Not at all.** (Please explain below.)

_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

9. **What qualities make a resource effective for promoting tolerance, inclusion and acceptance of diversity among students in Grades K-3?** (Please mark one response.)

   a. Books with actual photographs
   
   b. Books with illustrations
   
   c. Video with real footage
   
   d. Video with animation or other simulation
   
   e. Other: __________________________________________

10. **What do you see as the biggest challenge to promoting tolerance, inclusion and acceptance of diversity among students in Grades K-3?** (Please mark all responses that apply.)

    a. Students are too young to understand
    
    b. Keeping students engaged
    
    c. Students are already predisposed to intolerance
    
    d. Although much material is readily available, the items fail to be relevant and meaningful for children in first and second grade.
e. The materials currently available on tolerance, inclusion and acceptance of diversity are not rigorous enough.

f. There is not enough time reserved during the daily schedule because the focus is on teaching mathematics, reading, and writing.

g. Other: _____________________________________________________________

11. Among your students, which of the following characteristics, if any, appear to be a common basis for intolerance? (Please mark all responses that apply.)

a. Racial bias
b. Ethnic bias
c. Gender bias
d. Religious bias
e. Intellectual bias (disability)
f. Intellectual bias (giftedness)
g. Physical Appearance (related to racial/ethnic bias)
h. Physical Appearance (related to cleanliness)

12. Please describe any acts of intolerance you have witnessed in your school, your classroom or in school related activities, which seem to be of particular note.

13. If effective and interesting resources for teaching tolerance were more readily available, would you incorporate them into your curriculum?

a. Yes, whether or not it was mandated by my school
b. Yes, but only if these resources also taught other skills currently mandated by my school.
c. Probably not, but this would depend on the particular resources in question.
d. No. I am satisfied with the resources already available to me.
e. Other: ______________________________________________________________

14. Do you have any suggestions or thoughts as we conduct our research? We welcome any insight related to Grades K-3, Tolerance Education. (Please list your ideas below.)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**Paper Presentation Focus**

Note: This presentation is one of ongoing research in the field of teaching Cultural Humility to our youngest learners through the Language Arts, Literacy and Literature for children. A more conclusive summary of findings will be available for the international conference, as well as sample curriculum materials.

The focus of the presentation will include the following: (1) the results of the survey and the implications for curriculum materials in support of cultural humility; (2) the relationship of said materials to the language arts curriculum (focused on reading, writing, speaking and listening); (3) the sharing of the materials that promote cultural humility and cultural competence; and, (4) the projected future research across the curriculum.

The areas of language arts, literature, literacy and reading were selected because of the process of learning to read and its reflective nature towards the learning cycle. Its focus on the “coming to know” process from four perspectives, reading, writing, speaking and listening makes it an important avenue for young children to have the opportunity to effectively honor their own beliefs as they relate to their family beliefs, the beliefs of their teachers and beliefs of their friends in daily life.

The process of understanding cultural humility is recognizing that ‘cultural difference’ refers to a relationship between two perspectives. It involves self-awareness and an acceptance of the other person and any differences in the contrasting cultures represented. Teaching the concept to those learners who are most impressionable, will lead to an ongoing development of cultural knowledge, skills in understanding cross-cultural interactions, and an awareness and acceptance of the dynamic variety of people and populations. Using the power of the word in literature, using oral, written and visual representations, will allow an active engagement in a lifelong process of cultural humility.
Teaching teacher immediacy: How drama techniques can benefit future teachers

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Abstract. Teaching is a complex and interactive profession which hinges on communication. Efficacy of teaching depends not only on content knowledge, but also on how well teachers communicate and exploit themselves in the classroom. The purpose of this study is to document the concept of teacher immediacy through the study of the effects of non-verbal communication (NVC) workshops on student teachers’ non-verbal (NV) language and self-confidence. Results will be discussed in terms of teacher training.

Teachers play a decisive role in shaping the process of education and schooling. In line with this perspective, the quality of teacher education is an important issue in that it aims at training competent and knowledgeable teachers. Yet, as Hurt, Scott and McCroskey (1978) put it, “[there is] a difference between knowing and teaching, and that difference is communication in the classroom” (p. 3). Communication would be the contextual element that influences student learning the most (Cooper and Simons, 2007; Tremblay, 2003). Efficient, communication facilitates classroom exchanges; inefficient, it may render learning difficult or even hinder it (Anderson, 2004). There is clearly a relation between the way teachers communicate and how efficient they are in their classroom (Cooper and Simonds, 2007; Rubin et Feezel, 1986). Indeed, “[w]hat teachers do and
say can have powerful and pervasive effects on students’ intentions for learning, subsequent learning behaviors, and academic engagement” (Stefanou, Perencevich, DiCintio, and Turner, 2004, p. 97).

Teaching rapidly appears to be one of the most demanding professions in terms of ability to communicate (Tremblay, 2003). In order to facilitate their students’ learning, teachers must build and deliver clear and accessible messages. Yet, communicating implies not only words, but also gestures, posture, eye contact, facial expression, etc. In other words, to communicate means to express one’s self both verbally and non-verbally. Discrepency between the verbal (V) and non-verbal (NV) components of a message will create confusion and misunderstanding on the part of the listener (Tremblay, 2003). For effective communication to take place, teachers not only need to possess theoretical and practical knowledge, they also need to know how to exploit themselves (Anderson, 2004). Thus, effective communication resides, beyond discourse quality, in one’s capacity to exploit their personality and their body (Quentin, 2004).

**NV communication in the classroom**

Teacher efficiency is related to both clarity of the message (Tremblay, 2003) and communication skills (Rubin et Feezel, 1986). Garmston (1995) emphasizes the importance of NV communication in pedagogy, adding that a great part of classroom messages come from NV communication. Indeed, subtle aspects of communication such as glancing, nodding, half smiling, etc. may have the potential to send either motivating or amotivating messages to students. Moreover, teachers have to make sure that the NV features of their messages are in accordance with their oral counterparts because, when the NV contradicts the V content, it is the NV message that is retained as the “true” message by their audience (Quentin, 2004).
NV communication seems to be a very important, not to say crucial, element in the classroom. Indeed, the greatest discourse or demonstration of knowledge will not succeed in maintaining students’ interest and attention if one lacks enthusiasm, avoids eye contact, or adopts a lazy body posture. Likewise, unrestrained gestures, invasive tics and twitches will act as deviating attractors, decreasing or even taking one’s audience’s attention away. NV communication therefore reveals itself as an important tool to help create and maintain efficient classroom communication, which will allow to teach content more effectively (Garmston, 1995).

**Specific context**

Effectively communicating in the classroom can clearly turn out to be a strenuous and confidence-mining task for student-teachers (STs) who are not used to being exposed – not to say overexposed – to an audience basically 5 hours a day, 5 days a week. Indeed, for many people, standing in front of a group means stress, anxiety, stage fright or increased timidity. These states of mind can be explained by fears people may be experiencing while talking in front of a group: fear of judgement, of not being understood or appreciated, of making mistakes, of being or looking stupid, … (Tremblay, 2003). All emotions, fears, or states of mind that a ST can experience induce physiological repercussions that are physically visible (voice tremolo, perspiration, becoming red, …). These body messages and NV signals act as cues students use to interpret and judge STs’ competency and self-confidence. Under these circumstances, and as ready and willing as they can be to teach, it is not surprising that some STs may be experiencing genuine difficulties to communicate in the classroom (ibid., 2007).
On the one hand, and contrary to the ability to vocalize, the ability to communicate knowledge effectively and appropriately is not innate: it is learned and can be taught. On the other hand, self-confidence is an essential factor for good and effective classroom communication, and every positive experience that may “nourrish” it will improve the quality of the teacher’s presence (Tremblay, 2003). Yet, working on personality is perceived as a rather unchangeable concept and, consequently, a concept more difficult, not to say impossible, to teach or unteach. Studies on effective teacher communication have also been conducted in light of the concept of teacher immediacy. Appearing more malleable, the construct of teacher immediacy becomes more appealing in the context of teacher training.

**Framework: Teacher immediacy and NV communication**

Immediacy was first conceptualized by Mehrabian (1967) as those NV behaviors that reduce physical and/or psychological distance in interpersonal communication. Similarly, Thweatt and McCroskey (1996) defined immediacy as communicative behaviors that reduce perceived distance by individuals. In this context, teacher immediacy behaviors express the V and NV communication behaviors which reduce both physiological and psychological distance between the teacher and the learners.

NV behaviors such as turning towards a person, sitting close to someone, using facial expressions are examples of the many NV behaviors that can create immediacy between individuals. Likewise, nodding in a positive manner, smiling and using postures and intonation in a meaningful way are viewed as NV immediacy behaviors. Surveying the literature on the topic, Briñol and Petty (*in-press*) report that arm movements (flexion versus extension of upper arm muscles), nodding (up and down or side to side), facial expression (smiling, expression of disgust), and body posture can all affect
attitudes, motivation, ability to think, and direction of thinking. These authors (ibid.) also report that research has shown that judgments of power are influenced by the vertical position, leading to say that body posture may predispose people to feel confident or not.

That posture may influence STs’ sense of power becomes an interesting hypothesis to examine for teacher training. However, because immediacy is theoretically encoded and decoded as a “gestalt,” meaning that perceptions arise from an overall impression of the degree of immediacy behaviors rather than from single cues, it may also be important to address more than one NV feature if the objective is to build ST self-confidence as well as develop one’s communication skills. How can teacher training programs help STs develop their NV communication skills and, at the same time, help them build their self-confidence before they go on practica or start teaching?

**Drama techniques and the teaching of teacher immediacy**

Drama techniques offer many possibilities for the development of NVC. There would be a good number of positive impacts of drama techniques on one’s behaviors: body posture and presence, attention and concentration, physique and mental relaxedness or comfort, voice, self-confidence, etc. (Quentin, 2004). Drama techniques also facilitate the development of specific personal abilities such as presence, awareness of self and one’s body in space. After training in drama, people are different, with better placed voices, awareness of movement and, most importantly, real confidence in themselves as teachers (ibid., 1984). Following NV communication workshops, future English-as-a-second-language (ESL) teachers also reported perceptions of increased ability to communicate, dynamism and self-confidence, elements of learning that were, for some of the participants, maintained and/or transferred in the medium-term (Gazaille, Plouffe, Gauthier, Gagnon, and McClintock, 2009).
Learning to improvise would also benefit STs with regard to their ability to listen to others and to create, their perception of themselves as teachers, their confidence in their abilities, their management of classroom behaviors and tasks, and their capacity to adapt to students’ comments and reactions [see Lobman (2005), Pelletier and Jutras (2008) and Sawyer (2004)]. Being inexperienced and over-exposed, we truly believe that STs would benefit from NVC training in order to be and feel better prepared to “hit the stage”.

Drama techniques providing tools to improve teacher immediacy, self-confidence and communication efficacy in the classroom, we sought to explore the value of teaching teacher immediacy to STs. Stated from the participants’ viewpoint, our specific objectives became: 1) to identify which NV component(s) the workshops had the most influence on, 2) to report perception of self-confidence, and 3) to explore the relation between posture and perception of self-confidence.

Methodology

Empirical and exploratory, the methodology follows a pre-test/post-test device. Participants were administered a 4-point Likert scale questionnaire. The questionnaires allowed to measure participants’ satisfaction and perceptions of the workshops’ effects on their NV behaviors. Two filmed tasks, respectively done at the beginning and at the end of the workshops, worked as bases for the self-evaluation tasks and the semi-structured interviews.

Participants. A total of 33 STs (7 males, 26 females) participated to the workshops (N_{F2008} = 8, N_{F2009} = 7 and N_{w2010} = 18), 22 of which (6 males, 16 females) participated in the study (n_{F2008} = 8, n_{F2009} = 7 and n_{w2010} = 7). They were registered in the mathematics (1), arts and drama (2), preschool and
elementary (3), physical education (4), and ESL (12) teaching degrees. Three ESL STs were personally invited to the workshops and participated on a voluntary basis while 2 physical education STs were instructed to do so by their program.

_Treatment._ Drawing on research in communication and drama techniques, we built and offered NVC workshops to future teachers. The workshops were 2 hours long and were given once a week for a total of 5 workshops in the fall 2008 semester, 7 in the fall 2009 semester, and 7 in the winter 2010 semester. In order to develop communication skills and confidence, each workshop comprised a practice of one or more NV behavior (facial expression, voice, movement and gesture, posture, eye contact, etc.) as well as communication exercises inspired from the classroom reality. Each workshop resorted to varied drama techniques and classroom reality examples to stimulate the development of participants’ communication skills. The number of participants per group was kept to a maximum of 12, as suggested by Quentin (2004). We opted for a playful approach, with no or just a very few theoretical explanations because STs were following the workshops on top of their official curriculum. However, reflexive analysis question and exchange periods were systematically integrated to all workshops in order to raise participants’ consciousness and to promote reinvestment of the learning done.

**Results**

Participants’ evaluation of the effects of the workshops on the NV components studied as well as on their perception of self-confidence will be presented. Preliminary results reveal that “confidence” was the most frequently used word to describe the impacts of the NVC workshops. Results will be discussed in terms of teacher training.
References


Distance tutoring as a means to foster the development of student teachers’ professional competencies

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Abstract. Moulding the process of education, teachers play a pivotal role in any education system. In this perspective, the quality of teacher education is an issue of high importance in that it aims at training professional, competent, motivated and motivating teachers. Hence, teacher training must not only be thought in terms of knowledge but rather in terms of integration of knowledge and professional skills and competencies. The current study aimed at documenting the question drawing on ST reported learning within the context of a cross-level distance tutoring project that took place in Trois-Rivières, Québec, Canada. STs were asked to discuss about areas of perceived difficulty and learning from the tutoring experience. The themes that arose from the focus groups and open-ended questionnaires are summarised and contrasted with the Référentiel des compétences professionnelles (MEQ, 2001). Preliminary results show that distance tutoring allows for the integrated development of a number of features from different professional competencies.

Moulding the process of education, teachers play a pivotal role in any education system. In this perspective, the quality of teacher education is an issue of high importance in that it aims at training professional, competent, motivated and motivating teachers, a daunting task in itself considering the complexity and uncertainty of the classroom reality. With the intended goal of improving the quality of education and, consequently, increasing the success rate in the Québec education system, the ministère de l'Éducation du Québec
(ministry of Education of Québec, MEQ) published, in 2001, a reference framework composed of 12 core competencies for teaching staff. Since then, universities that offer teacher training programs (TTP) have been training student teachers (ST) not only in terms of content knowledge and teaching skills but also in terms of professional competencies. The Référentiel des compétences professionnelles (MEQ, 2001) is informed by constructivism, which emphasises construction of knowledge, and the competency-based approach (CBA), which calls for an intertwined focus on “interaction and meaning” or “reflexion and action” to teach STs. Selected as the central element of teacher training, competencies can be very briefly defined here as “a complex knowledge-to-act”. For the ministry of Education, a competency is “always a competency for action” (MEQ, 2001, p.48). “Teaching to teach” therefore implies not only teaching STs to become reflective practitioners in the sense of Schön (1983), but also opting for the development of useful, practical knowledge to foster the development of the 12 competencies herein identified.

In order to prepare them for their career, TTPs supply prospective teachers with a significant academic background in pedagogy, didactics, methodology, subject content, and technology for the lived experience of classroom teaching. Yet, and even after the addition of many hours of practica to TTPs, we can still hear comments such as “courses being too theory-oriented” or “not being concrete enough (not to say useless) for the reality out there.” In fact, many STs find it hard, not to say impossible, to apply the knowledge learned at university while having to deal with classroom management and the many impromptus of the everyday class. Surveying approximately 80 STs, Ure and Lysk (2008) remarked that their STs “did not feel prepared for the type of experiences they were exposed to and expected to master” (p. 5) and that, in the opinion of their participants, “more could have been done to prepare them” (p. 5). All of this suggests that more opportunities need to be created to enable
STs to develop professional knowledge and practice professional skills before being required to teach a class.

**Specific context**

Knowing that the language taught in the communicative second language (L2) classroom is also the language used to communicate, learning to communicate efficiently, to give clear, understandable instructions and explanations and even to create a positive learning environment can become difficult, not to say strenuous, tasks for L2 teachers. Addressing students who can barely understand the language of instruction, L2 teachers have to resort to a variety of pedagogical strategies to create a climate facilitative of learning and to meet their students’ needs and learning styles. At the same time, they must try to integrate information and communication technologies (ICT) in their teaching, nowadays a “must” for the teaching and learning of L2 (Sotillo, 2000). If we add the reality of classroom management to the picture, we clearly see why inexperienced STs can rapidly become overwhelmed when having to “deal with everyone and everything at once”. Teaching professional competencies in an integrated fashion appears to be a crucial question that TTPs should be ready to address.

On the one hand, research tends to support that it is the experimenting of new ways of teaching or carrying out of tasks that brings teachers to change their practice (Garet, Porter, Desimone, Birman, and Yoon, 2001). On the other hand, cognitive load theory (CLT) tells us that a change in performance can occur when one becomes increasingly more familiar with a given task or situation. At the same time, CLT reminds us “that our working memory is limited with respect to the amount of information it can hold, and the number of operations it can perform on that information” (Van Gerven, Paas, Van Merriënboer, Hendriks, & Schmidt, 2003). Schemas, as a sophisticated structures or combination of elements of information, permit individuals to
handle multiple elements as a single unit, allowing one’s working memory to process information more efficiently (Sweller, 1988). Knowing that experienced teachers have better developed knowledge structures of “schemata” for classroom teaching than do novice teachers (Peterson and Comeaux, 1987), how can TTPs help pre-service teachers develop these more complex schemas they would need to interpret more rapidly and cope more efficiently with the reality of the classroom?

**Cross-institutional distance tutoring and ST development**

In compliance with CLT and CBA, it can be argued that discipline-focused, one-on-one distance tutoring can reproduce the reality of the classroom at a smaller scale level. Cross-institutional distance peer tutoring is a form of individualized help offered by a peer of a more advanced level and from a different establishment. It has been observed that, in the context of L2 teaching, distance peer tutoring has had positive impacts on both tutors’ and tutees’ learning (Gazaille, 2010; Gelabert, Gisbert, Thurston, & Topping, 2008). Examining transcripts from a semester-long asynchronous discussion between foreign language methodology classes at two different universities, Arnold and Ducate (2006) found that students not only progressed in their cognitive understanding of the pedagogical topics, but also developed social presence. That is, even without the visual cues that accompany face-to-face communication, social presence can be established in online learning communities (Swan, Garrison, & Richardson, 2009).

Thus, reproducing some sort of classroom microcosm, cross-institutional distance peer tutoring could help STs better read and address more efficiently “what is going on” in the teaching-learning situation. This will become especially true if STs are provided with technical support and guidelines for the tutoring session. Diminishing the quantity of input of information, we
advance that distance tutoring would familiarize pre-service teachers with some aspects of the teaching situation, helping them build and develop more complex schemas about some aspects of the teaching-learning situation and, in the end, feel better prepared to, once again, “cope with the reality of the classroom”.

**Context of study**

The reality of the ESL classroom puts extra demands on specific professional competencies. First, the language of instruction being the language of communication, the ESL teacher’s reality calls for a maximum of clarity in communication abilities (explanation and instruction) as well as on the ability to adjust one’s L2 level to that of the learner – something many STs have forgotten when they start teaching because of the level of L2 they have come to master. Moreover, current approaches to teaching modern languages are communicative in essence i.e. ESL teachers also need to develop strategies for “provoking, maintaining and expanding” interaction on the part of learners who, often times, have to struggle with limited knowledge of and skills in the target language.

The context of this study is a teacher training program for a bachelor’s degree in teaching ESL. An experimental tutoring project provides STs from UQTR, a Canadian university in Québec, with the opportunity of teaching online to beginner and intermediate-level cégep1 ESL learners by means of a desktop videoconferencing platform (VIA). On the one hand, this tutoring experiment endeavoured to help cégep ESL language learners from a unilingual region to improve their oral skills in the L2. On the other hand, it aimed at confronting future ESL teachers with the specific challenges of teaching a L2.

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1 In Québec, general and vocational colleges (CEGEPs) offer two-year pre-university and three-year technical programs. College teaching normally follows the fifth year of the secondary cycle. The designation CEGEP is reserved for public institutions; private college is not a CEGEP. The name “college network,” of necessity, includes both types of institutions.
objective of this paper is to investigate the effects of distance tutoring on the development of ESL STs’ professional knowledge and competencies.

**Framework : Référentiel de compétences professionnelles de la profession enseignante**

In the province of Québec, Canada, the official document for teacher training is called the *Référentiel de compétences professionnelles de la profession enseignante* (MEQ, 2001). The official reference framework defines the teaching profession by means of 12 professional competencies (see table no. 1)
### Foundations

1. To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.
2. To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.

### Teaching act

3. To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.
4. To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the programs of study.
5. To evaluate student progress in learning the subject content and mastering the related competencies.
6. To plan, organize and supervise a class in such a way as to promote students' learning and social development.

### Social and educational context

7. To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.
8. To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.
9. To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.
10. To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned.

### Professional identity

11. To engage in professional development individually and with others.
12. To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.

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**Table 1: The 12 core professional competencies (MEQ, 2001, p. 55)**

grouped in 4 domains: 1) foundations, 2) teaching act, 3) social and educational context, and 4) professional identity. The *Référentiel* introduces each of the 12 core competencies with a general description and the identification of its features and levels of mastery. These elements are used as standards to specify the learning outcomes of pre-service training courses.
This paper sets out to verify if cross-level distance tutoring contributes to an integrated development of teacher professional competencies. Our specific objectives hence become: 1) to identify and to analyse, in light of the *Référentiel des compétences professionnelles*, participants’ reported learning.

**Methodology**

The cross-institutional distance tutoring project was implanted in two cégep-level establishments in the fall semester of 2009 and the winter semester of 2010. A total of 25 future ESL teachers were hired to work as ESL tutors ($N_{F2009} = 10$ and $N_{F2010} = 15$). After the tutoring, participants were invited to participate to the study; a total of 15 tutors attended the focus group ($n_{F2009} = 8$ and $n_{F2010} = 7$). In the W2010 session, 10 participants also accepted to answer an open-ended questionnaire: group A filled the questionnaire before and completed it after the focus group (W10 gr. A, $n = 7$) while group B answered the questionnaire online (W10 gr. B, $n = 3$) but did not participate in the focus group (see table 2).

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<tr>
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<th>Focus group</th>
<th>Questionnaire (in person)</th>
<th>Questionnaire (online)</th>
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<td>W2010A</td>
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<td>W2010B</td>
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**Table 2: Participants and tools**

The cross-institutional distance tutoring is offered synchronously by way of the VIA platform. Tutor-tutee exchanges are based on audio and text support; the webcam is not used. All exchanges are done in the L2, in this case, English. Tutors and tutees meet 30 minutes, once a week, for 10 weeks. Each tutoring session is composed of two distinct tasks: a 15-minute bloc is
dedicated to guided oral communication while the second 15-minute bloc is
dedicated to the correction of a text submitted by the tutored student. Tutors
were instructed to correct both written and oral English, the former more
thoroughly and the latter less, in order not to interrupt conversational flow and
demotivate the learner’s attempts with the L2.

Results and Discussion

Results will be presented and analysed in light of the Référentiel des
compétences professionnelles (MEQ, 2001). Themes arising from the analysis
of the focus groups and open-ended questionnaires will be summarised and
contrasted with the Référentiel des compétences professionnelles (MEQ,
2001). Our preliminary results reveal gains in sensitivity, quality of
explanations, adjustment of one’s L2 level to that of the learner, ability to bind
with the learner, and L2 knowledge. The first steps of the analysis tend to
show that distance tutoring can allow for the integration of a number of
competency features from different professional competencies. Results will be
discussed in terms of what they may mean for TTPs.

References

Arnold, N., & Ducate, L. (2006). Future foreign language teachers’ social and
cognitive collaboration in an online environment. Language Learning &
Technology, 10(1), 42-66.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S.
(2001). What makes professional development effective? Results from a
national sample of teachers. American Educational Research Journal,
38(4), 915-945.

et des futurs enseignants d'anglais langue seconde. Proceedings of the 2ème
Conférence Internationale Éducation, Économie et Société, France,
1, 250-259.


Competencies for professional teachers

Research objectives

In their profession teachers have to deal with ambivalent and contradictory situations. On the one hand they have to meet high expectations and on the other hand they are exposed to lacking social acknowledgment, hierarchical subordination and substantial stress factors. Professionalism therefore means to develop realistic perspectives for a competent course of action and to establish an expertise in various fields.

The Austrian school system – An overview

To get a better understanding of the professional situation of teachers some information on the general education system of this country is essential. This offers an insight into peculiar structures that to some extent were already overcome in many other countries years ago.

A large percentage of children but not all go to kindergarten at the ages three to five. From age six to ten they attend primary school, from ten to 14 lower secondary school, and from 14 to 18/19 they go to upper secondary school. Another option is to leave school altogether at 15 after one more year of pre-vocational training. In this case they have to undergo three more years of part-time training in vocational schools combined with a vocational training (apprenticeship) at a company (dual system).

At the age of ten, children in Austria are separated to either continue their education in the Hauptschule, a comprehensive variant of lower secondary school/middle school, or in the
Gymnasium (grammar school), a more academic and achievement-oriented form. After Hauptschule there is still the chance to go to an upper vocational school for five more years and after completion get A-levels/high-school diplomas. It is an open secret that Hauptschulen in rural areas have a very high standard and are comparable to a Gymnasium, but in city centers have terrible reputations. This is due to the fact that in the cities they are mainly attended by children of migrant families and others from the lowest socio-economic backgrounds.

Pupils at Gymnasium can continue their education in the same school for eight years (lower and upper secondary level) and finish it with rather difficult and competitive high school diplomas/A-levels. Nowadays, around 38 % of all Austrian have a high-school diploma (Austria Statistik 2010). This diploma offer them access to university study programs in this country, even though many popular disciplines like medical or business studies also require an entrance examination.

School is compulsory for nine years (nine grades) beginning at the age of six, with an additional three years of part-time schooling when doing an apprenticeship.

The Ministry of Education and Cultural Affairs possesses far-reaching authority and independence with regard to syllabi, textbooks as well as the structure and organization of teacher education in almost all aspects like duration of programs, structure of courses, certificates and exam regulations (Buchberger & Seel, 1999). Another important feature of the Austrian school system is its highly bureaucratic basis. Schools as institutions are subject to state administration with a clearly defined hierarchy and a high level of regulatory activity.

Teacher education takes place at two different places. Teachers who want to work at upper secondary levels and/or at the lower level of a Gymnasium have to undertake their studies at a university. They have to choose two subjects they would like to teach in the future and get a teaching certificate. Teacher education studies are difficult and there is a high drop-out rate.

Teachers for elementary and Hauptschulen are educated at Pädagogische Hochschulen. These institutions also are part of the tertiary system, but their reputation is not the same as the one of a university. Pädagogische Hochschulen are also responsible for in-service trainings of all teachers, regardless of their original form of education.
Teachers in Austria are paid according to their form of education and their duration of service. Those who work at a Gymnasium earn more money than the others. It is not possible to change from one school type to the other. The system does not allow any vertical job mobility. This generates a two-class-system of teachers.

Methodology

A qualitative study based on the concept of the Grounded Theory (Glaser & Strauss, 1996) was undertaken. 20 Austrian teachers were interviewed on their perspectives on different competencies essential for the teaching profession.

Grounded Theory is a qualitative research methodology in the social sciences. Its aim is to generate a theory from data during the research process (Martin & Turner, 1986). So to a certain extent this method works in a reverse way when compared to traditional research methods (Boehm, 2007).

The generating and verifying of theories are a simultaneous process with Grounded Theory. For this purpose qualitative and quantitative data and methods are applied (Glaser & Strauss, 2008). Grounded Theory starts out with data collection. The crucial points are marked with codes. These are grouped into similar concepts from where categories are formed. Then they are taken as a basis on which a theory or hypothesis is developed. This means that the theoretical framework is created at the end of the process – in a totally reverse manner compared to traditional scientific research.

Simultaneously to an analysis of scientific literature on the topic (Glaser & Strauss, 1998) qualitative interviews were undertaken with 20 teachers. A research diary was conducted on the different steps of the research process, as well (Anastasiadis & Bachmann, 2005).

In addition to the method of Grounded Theory field research was undertaken implementing participant observation. Teachers were visited during their lessons which facilitated a direct participation in social situations by the observer (Mayring, 2002). The method of observation enabled an insight into a social setting which can hardly be evaluated from outside. It supported the explorative approach of the survey.

The observations followed a predetermined outline and were documented with notes and protocols. Afterwards, they were systematized. The triangulation of methods guaranteed a
complex collection of data, improved insight, and the development of new perspectives and different facets (Flick, 2000)

The selection of the interview partners took place according to the specifications of theoretical sampling in order to support data collection (Glaser & Strauss 2008). Teachers in two Austrian high-schools, two middle-schools and two elementary schools were interviewed. In all three cases one school was located in a city (Vienna and Graz) and the other in a rural area to get some geographical balance. Inner-city school teachers had to deal with a lot of immigrant student and their specific problems. School-size was between 100 students in rural elementary schools and almost 2000 in one inner-city school.

The age range of the teachers was 22 to 55, ten teachers were female, ten male. Their length of service in schools was between one and 33 years. All interviewees were certified.

All teachers were interviewed five times during December 2009 and May 2010. The interviews were recorded, transcribed, and analyzed. The interviews were partly standardized which left space for getting for more detailed information and changing the sequence of questions if needed (Hopf, 2008). All interviewed teachers were requested to disclose their subjective perspectives and interpretations (Mayring 2002).

**Outcomes**

The results prove that there are certain competencies that can be defined which are regarded as essential for a successful professional performance as a teacher (Thonhauser, 1995). Men and women did not significantly differ in their opinion.

The following categorized competencies, which include cognitive, affective and practical dimensions, could be identified as the most important ones for a successful teaching career.

1. **Personal competence**

   Personal competence was regarded as the key competence by all teachers. This competence comprises the consciousness of a teacher with regard to his own biographic data. This includes reflections on his/her background as well as on prejudice towards certain groups of students originating from past experiences. In the opinion of the interviewed teachers, decisions that were influential for becoming a teacher have to be questioned and personal strength and weaknesses detected.
2. Social competence
Social situations have to be coped with in an adequate manner. Sensitivity, efficiency, discretion and dedication were the qualities indicated most frequently that were expected from a competent teacher. Ten teachers also mentioned communication competence and the ability and willingness to successfully work in teams (Klippert, 2004). Especially teacher in elementary and Hauptschulen saw this is as a very important competence. Teachers in Gymnasium and upper vocational school usually have a more academic understanding of their profession. Being trained at universities they often copy the style of teaching they get to know during their education. As in-service training hardly concentrates on teaching methodology either, these teachers often show a lack of adequate competence. On the other hand, their colleagues at elementary and Hauptschule level enjoy a very good methodological and didactical training and are therefore much better prepared for their jobs in this respect (Buchberger, 1993).

3. Historical competence
Substantiated knowledge of historic-societal conditions is regarded as essential as well. Especially the Austrian historic past requires a very subtle and thorough historic approach. All teachers were convinced that one must never forget the crimes committed during the Second World War in this part of the world. According to the interviewed persons, teachers are responsible to guarantee the information of the next generations about the atrocities. For the two elementary teachers historical competence did not seem to have same importance as for their interviewed colleagues. They explained this fact with the young age of their students.

4. Value competence
This competence comprises the knowledge of societal and personal values (Oser, Zutavern & Patry, 1990). Students have to be aware that we live in a democratic, constitutional state. A society shares certain norms and values and students have to get acquainted with them. So teachers also have to make sure that they are aware of their own “value system”, especially in times of increasing nationalism and extreme right-wing populism. Especially teachers in inner city schools regarded value competence as very important. Due to their frequent contact with immigrant children they always have to emphasize the values of the Austrian society.
5. Methodological and didactical competence
Competent teachers need a huge repertoire of methodological skills. They have to be experts on learning strategies and be able to adapt their teaching to the different learning styles of their students (Meyer, 2004). All teachers felt rather competent, even though close observation detected a lot of deficits.

6. Theoretical and meta-theoretical competence
Teachers have to be well informed about current research results in their disciplines. More than two third of the teachers admitted deficits in their theoretical competence. They explained it with a lack of time that prevented them from concentrating more on such issues. Most of the teachers in Gymnasium felt more theoretically competent in this respect than their colleagues. Due to the very academically oriented education of this group of teachers, these findings are not really surprising (Oser 2001).

7. Reflective and discursive competence
All but two very young female teachers agreed upon undergoing continuing reflective processes. 50 % of the teachers also entered into regular professional discourses with colleagues and subordinates like principals and – although with negative connotations – school administration staff (Klippert 2004). In general, most of them felt supported by colleagues, one third complained about problems with their principals and only two of the teachers reported about constructive professional conversations with school administration. Obviously, school administration is not regarded as a supportive institution yet but still seen as a controlling authority – despite large campaigns for an image transformation (Friehs 2004).

8. Multi-cultural competence
Since the early 90’s of the past century Austria has experienced huge immigration waves that have never occurred before. As a consequence of the Balkan crisis and the conflicts in the Middle East, the Caucasus region and African countries, Austria has accepted more immigrants than any other European Union member state. This made the population rise from seven to eight million people in less than a decade (Austria Statistik 2010). Immigrant students gather in inner-city Hauptschulen and teachers are confronted with enormous problems. Many students do not speak any German, most
of them are muslims (in a predominantly Roman-Catholic country) and depend on social welfare payments. All teachers in inner-city Hauptschulen indicated that even if they had intercultural competence, this was not enough to cope with the many problems of a typical school day. They felt left alone by the school authorities and talked about the impossibility of teaching “29 kids with 18 different native languages” in one classroom. Nevertheless, all teachers who worked in inner-city schools regarded multicultural competence as one of the central competencies for a successful job performance (Keuffer & Oelker, 2001).

Teachers in rural areas are not as concerned with multi-cultural competence as their colleagues in the cities. Only one high-school teacher from the country-side indicated its relative importance for his job. Immigrants do not settle down in the countryside that often. Therefore the integration of a few kids per class with a migrant background does not seem to be too difficult compared to the overfilled classes in the cities.

9. Organizational competence
Teachers are required to create a safe learning environment. As in Austrian school counselors and psychologists are totally overworked and never available when needed, teachers very often have to assume their tasks – without any special training. This requires a lot of positive energy. All interviewed teacher complained about this additional work-load but none could think of a solution for this problem except for hiring more professional staff (Kiper & Mischke 2008). They also mentioned problems with classroom-management as more and more children do not get any proper education at home any longer. They held societal developments, like increased divorce rates, single mothers and absent fathers, economic problems and of course immigration responsible for this situation.

10. Educational, consulting and leadership competence
When being entrusted other people’s children teachers need a lot of organizational competence. In Austria teachers do not act in loco parentis (Friehs, 2004), but nevertheless they are required to educate and teach children., even if the final responsibility stays with the parents. Only one of the teachers felt sufficient competence to accept consulting tasks at an advanced level. 13 teachers indicated that their leadership competence was very strong. Especially younger teachers reported a lack of leadership qualities, however, hoped to be able to
Almost all wanted more in-service training courses on leadership competence.

Implications for Teacher Education

Efficiency and effectiveness of the in-service training institutes were criticized especially by teachers at upper secondary level. The offers of the institutions often do not meet the needs of the teachers. Also the quality of the seminars sometimes leaves a lot to be desired, especially when it comes to the developing and strengthening of competencies. In the opinion of these teachers, also teacher training did not emphasize a lot of competencies later needed on the job. The reason for this may be found in the fact that there is a strong emphasis on the subject disciplines, whereas pedagogy and psychology are part of the curricula that are not taken too seriously. As a consequence, teachers at the Gymnasium enjoy a very challenging education in all subject disciplines at universities, but do not get to know a lot about actual teaching and methodology.

On the other hand, teachers at elementary and Hauptschule level seemed to be quite satisfied with their pre-service training. This is also true for the in-service training, as all of the teachers of these school types participated on a regular basis (Buchberger, 1994). They also felt that teacher training as well as in-service programs did a lot to support the development of competencies.

It would be desirable to cooperate more in teacher education and in-service training in Austria. Reforms are planned to implement comprehensive schools for all children age 6 to 14 and abolish the differentiation at middle school level between Hauptschule and Gymnasium. Society has not supported such reform plans so far but a change in attitude is to be expected in the near future. A comprehensive school for the majority of students will also have a positive impact on teacher competence. It will lead to more cooperation and exchange of ideas also as respects teacher competencies.
References


Abstract and/or full paper: According to UNESCO (2006), nonformal education (NFE) may very likely be a “critical supplement for students enrolled in formal schools.” While NFE is commonly associated with education outside of or beyond the formal educational context, this study aims to identify the social impact of NFE at the grassroots level—not only through the analysis of its structural and environmental characteristics—but also through study of its pedagogy, content and/or subject material, and its overall objectives. Through the comparative analysis of secondary statistical data, document review, and interviews with students and facilitators of NFE, case studies from Africa, Asia, Latin America, Oceania, and North America will be reviewed. This proposed inquiry argues that there is an urgent need for NFE in order to promote and maintain goals that are most often lacking within formal educational settings—social welfare, empowerment, human security, economic development, and human rights. Due to its more learner-centered nature and grassroots approach, the importance in understanding how students and educators interact with each other and within the community is also vital to realizing the advantages of nonformal education in promoting the betterment of humankind. The study will conclude with a discussion on how nonformal and formal education compare in achieving global development and upholding human rights.
Comparison of Online and Face-to-Face Peer Review of Writing

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Abstract
Peer response has been shown to be an effective strategy for improving writing. The social nature of collaboration as peers give and receive feedback can broaden perspectives about what good writing is and help motivate students to revise their work. Traditionally, writing groups conduct peer response in a face-to-face, synchronous environment, but questions about the feasibility of using an online environment as another space where peer response and review could take place are central to this research study and acted as both catalyst and structure for the inquiry. We examined the attitudes and experiences of adult students, who are K-12 teachers across disciplines, using both a face-to-face environment and an online environment, as well as their experiences in being peer reviewers of the writing of others in these two contexts. Preliminary results show that the power of using different environments for peer review exists not in duplicating and imitating traditional methods, but in recognizing and understanding that face-to-face and online environments function in different ways to support peer review of writing.

Introduction
The purpose of this study is to examine the attitudes and experiences of adult students, who are K-12 classroom teachers across disciplines, using both an online environment and a face-to-face environment for peer review of their writing as well as their experiences in being peer reviewers of the writing of others in these two contexts. At the time of this publication of conference proceedings, the researchers have received IRB approval and informed consent and gathered the data. Data analysis has begun, but is not complete. Therefore, this will be a preliminary report. If readers would like more information, please email the authors.

Theoretical Background
Gert Rijlaarsdam and colleagues (2008) summarize the use of peer learning as the paradigm of language instruction, especially writing instruction, with roots in the 1960’s in the theories of James Moffett, Peter Elbow, and Kenneth Bruffee who each expanded on the ideas of John Dewey. Moffett proposed writing tasks be sequenced from self as reader to larger, real audiences, which in the classroom meant peers as readers, not teachers as graders. The authors quote Moffett’s landmark book Teaching the universe of discourse (1968): “Learning to use language, then, requires the particular feedback of human response, because it is to other people that we direct speech” (p. 191).

Peter Elbow, best known for Writing without teachers (1974), advocated that a “good text” is one that speaks to the reader, not one that contains all the elements of an abstract list of features. Rijlaarsdam and colleagues explain that, according to Elbow,

[The] Success of a text depends on the subjective reader. Therefore, writers should have the opportunity to listen to readers. He [Elbow] used the word “listening” on purpose here. Writers must be able to hear what the text “sounds” like, to hear their reader’s voice and to hear whether the writer’s voice was recognized by the reader. Listening to how various readers read the text – aloud – would provide enough feedback in itself. From this listening experience, the writer could
decide whether he was clear enough to be understood, and whether what was understood was also what the writer had intended. Readers’ feedback must stimulate further thinking about what was presented in the text. As a consequence, readers became more necessary than teachers in writing education; since there was no objective theory about what a good text entailed, there was no need to transmit this knowledge… (p.55)

Finally, the authors credit Bruffee’s epistemology that all knowledge is subjective as foundational to having peers work together in the classroom and respond to each other in order to gain broader perspectives. There is no one way to know, and according to Bruffee’s rhetorical theory, no one way to write. Like Elbow, Bruffee advocated for peer groups and peer tutors in his book *A short course in writing*. *Practical rhetoric for composition courses, writing workshops, and tutor training programs* (1980).

These seminal theories starting in the 1960’s were introduced at a time when teachers were the primary readers of student writing and teachers provided the feedback. The theorists assumed that the community of writers were sharing face-to-face at the same time, and if they were not physically in the same space, they were reading documents on paper. These pace setters were challenging the dominance of teacher-directed learning in our schools, but were not investigating who learns most—the person giving or receiving responses. Nor were they anticipating the realities of the new millennium where readers and writers co-create the meaning of text using Web 2.0 tools, and may do so in a digital, non-synchronous environment. Most of the emerging studies of virtual peer groups are concerned with writing for L2 (second language) students and college-level students (Liu & Sadler, 2003). And many developing writers who are facile with e-communication see no connection to the digital writing they conduct out of school and the writing they are required to do in school. A 2008 report (Lenhart, et. al.) by the Pew Internet & American Life Project, the College Board, and the National Commission on Writing provides these statistics:

- *85% of teens ages 12-17 engage at least occasionally in some form of electronic personal communication, which includes text messaging, sending email or instant messages, or posting comments on social networking sites.*
- *60% of teens do not think of these electronic texts as “writing.” Teens generally do not believe that technology negatively influences the quality of their writing, but they do acknowledge that the informal styles of writing that mark the use of these text-based technologies for many teens do occasionally filter into their school work. Overall, nearly two-thirds of teens (64%) say they incorporate some informal styles from their text-based communications into their writing at school.*
- *50% of teens say they sometimes use informal writing styles instead of proper capitalization and punctuation in their school assignments,*
- *38% say they have used text shortcuts in school work such as “LOL” (e.g. “laugh out loud”);*  
- *25% have used emoticons (symbols like smiley faces 😊) in school work.* (p. ii)

At the center of the current study are questions that can only be raised in the advent of theories of social constructivism, digital communication, and New Literacy. In the 21st century, the answers to questions such as What is good writing? Who owns the text? and What is the role of the teacher? are shifting rapidly.

**Research on Peer Writing Groups**

Researchers have examined the connection between the writing process and the social contexts within which writing occurs (DiPardo & Freedman, 1987; Gere, 1989; Jenson, 2002; Willinsky, 1986). They attribute the effectiveness of the writing process to one essential practice – the interaction of writers with
teachers and peers during conferences and small group work. In a recent meta-analysis of 123 studies of effective writing instruction (Graham & Perin, 2007), collaborative writing, which included peer response, was found to produce a considerable effect size (ES = .75), and was thus deemed an effective strategy for teaching writing. Teachers have implemented peer groups in settings across the K-16 curriculum as a way to encourage students to write and revise. Most researchers agree that using peer groups supports the process approach by providing social benefits. These include a non-threatening audience, immediate feedback, experience of a wide-range of writing abilities, reduced writing apprehension, fostering of positive attitudes about writing, increased motivation to revise, increased quantity of writing, more teacher time for individual attention, and development of cooperation and interpersonal skills.

The effects of peer conferencing on the quality of writing has also been studied. For example, one early study on the effects of peer feedback was a dissertation by Benson (1979). Her experimental study with 288 junior high students during a ten-week period examined the effects of peer feedback on writing performance, revision, and attitudes. The experimental group was trained in providing feedback using five basic aspects of writing; the control group received only teacher-directed revision activities. All students were required to revise each of the five assigned papers at least twice. Benson found that the writing of students who participated in peer conferencing received scores that were significantly higher than those in the control group.

Peer response of writing might also help students develop ownership and responsibility for their writing (Haaga, 1993) as well as help them understand the evaluation criteria for what constitutes a good piece of writing (Rushton, Ramsey, & Rada, 1993.) A study focusing on validity and reliability of student evaluation of their peers’ writing in comparison to teacher evaluation found that “…the aggregate ratings of at least four peers on a piece of writing are both highly reliable and as valid as instructor ratings.” (Cho, Schuun, & Wilson, 2006, p.891.) Another study (Cho, Schuun, Charney, 2006) comparing content experts’ comments and students’ comments on papers found that students produced shorter comments that were a mixture of praise and “directives,” and were rarely summative. In contrast, the instructors’ comments were longer, predominantly directive and rarely summative. Students considered the mixed types of responses that their peers offered as the most helpful. A third study along the same line (Patchan, Charney, & Schuun (2009) looked closely at the quality of comments offered by peers and by instructors. The conclusion was that “Overall, students’ comments seem to be fairly similar to instructors’ comments.” (p.124).

Although our study investigates peer response, and not peer evaluation, these three studies did involve students reading the work of their peers and providing feedback. A benefit of exposure to the writing of peers might be that it helps developing writers internalize the features of good writing in terms of its effects on an audience of age-mates, not just in the published literary works they read for class, so that they believe that producing effective writing is within their reach.

Research evidence on the impact of peer groups on writing quality is mixed. Some studies indicate significant improvement in the writing of K-12 students as a result of peer response (Colling, 2002; Farrell, 1977; Lagana, 1972; Simmons, 2003). On the other hand, Wolters and Lamberg (1976) examined several studies indicating both significant improvement and no gains in student writing as a result of peer groups. In her review of the research up to 1989, Herrmann (1989) noted that “not all the studies of peer reaction show unqualified positive effects on revision.” In summarizing the spectrum of research findings on peer response up to 1976, Wolters and Lamberg stated that peer response in general has mixed effects unless it is “task-related feedback, controlled by measurement instruments, and provided by students to themselves and their peers.” (1976, p. 2).

Research on Virtual Peer Group Interaction

Because the online peer review in this study took place in a discussion forum, we have drawn on the research surrounding the nature of the interaction in online discussions. Advantages of the collaborative
and co-constructive nature of online discussion forums have been found to accrue to both individuals and groups. Hawkes (2001) lists the time and place independence of the medium, the capacity for multiple conversations and the archiving of content and messages as supports for engaging in online discourse in order to construct and refine ideas. Other positive outcomes for using online environments include the development of self-direction and independence (Lee & Gibson, 2003; Marra, 2004); a stronger sense of community (Beeghly, 2005; Lee & Gibson, 2003; Poole, 2000); the ability of students to read and respond in their own time (Beeghly, 2005); and an increase in incidences of reflection (Hawkes, 2006).

Drawbacks to participation in the online environment include lack of immediacy and spontaneity that are found in face-to-face conversations (Beeghly, 2005; Hawkes, 2006) and increase in complexity brought on by the technical aspects of the medium (Liu & Sadler, 2003). Communicating in the text-based environment of online courses can also be a barrier for students who have reservations about their writing skills or their ability to effectively communicate solely online (Stephens & Hartmann, 2004). Wu and Hiltz (2004) found that online discussions improve students’ perception of learning but caution that the instructor is responsible for promoting students’ motivation. Similarly, Pawan, Paulus, Yalcin and Chang (2003) recommend that to be effective, online discussions must be clearly structured. Angeli, Valanides and Bonk (2003) suggest that the instructor must situate online sharing within the larger structure of the class in order for students to perceive the importance of participating in the discussions.

Literature focused specifically on the use of online peer review and improvement of writing, while not comprehensive, does highlight some important issues for consideration. Evidence supports using online annotations for error correction as effective for revision (Liu & Sadler, 2003; Yeh & Lo, 2009), having an online record to monitor and mentor improvement in writing as a positive outcome (DiGiovanni & Nagaswami, 2003; Yang, 2010), and providing time in asynchronous environment as an impetus for students to form more critical and thoughtful revisions (Black, 2005).

Hawkes (2006) suggests that while online and face-to-face interaction might serve different purposes, similar discourse strategies appear in both, suggesting a reliable basis for comparing and examining the effectiveness of the two contexts. In a comparison of oral and computer-mediated peer group revision, Hewitt (2000) found that the two media created different types of talk about writing and prompted different types of changes in the writing. While the online environment focused more on concrete writing tasks and direct use of peers’ ideas, the oral environment centered on abstract, global idea development and self-generated ideas for revision. Liu and Sadler (2003) compared asynchronous and synchronous feedback in both online and face-to-face environments. They found that students using the online environment worked more effectively to review peers’ writing asynchronously than they did in synchronous chat rooms. Further, they determined that synchronous, face-to-face environments were more effective than asynchronous environments where feedback was written on a paper copy and returned to the writer. Another major finding of this study revealed that while the online group made a larger number of comments and revisions overall, the face-to-face group made a higher number of revisions based on respondents’ comments. This led researchers to suggest that a blended approach of online and traditional environments should be considered in writing instruction and investigated by researchers.

Research Questions

The guiding research questions for this study are: Do the benefits of using peer writing groups, as identified in the research literature, also accrue in online peer response groups? What are the particular strengths and limitations of each context of response, face-to-face and online?

The second tier of questions comprises the following:

1. Are the rules for face-to-face peer groups equally applicable to online groups?
2. Is one environment (f2f or online) more supportive of specific aspects or kinds of feedback? (e.g., Do respondents in one environment offer more reflective responses than in the other?)
3. What aspects of peer group functioning are applicable to both environments? What aspects apply to only one environment or the other?
4. Which environment for giving and receiving do students prefer?

A third tier of questions will arise as we do the qualitative and quantitative analyses of the data. Preliminary review of the data indicates that these questions will involve the nature/types of the responses—such as comments about surface level features, deep structure/semantics, and personal connections; use of humor; voice or stance of the persons giving response; issues of trust and risk-taking; respondents following and/or breaking the standard rules for giving and receiving response; sequence of responses—such as threaded responses, responses that piggyback on another’s comments, responses that are generic or that offer details and examples, off-topic responses, etc.; tactfulness of respondents; and recursiveness of the responses—do members develop a history and make references to earlier papers, class lessons, etc.? Quantitative data will include time-on-task in each environment.

Methods
This is a phenomenological study which does not include any intervention apart from the syllabus requirement in the course for participants to share one writing in an online environment and one writing in a face-to-face environment, with the same four-member peer groups. Except for a determination of time spent in online groups and face-to-face groups, which will be analyzed using statistics, the research methods are qualitative in nature, involving email interviews, survey of technology competence, transcriptions of digital recordings, archived online postings, participant evaluations, and pre- and post-tests of confidence in integrating technology and writing, and post-course survey of experiences in face-to-face and online groups.

Participants & setting
The participants in this research were 16 classroom teachers across grade levels and content areas who were engaged in a month-long, all-day summer course in the teaching of writing in a university setting. As one of the course requirements, the teachers met in peer response groups in both face-to-face and online environments. They were randomly assigned to four-member writing groups and remained with the same groups throughout the course.

Writing tasks
Two writing tasks were assigned in the same mode: personal expressive writing. One was a writing autobiography and the other was a childhood memory. This was done in order not to have intrusion of content knowledge by respondents (e.g., noting that the facts are wrong) on the sharing. If each writer were the expert on his or her personal writing, it was assumed that the readers/respondents would not be influenced by shared prior knowledge which could prompt them to read-between-the-lines or fill in gaps, for example. Although much other writing was accomplished in the course, only these two formal assignments were part of the study.

Instruments
The following research tools were utilized in this study:

Email Survey of Technology Background: Prior to their attending the first day of class, all participants received an email with instructions to explain their facility and comfort with computers and online environments.

Demographic information collected on each participant

Transcribed digital recordings of face-to-face meetings of peer response groups
Descriptive statistics of time in face-to-face and online meetings for each group

Archive online peer-responses

Pre- and Post-tests (on a 5-point scale) collected on the confidence of the participants to incorporate technology into their teaching of writing

A 9-question post-course survey asking participants to rate various aspects of the peer response experience (online and face-to-face)

A course evaluation

**Procedures**
Participants were provided an overview of the research study and an Informed Consent agreement. Participation in the study was not a course requirement or part of the grade. All agreed to participate in the study.

The participants learned the rules for peer response (Elbow, 1974) in a skit and follow-up discussion prior to meeting in peer groups. Peer editing and peer response were distinguished, although both are part of the peer group experience. Participants practiced giving responses according to the rules (protocol) using a paper provided by the instructor in a face-to-face environment. They were also given guidelines for making responses online, including reminders about online etiquette, readable font size, etc. Additionally, they were provided practice with the technology website and how to upload their papers and share their responses in postings. This was done to assure that lack of facility with technology did not intrude on the online responses.

After meeting their peer group members in person, participants were instructed to take part in an online peer group where they provided asynchronous responses to the Writing Autobiographies, abiding by the protocol. For example, they rotated from person to person, rather than responding randomly in a synchronous chat room -- the same rotation that they had practiced in class face-to-face. Deadlines were set for each group member to post his/her Writing Autobiography, so that papers were not shared at the same time. Multiple drafts were encouraged to be submitted for response, but at least one draft was required.

For the second assignment, participants shared their Childhood Memory drafts face-to-face and the sessions were digitally recorded. A research assistant sat outside the group and took notes as well. The due date was the same for all groups, and the length of time for meeting was sufficient—at least 20 minutes for each reader.

**Analysis**
The two researchers, working independently, are reading the transcriptions of the face-to-face peer group meetings and the archived online records. We have, so far, determined the following categories in studying the response group interactions:

I. Writer’s response to peer’s comment
II. Respondent shares personal experience relevant to writing
III. Respondent shares personal experiences NOT relevant to the writing
IV. Respondent piggy-backs on the comments of peers
V. Respondent comments on the quality of the writing
VI. Respondent offers revision ideas
VII. Communication Loops
VIII. Group members take on roles: In writing group, who is most dominant? Who is least responsive? Who is the praiser, the grammarian, the time keeper, etc? Is this the same online as face-to-face?

IX. Anything unusual that pops up, such as how groups negotiate the HOW and WHAT of providing responses

However, we are still reading, and these coding categories could change.

Results
We do not yet have comprehensive results. When we do, we will organize our discussion according to the four research questions we posed for this study.

References


Colling, A. (2002). Improving student revising and editing skills through the use of peer editing and writing conferencing. Master’s of Arts Action Research Project (ED465189).


Patchan, M. M., Charney, D., & Schunn, C. D. (2009). A validation study of students’ end comments: Comparing comments by students, a writing instructor, and a content instructor.
Journal of Writing Research, 1 (2), 124-152.


ESL and Mexican American Students: Learning in a Climate of Politics, Standards, Immigration Reform, and Fear

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According to the PEW Hispanic Center (2008), Hispanics children accounted for over 60% of the school enrollment growth in the United States from 1990 to 2006. The U.S. Census Bureau (2008) also estimates that by 2050, the Hispanic school-age population will increase by 166% (to 28 million from 11 million in 2006). The Hispanic school-age population will be larger than the non-Hispanic white school-age population (U.S. Census Bureau, 2008). These numbers have helped to increase Americans’ concerns about immigration, education, the economy, and public policy. It has touched off a wave of xenophobic behavior among U.S. citizens, which has affected American education in ways that should concern educators across the country.

For example, several states have enacted English-only laws that restrict how students can be educated. California (1998), Arizona (2000), and Massachusetts (2002), passed laws that have prohibited the use of a child’s native language during instruction. This has spurred a wave of similar legislation or considerations in states across the country. Arizona Governor Jan Brewer signed the nation’s toughest bill on illegal immigration aimed specifically at identifying, prosecuting, and deporting Mexican illegal immigrants. This law allows for law enforcement agents to demand identification from anyone they suspect of being illegal. How do these law enforcement agents differentiate between people of Mexican descent who are citizens and those who may not be?

The Arizona legislature has also gone so far as to pass a bill restricting the teaching of ethnic studies in school districts as well as considering the firing of teachers.
with foreign accents. Other states and some political candidates have even expressed desires to change the 14th amendment to the U.S. Constitution in order to deny children citizenship if they were born in the United States to parents that are here as undocumented workers. In states such as Texas, the State Board of Education has passed new social studies standards that are extremely conservative and passed only along official political party lines. These new standards do not reflect the history of Mexican Americans prior to 1836 and fail to include accurate historical data and appropriate role models for Mexican American students. This makes validating the history, language and culture, and contributions of Mexican Americans very difficult (Midobuche 1999; Benavides & Midobuche 2003).

Because Mexican Americans comprise approximately two-thirds of all U.S. Hispanics (Fry 2008), and many are identified as English learners, it is important that educators understand the particular educational issues involved in educating this group of students. What happens to the learning process in this type of environment? Do schools or teachers understand Mexican American children and their parents and home life experiences? What makes these students different? For Mexican American students one can add language proficiency in both the heritage and target languages, retaining heritage culture and issues of acculturation, immigration, legal status, migration, hours of employment, generation stage, teacher dispositions and preparation, teacher shortage, etc. These issues are paramount in the Mexican American community. Also, Perez, Espinoza, Ramos, Coronado, Cortes, (2009) reported that migration is one of the most radical transitions and life changes an individual or a family can endure. For immigrant children this is a dramatic experience that reshapes their lives.
Acculturation stressors among Mexican Americans include leaving relatives and friends behind when moving; feeling pressured to speak only Spanish at home; living at home with many people; feeling that other kids make fun of the way they speak English (Perez, Espinoza, Ramos, et al, 2009; Cervantes & Castro, 1985; Padilla, 1986; Padilla, Cervantes, Maldonado, & Garcia, 1988). Stress may also be created in selecting which set of cultural norms and expectations to follow. Mexican American children and their families have to select expectations from their culture of origin or that of the mainstream culture. The differences in the value of each may create additional pressures (Kurtines & Miranda, 1980; Perez, Espinosa, Ramos et al, 2009).

Perez, Espinoza, Ramos, et. al. (2009), report that there are only a handful of studies on undocumented college students. De Leon (2005), in one of these few studies on undocumented college students, reported that these students remember isolation, fear, and those teachers who treated them negatively. Dozier (1993) found three central emotional concerns for undocumented college students. These were fear of deportation, loneliness, and depression. Fear of deportation is very central to undocumented students. It influences every aspect of their lives. They are afraid to go to hospitals and it makes it impossible to obtain work authorization and therefore they are often forced to stay in bad work conditions. They are also reluctant to develop close emotional relationships with others (Dozier, 1993). All the respondents in the study by Buriel, Perez, DeMent, Chavez, & Moran in 1998, reported frustration, helplessness, shame, and fear due to their undocumented status.

Migrant children present another pressing problem in American education. Reyes, Garza, & Trueba, (2004) stated that for migrant children the image that has been
constructed is one of a perpetuating cycle of failure. Many educators have been convinced erroneously that the children of farm workers will never be able to perform at high and sustained levels in their educational programs. According to Reyes, Garza, & Trueba (2004), many of these students are led to believe that they are intrinsically inferior or that their fate is to follow the path of hopelessness that has been imposed on them for generations.

Olivarez (2006) reported that families seemed to support students’ aspirations to attend college but the home environments were not always conducive to college preparation. Students had to care for younger siblings and often did their homework away from home because it was crowded in the family’s small rented apartment or they secluded themselves in a corner or waited until everyone was asleep to get their work done. None of the students had a separate room in their homes where they could find a quiet space to study. Sixty percent of these students lived in crowded homes with 6 or more people and 90% lived in single studio apartments where everyone slept in the same room (Olivarez, 2006).

To compound the problems among Mexican American English language learners (ELLs), there exists a great shortage of bilingual and ESL educators. This shortage has remained critical since the early 1980’s. Boe (1990) noted that no national database of bilingual education teachers was available to support refined supply and demand research in this area. Gold (1992), referred to this shortage as “the single greatest barrier to the improvement of instructional programs for limited English proficient (LEP) students” (p. 223). Furthermore, research supports the lack of bilingual teachers in studies by Gándara
(1986); Macias (1989); Quezada (1991); Torres-Guzman and Goodwin (1995); Crawford (1997); Menken and Holmes (2000); and Menken and Antunez (2001).

The National Clearinghouse for English Language Acquisition (NCELA 2004) pointed out the difficulty in finding and attracting teachers for bilingual classrooms. This report emphasized that schools would need to hire as many as two million new teachers (all fields) in the coming decade. The Clearinghouse noted that bilingual and ESL education would be particularly crucial in this great teacher shortage. Moss and Puma (1995), stated that the inadequate supply of bilingual teachers had forced many districts to hire uncertified aides whose only qualification in many cases was the ability to speak another language.

Some school districts in Texas made trips to Mexico to recruit Mexican teachers (Barbe 2006). Dallas Independent School District officials wanted to work with other urban school systems to initiate changes in current immigration laws in order to permit them to hire college-educated illegal immigrants to address the growing shortage of bilingual teachers in their districts (Hobbs 2006). It is apparent to many educators that this shortage is very real.

The great shortage of teachers for ELLs in the U.S. is only magnified by the lack of preparation teachers receive for working with English language learners. Teachers and school environments are extremely important in creating and fostering resiliency in students. Of particular emphasis in addressing and fostering educational resiliency among Mexican American students is the issue of teacher preparation with an emphasis in identifying, creating, and developing positive dispositions and attitudes among teachers of Mexican American English language learners, including validation of the students’
linguistic and cultural diversity. This critical area cannot be glossed over. It is important that children receive support for who they are and the value that they represent to our society. What do teachers need to possess in order to succeed with Mexican American English language learners? Further, what responsibility does a state have to educate all of its children—legal or otherwise? Finally, what are the effects on children’s self-esteem when they feel that they are afraid and feel not only expendable, but also unwanted and unworthy of being educated? It is difficult for these children to learn in this political climate of conservative standards that do not acknowledge their contributions, and immigration reforms that cause them to be fearful, isolated, and lonely.

Mexican American children have existed in the southwestern United States for generations. And, many of these children and their parents have gradually left the southwest and taken up residence in all fifty states and all areas of the country. What responsibility does a state have to educate and prepare all of its citizens? In Arizona with Senate Bill 1070 and its assault on undocumented workers, and ethnic studies being denied in the classroom, what responsibility does the state have to ensure that minority children have an opportunity to know and understand themselves? How do citizens of a state fight back against a system determined to do harm to them or get rid of them altogether? In the end, what effects will these policies have on children’s self-esteem when no mention is ever made of their culture’s contributions to the success of the society in general?

The fear that has been created in the Mexican American community by state sanctions aimed directly at them is beginning to take a toll on this population. Bilingual programs have been cut back or in many instances eliminated altogether. Ethnic studies
courses are being removed from the curriculum and English-only and anti-immigrant laws have been passed in many parts of the country, directly aimed at negatively affecting the education, self-esteem, and future of these students.
References


The growing role of Massive Multiplayer Online Role Playing Games (MMOs or MMORPGs) as tools of social inclusion for 'at risk' high school students.

Abstract

There is a growing body of literature focusing on the relationship between the social and emotional wellbeing of teenagers and their use of online networking tools (Cummings, Lee & Kraut, 2006; Haase & Wellman, 2004). Some studies have looked more specifically at self-representation within social networking sites. There seems to be evidence to support the idea that the personality created online on these platforms differs from their social image in the daily context (Acquisti & Gross, 2006; Stutzman, 2006). Research also seems to imply that the availability of this different platform for self-representation may be therapeutic for some (Ellison, Steinfield & Lampe, 2007; Boyd, 2008). Mazer, Murphy and Simonds (2007) have explored further the potential benefits for at-risk students and studied the impact of teacher self-disclosure on Facebook on student motivation, learning, and classroom climate.

Apart from social networking sites used specifically for communication which have already been scrutinized by literature, SEBD students are also seen to be taking part in collaborative online videogames called "massive multiplayer online games" (MMOs) (Steinkuehler & Williams, 2006). World of Warcraft in particular seems a very popular MMO according to the findings of the study; it is remarkable not just because it is used for the purpose of playing but because of its chat capacity and the dialogues it engenders. MMOs are graphical two-dimensional (2-D) or three-dimensional (3-D) videogames played online, which allow individuals, through self-created digital characters or "avatars," to interact in the game and with each other. Aesthetically, they are part of the long history of alternative worlds found in science fiction and fantasy literature. Participation in such virtual "third places" appears particularly well suited to the
formation of bridging social capital (Putnam, 2000) and SEBD students appear to use these functionalities for the purpose of social inclusion. Call of Duty has also been found to be an important and popular MMO for students with SEBD (Greene & Bavelier, 2003). The anonymity of both online games appears to provide a safe haven beyond the reach of school and home that allows individuals to engage with others socially without entangling obligations and repercussions; it is the so-called "magic circle" of the game (Huizinga, 1949, as cited by as cited by Steinkuehler & Williams, 2006).

The paper will address the impact of its findings on the inclusion of ‘at risk’ high students, both in term of pedagogical development and social inclusion. The paper will also consider the wider impact of the paper on students generally, within inclusive education, where each ‘millennium’ learner (Keefe, 2008) is increasingly becoming a hybrid learner, drawing skills and knowledge from the classroom but also from a much wider array of technological avenues. The paper will suggest that the notion of ‘school community’ needs to be revisited and redefined and with it the notion of effective functional inclusion.

REFERENCES


Internal and External Accountability: Building Evidence-Informed Leadership Capacity at all System Levels

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1 The views expressed in this proposal are those of the authors and not necessarily their employing organizations.
Abstract

Background and Objectives

This paper proposal is based on a recently completed book chapter that considers leadership standards at the district and school levels in relationship to advantageous systemic data analytic structures and processes facilitated by a provincial Department of Education. Evidence-informed decision making is explicated within a multifaceted, adaptive leadership framework that is evolving in the province of Alberta, Canada.

Improving learning for all K-12 students in the public education system and preparing them for the 21st century world of work and/or post-secondary studies undoubtedly epitomize one of the most comprehensive “adaptive problems” that do not entail clear-cut solutions and the answers that are known in advance (Heifetz, Kania & Kramer, 2004). These types of problems cannot be resolved by merely throwing money at them or by externally imposed changes by a single authority. Contemporary educational issues are very dynamic both time-wise and context-wise. One example of complexity is the rapidly evolving diversity of student populations and consequential comprehensive educational environments. The latter could encompass English as a second language (ESL) learners from a variety of cultural backgrounds and grade levels, low socio-economic status (SES) students in city core schools or indigenous and other minority students in both urban and rural schools.

Consequently, successful programming for students’ success and school improvement needs to be grounded in solid, comprehensive data reflecting complex education environments, including building versatile assessment systems capable of addressing various monitoring and diagnostic needs by tracking individual students’ progress. President Obama has accentuated the need for better (higher) standards and assessments to improve student achievement (U.S. Department of Education, 2009), as well as for state data systems that follow students’ education paths and track how much progress they are making and where they are struggling (see also National Center for Education Statistics, 2009).

Furthermore, balancing contradictions, prioritizing and directing joint efforts at identifying issues and meeting common goals would not be possible without development of a flexible, responsive, adaptive and systemic education leadership frameworks. Such leadership frameworks need to be “nested” whereby school districts’ major educational goals are intrinsically aligned with general provincial or state educational initiatives and priorities, but at the same time account for the specifics and unique needs arising from the local contexts. Grassroots school leadership systems should similarly be nested and organically integrated in the districts’ leadership frameworks by keeping an eye on general goals while initiating school level solutions. School results are then considered in relationship to district and provincial/state comparators as one means to judge the degrees of success being achieved. Adaptive leadership frameworks or systems presume flexibility, transparency and openness to all educational stakeholders and the public, whereby the
public and stakeholder opinions on educational priorities, goals and solutions are heard and accountability processes are in place to inform the progress achieved.

The objectives of this paper are to:

- Highlight the particulars of the province-wide (Alberta, Canada) multi-faceted student data collection system implemented in school districts and directed at: (1) attaining a comprehensive approach to student assessment; (2) monitoring and understanding students’ progress controlling for various educational, cultural and social settings and conditions; (3) supporting diagnostics of at-risk students; and (4) encouraging evidence-informed leadership, programming and decision-making at school, district and province/state levels.

- Outline the aspects and potential benefits of building system-wide and local leadership structures grounded in holistic and systematically collected empirical, data-based evidence.

**Evidence and Methodology**

This paper involves a theoretical discussion representing provincial and school district central office perspectives on an integrated leadership model that is evolving under the direction of the Ministry of Education and the College of Alberta School Superintendents, as well as a case study illustrating application of the integrated data models to inform the leadership structures. The analyzed data highlight chartering comprehensive district profiles based on the outcomes of standardized external achievement tests, classroom-based assessments, high school completion and dynamics in high school courses intake in conjunction with the attendant variables such as socio-economic backgrounds of student populations, student mobility and special needs codes (e.g., ESL and special needs).

**Theoretical Insights and Expected Research and Practical Outcomes**

The concept of “nested” or system-wide aligned leadership explored in the proposed paper is related to Fullan’s notion of “permeable connectivity” presuming a delicate balance between Departments of Education and field-based staff in ways that capitalize on each sector’s comparative advantages. As observed by Fullan (2006: 95-96),

> Centralized high stakes accountability schemes have failed to produce ownership, as has decentralized site-based management. The solution, in my view, is to develop strategies that integrate top-down and bottom-up forces in an ongoing, dynamic manner, achieving what I call ‘permeable connectivity’… [that] requires a sophisticated and delicate balance, because to work it requires all three levels – school, community and district, and state – to interact regularly across and within levels.

In addition, *Intelligent leadership: Constructs for thinking education leaders* (Burger, Webber, & Klinck, 2007) presents the view that effective educational leadership is premised on a
complex, multi-faceted and inter-related set of skills and knowledge. Effective educational leadership is becoming a clearer and better understood enterprise. Necessary conditions include:

- Inter-connected and holistic policy frameworks across system boundaries to support education leaders
- A commitment to change and change processes recognizing that status-quo leadership will not move an organization to excellence
- On-going reflective thinking about how effective current leadership strategies are for achieving success for all students in a school or jurisdiction
- A keen understanding of pedagogy and learning theories applied to curricular outcomes
- Transparent and open education systems that use data and evidence to build partnerships with students, parents and communities in moving schools to higher performance
- Balanced approaches to student assessment that give weight to formative assessment strategies linked to effective teaching methods and use summative assessment to gauge progress and provide feedback to students, teachers and parents
- A willingness to re-assign existing resources to new uses that promise more effective outputs and outcomes for students, and
- Life-long, interactive and articulated leadership training models that help to shift the accountability foci from a blame and shame process to a capacity building, networked enterprise.

At the same time, the Wallace Foundation’s (2006:8) report observes that,

> It is important to emphasize that this vision of a more comprehensive approach to leadership improvement is in an early and highly formative stage. Indeed, it is largely hypothetical, existing only in fragments in a few states and districts that have made early attempts to make the critical policy connections.

One of the challenges of building school and district leadership capacity is the different degree of “readiness” and preparedness of various education stakeholders (including schools) to actively lead locally, while connecting with the broader leadership framework.

For example, school leaders’ workloads have become increasingly complex and potentially onerous with more sophisticated administrative and managerial responsibilities and greater accountability for results. There are some notable differences between the knowledge, skills and attributes required of school leaders a generation ago and those required now. Given the increasingly complex work context, the school leader’s role today may be beyond what most practitioners can fulfill successfully.

New models of school leadership practice and related preparation and professional development opportunities need to be developed to ensure that school leaders can effectively respond to
current and future educational demands. Educational researchers and policymakers are calling for a new vision and model of distributed school leadership (Spillane & Diamond, 2007; Leithwood, 2009), concluding that traditional approaches to school leaders’ preparation, professional development and practice are antiquated. Education stakeholders in Alberta recognize the need to develop strategies to accelerate the acquisition and refinement of required competencies by new school leaders.

Another major issue is grounding contemporary leadership frameworks in firm empirical evidence, so that on-going learning about the current and emerging student needs and possible solutions, goal setting, strategies and decisions are rooted in accurate and timely data. Successful and effective leadership frameworks should be supported by comprehensive and relevant system-wide data systems.

Stakeholders are becoming increasingly aware that a solid, common (provincial or state) empirical data base would add objectivity to the discussions, information exchanges and decision-making underlying increasingly complex education challenges. Already collected data (e.g., external classroom assessments or surveys) can be combined with other data sources (e.g. external assessments and census data) and used as a base for initiating comprehensive system-wide databases. These databases can be further developed and refined to provide information foundations for a broad variety of initiatives, including enhanced program evaluations, school improvement, education policies and leadership decisions. The province or state needs to assume an instrumental role in ensuring quality student data collection (including registration, course participation, achievement and demographics). The school-generated accountability data should be enriched by additional data collections and returned back for districts’ and schools’ use or in the form of analytical reports as “value-added” feedback. It is important to emphasize that functional information flows between various elements and levels of the education system and building data-centric province or state-wide improvement systems (Kline, 2009) presume not only quality data collections and maintenance, but understanding and active usage of data at all system levels.

The proposed paper provides insights into how leadership standards can be reified in relationship to building supportive networks as well as meaningful and useful data to support evidence-based decision-making by education leaders. The paper highlights the experience of one school district in building an evidence-based leadership framework using systemically gathered data, which makes it possible to consider district results in relationship to provincial parameters.

The district first built and strengthened a culture of trust, collaboration, support and transparency throughout all levels of the organization. The degree to which any change is successful and/or sustainable is entirely dependent upon the relationships and degree of trust between all levels of the enterprise. Second, an emphasis has been put on alignment and integration of evidence and data for analysis, planning and decision-making. As the district began to engage the teachers, school administrators and central office to establish a framework for analysis, planning and decision-making, the following fundamental questions needed to be addressed:
What evidence and sources of data would best inform discussions?

What confidence did we have that the information was valid, reliable and a strong indicator of improved student achievement and engagement?

What was the proper balance of qualitative and quantitative information?

One of the important utilities of comprehensive data systems is the opportunity to provide an integrated picture of a district’s student population and associated environment. The paper illustrates how charting a comprehensive district profile using solid evidence is essential for better understanding of local contexts where students and educators interact. For example, research literature consistently points to a link between socio-economic status (SES) and student academic outcomes (e.g., Adams & Ryan, 2000; Dahl & Lochner, 2005; Magnuson, 2003; Morris, Duncan, & Rodrigues, 2006; van Zanten, 2005). Therefore it is imperative for the district’s educational leaders to be fully aware of the local SES milieus and also position themselves relative to the state/province and/or other school districts’ outcomes. Rather than using local SES-related issues to rationalize low student outcomes, it is important to account for them in designing custom interventions to counteract the potential negative effects of low SES factors.

Student mobility data (changed school registrations) linked to academic outcomes resultant from standardized tests and classroom-based assessments may provide a powerful demonstration to teachers and parents of how harmful the effects of student mobility might be for their success at school. Analyzing this relationship on a regular and more disaggregated (classroom) basis may provide indication of the effectiveness of programs designed to help highly mobile students academically and to assist families in counteracting the negative effects of student mobility.

Charting the distribution of students with ESL and special needs codes by grade groupings helps to identify programming and staffing priorities for the district as well as identify its position relatively to the province or state-wide results in general.

In order to better understand and effectively address student achievement and high school completion issues, it is important for educators to be aware of the dynamics in student high course participation (e.g., tendency to take advanced or general stream courses or switching between these categories) and associated precursors and outcomes.

Lastly, the opportunity for juxtaposing the outcomes of standardized and classroom-based student assessment models is useful for ensuring that students are well served by both sources of measurement and balanced approaches to student assessment is attained.

In summary, value-added data analysis by school and district leaders supported by emerging leadership standards is in the early stages of development. These efforts, however, promise a future where leadership behaviors are better understood through the enhanced inter-connectivity of leaders’ critical reflection focused on success for all students. The proposed paper illustrates how educational leadership is being enhanced in Alberta by linking it to comprehensive, current, accessible and balanced data supported by a data warehouse maintained by the Department of Education with practical applications at the school and district levels.
References


Leadership Styles of Educational Non-Profit Institutions

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Abstract

This paper explores the nature of leadership in interinstituational, non-profit collaborations. Interviews were conducted with 6 persons holding positions of leadership in 6 differing institutions with 4 institutions of higher education and 2 museums included in the analysis. All interviews were transcribed and occurrences were counted across 8 different areas of leadership theory as well as the number of references to collaboration in the workplace. Qualitative analysis then was performed to isolate quotes from the interviews. The findings suggest that the most common category of reference was indeed collaborative involvement and membership or the reference to being a member of a team. The next 3 categories of importance were transformational, trait, and skills theories of leadership respectively. We conclude that leaders of interinstituational nonprofit institutions perceive collaboration as a primary area of importance and associate their leadership philosophies with transformational, trait, skills, and styles theories.
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Introduction

From the beginning of time, humans have engaged in social activities such that out of necessity, some individuals became leaders and some take on a more follower role. While some theorists suggest that every individual is a leader at some point, we speak typically of the leader as someone existing on top of an organizational pyramid as a result of promotion, appointment, attrition or the like. However, in recent times, due to the vastly expanding population and interdependence of collaboration in all areas of human existence from food production, religion, defense, political structure, to professional adventures, we have become increasingly interested in explicating the leadership process in hopes of producing more meaningful and productive teams. Northouse, 2007 in his expansive book *Leadership: Theory and practice* suggests that of utmost importance is operatively defining the term leadership before entering into any further discussion. Offering the notion which was adapted from Stogdill (1974), Northouse, 2007 mentions that there are a vast number definitions of leadership pervasive today in print. However, he settled on the following definition of leadership which we will adopt for this manuscript as well: “Leadership is a process whereby an individual influences a group of individuals to achieve a common goal” (p. 3).

The world is getting smaller. Obviously, not in the sense that the physical dimensions of the world are decreasing, but due to the exponentially increasing population growth of the last century coupled with technological boom of Web 2.0 and 3.0 the ability to contact, exchange knowledge, and communicate occur with an ease the likes humankind has never experienced. This convenience of contact allows the cultural dissemination and sharing of knowledge to occur at a rate that is unprecedented and with a convenience that is unparalleled. Because the world is becoming more and more intertwined, institutions are unlikely to persist on their islands for much longer into the future suggesting that collaboration is thus the way of the future.
One situation where the collaborative potential is obvious and historically relevant is the interplay between higher education, museums and even libraries. Higher education, with the basic historical charge of fostering learning requires the vast resources found in the traditional role of libraries as a storehouse of information. Museums possess vast collections of artifacts and intellectual property either in both the physical and virtual worlds. All three are engaged in certain ways in the original research missions indicating their own respective fields of discipline. We feel that these three areas lend themselves very well to the description of collaboration at present and to the future potential of these relationships.

**Purpose**

We therefore set out to investigate the process of leadership by identifying individuals of accepted societal positions of leadership. Specifically, our research purposes are as follows:

1. Are the leadership characteristics of leaders in the field of interinstitutional collaborative situations inherent in museums, higher education, and libraries?
2. What are the assumptions of these leaders with regard to their followers?
3. How do these leaders view the role of women in leadership?
Procedures

Participants

The participants (n=6) for the study were selected through personal contacts and past affiliations with the authors. Two were presently working in administrative appointments at southern California museums, and four were serving in administrative appointments in higher education at four year undergraduate universities and graduate schools along the Pacific Coast. Our sample included three males and three females.

Protection of Human Subjects

Prior to pursuing any aspect of this study, the project was approved by the Institutional Review Board for the Protection of Human Subjects in accordance with the guidelines of Pepperdine University (see appendices A and B). The nature of the approval is one of an indefinite end point subject to resubmission each year as directed by Dr. Madjidi (see appendices A and B).

Data Collection

Research participants were identified and contacted via email or phone call where the recruitment followed a script identical to the one provided via email. A copy of the recruitment form is presented in Appendix D. Upon acceptance and agreement to participate in the study, all participants were provided with a list of interview questions prior to the interview. For a list of questions used in this study, see Appendix F. The interviews were scheduled on a case-by case basis where agreements were made as to the location and time. On the day of the interview, participants were then asked to read and sign an informed consent document like the one provided in Appendix E. All aspects of the identification of participants have been obscured and respected in this manuscript unless express, signed permission was granted on the informed
consent form. The interviews lasted approximately one hour each during which time, each of the sessions were recorded. Each question from the pre-determined list (Appendix F) was elaborated on and relevant follow-up questions were posed for the purpose of clarification or further depth.

**Instrument**

A copy of the interview questions has been included in Appendix C. Each item was included as part of a larger group project fulfilling the requirements of doctoral work within the Graduate School of Education and Psychology at Pepperdine University in Malibu, California. The purpose of this research was to identify: a) what the leadership characteristics of leaders in are the field of interinstitutional collaborative situations inherent in museums, higher education, and libraries, b) what the assumptions of these leaders are with regard to their followers, and c) how these leaders view the role of women in leadership.

Our interview (Appendix F) was a seven question process with additional follow-ups as needed pending the responses of the individual interviewee. The first two items (1. Tell me a little about your career. 2. What were some of the obstacles you have faced in your career?) were useful in identifying historical events that shaped each of the participants’ leadership attributes and beliefs. The creation of a timeline identifies factors that can be identified in similarity or difference between the participants. The next item (How would you describe your leadership style?) was useful in determining the perception of the leader’s style (purpose #1) and insight into a general leadership philosophy. Later analysis can result in identifying areas of agreement and contrast between the spoken evidence of behavior and the perceived philosophy. Our next question (What leadership characteristics do you value in your employees?) addresses specific research purpose #2 where we are interested in characterizing the relationship interaction between the leader and the follower. It furthermore promotes what skills and traits in their
chosen employees leaders find vital. This provides for insight into whether they select employees in their own image or seek out those based on a contingency theory in order to match the correct person for the desired environment. The fifth item (What challenges do you face in your day-to-day dealings with your employees?) addresses specific research purpose #2 where we are interested in characterizing the relationship interaction between the leader and the follower. The sixth item (Describe to us your decision-making process) gains information on how the leader interacts with employees and hardships or barriers. Specific purpose #1 and #2 are targeted here by isolating traits of agreement, collegiality, isolation, autocracy, etc. Our last item (What role do you see women playing in leadership and what advantage or disadvantages do women face in leadership positions?) and related follow-up questions are directed at research purpose #3.

**Data Analysis**

Each interview was recorded and later transcribed by the respective interviewer into text over a period of a couple of weeks following the interviews. Then, each transcription was surveyed for the frequency of references to thoughts that were in line with the major research theories of the past and present. These coded areas were as follows: transformational, trait, skills, styles, contingency, situational, and transactional. Because a critical piece of our research question was to identify factors and theory affiliation of persons working in positions of assigned leadership of collaborative non-profit institutions, we further coded a category associated with collaboration. The interviewees then reviewed each transcript for direct references to items and terms as well as inferred content. A frequency count was accumulated for each of these categories as well as quotations specific to the topic for later discussion.
Literature Review

History

The academic interest and documentation of leadership largely began in the middle of the 20th century where seminal works focused on the notion that successful leaders were those who were in possession of certain physical and intellectual attributes that inclined them towards success in leading others. The “trait theory” as sprung forth, was possibly a product of the leadership positions historically bestowed by a higher power through birthright and thus produced the belief that leaders were born not made (Stogdill & Shartle, 1948). Among the first to publish work in this field was Stogdill (1948) who approached this work with the intention of identifying the major traits that were perceived to be the common attribute threads of all successful leaders. Since that time, there have been a number of additional studies producing a progressively longer litany of leadership traits (Kirkpatrick & Locke, 1991; Lord, de Vader, & Alliger, 1986; Mann, 1959) where commonalities and differences of the identified traits continue to be prevalent amongst the varied academics involved in this theory.

Since that early work, additional efforts have been made by others that continued to focus on the things that make up a good leader. The “skills approach” is one where the belief centers on the disagreement with the previous trait approach in one major way (Katz, 1955; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000). Where both the trait and skills approach identified features of leaders, the trait approach believed in the uncontrollable factors associated with birth and genetics in the creation of a great leader, whereas the skills approach centrally believed it was possible to obtain and develop certain traits through training and life experiences (Katz, 1955; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000).
These first two widespread and researched theories prioritized the leader and paid little attention to the role of the process, the followers, or the interactions of all parties. Because we have adopted the Northouse, 2007 definition of leadership wherein “Leadership is a process whereby an individual influences a group of individuals to achieve a common goal” (p.3) it then becomes necessary to progress the discussion to more recent and all-encompassing contemporary theories. One of these is an alternative theory of leadership stemming from a similar time which was then moved to the premise that behavior factor that must be elucidated in the identification and development of leaders. The early work performed by Blake et al. (1964) from the University of Michigan produced a summary grid identifying the interplay of concern for relationships and the concern for outcomes as being the two major factors of this new “style theory.” This basic premise of bifactor interactions of the leader and the led will resurface time and again through more modern explanations albeit in forms using differing language.

Two theories emphasizing the environment and the leader are the “contingency” (Fiedler, 1971) and “situational” (Hersey & Blanchard, 1969) approaches. In short, the situational approach supports the idea that a leader should adopt a particular style in order to best cater to and match the needs of the given situation. Therein, it is possible for widespread success of a particular leader in differing arenas if adaptation and care to choose an appropriate method is exercised. In a similar vein, the contingency theory takes the approach not from the leader matching their approach to the situation, but rather the situation choosing the appropriate leader. In this theory, the best results would occur when the ideal leader is chosen for the given situation.

In more recent times, and of growing acceptance, is the idea that previous theories, while valuable, are too simplistic in terms of the addressing the individual (trait, skills, and style
theories) or the environment (situational and contingency theories). Modern approaches have begun to classify leadership as a delicate balance of interactions between the leader and the followers such that each in turn predicates the responses and actions of the other. Theories here include the “path-goal theory,” (House, 1996) “leader-member exchange” (Graen & Uhl-Bien, 1995) and “transformational leadership” (Burns, 1978; Dowton, 1973). As stated by Wolverton, Gmelch, Montez, & Nies, 2001, “Over the past 20 years, two paradigms have dominated scholarly work on leadership-transactional and transformational” (p. 41) we will focus our attentions henceforth on these two contemporary theories.

Leader-member exchange (LMX) theory “works in two ways: It describes leadership, and it prescribes leadership” (Northouse, 2007, p. 157). The major component is the two-factor relationship between the leader and subordinates that is further classified by entities called “in-groups” (IG) and “out-groups” (OG). Also referred to as a transactional theory, relationships are theorized to begin in the OG where interactions are scripted, predictable, and fall within a restricted zone of operations. Over time, the members of the OG move towards the IG through transactions involving taking on additional responsibilities, performing above expectations, and simply gaining trust of the leader. As this unfolds, there is equal reciprocity where the leader increases the gray area of the relationship and not only allows but encourages individuality of operation. The prescription component of the model suggests that leaders should strive to move all subordinates towards the IGs in time and thereby promoting movement towards higher and more meaningful output (Graen & Uhl-Bien, 1995; Liden, Wayne, & Stilwell, 1993).

Transformational leadership is likely to be the most investigated and strived for model of leadership in operation today (Wolverton et al., 2001). Intrinsic to this theory is the identification of two related principles known as transactional and transformational leadership
with the latter argued to be the more desired form. In negotiating stimulus-response style outcomes of interactions between leader and subordinate, a transaction of effort and reward occurs. Thereby, the subordinate is motivated and performs only with the notion that they will in turn receive some assumed reward for each and every one of the accumulative efforts. Therefore, actions that result in group or team benefit with little individual reward occurring behind closed doors or beyond the watchful eye of the leader will be minimal because the subordinate perceives little derived individual satisfaction. However, transformation is best described as creating the inspiration in both the leader and follower in a positively arranged feedback system that “raises the level of motivation and morality in both the leader and the follower” (Northouse, 2007, p. 176). As a result, direct supervision becomes less intensive (and less necessary); thus stimulating personal work habits and output enhancements that would otherwise occur due to a “what’s in it for me?” attitude. The members of the cycle (leader and followers) therefore persist to engage in efforts for the greater good which in return provide deep satisfaction from a magnified, accomplished success of a nature which is often intangible.

Higher Education

State of theory.

Universities are rife with organizational complexity and multiplicity of leadership roles. Administrators in academics, student affairs, as well as scholarly roles must demonstrate leadership in a variety of different ways. As we move to investigate the current application of theory to educational pursuits, Wolverton et al.(2001) provided a relevant review of leadership from the perspective of a Dean. In this work they referred frequently to the previous works of (as cited in Wolverton et al., 2001) who is given credit for first addressing the concepts of transaction vs. transformational leadership (as cited in Wolverton et al., 2001). Wolverton et al.
offered that the original belief of Burns’ work was one where the difference was viewed as “a trading of benefits between leaders and followers and transforming leadership as mobilizing others to act in a manner that is morally superior to what might otherwise might be the case” (Wolverton et al., 2001, p. 42). Wolverton et al. argue that subsequent evolution of the theory by others has removed the statement of morality with concluding support for substantive change (Wolverton et al., 2001). The Wolverton group continued by saying that deans will be more successful who display higher levels of emotional intelligence (Goleman, 1995) where they will be able to “understand themselves, and their emotions, moods, and desires” (Wolverton et al., 2001, p. 43) and thereby provide for more relation building and shared governance than those that are transactional (Wolverton et al., 2001). Furthermore, the authors speculated that the future of deanships in American universities is one where transactional and transformational elements will not only be necessary, but lead to the greatest levels of success by attending to both day-to-day actions while not sacrificing elements of forward thinking and vision (Wolverton et al., 2001, p. 43). Current research seems to agree to some level that transformational and transactional discussions of leadership are powerful theories of description and prescription in educational settings. However, the following is a short list of other areas of investigation in line with transactional and transformational components.

**Leadership categories.**

In a separate article using a top-down approach for generalizing the technique in play throughout the university environment, Neumann & Bensimon (1990) used university presidents as a view into the methods of leadership pervading the university setting. As part of the Institutional Leadership Project of the National Center for Postsecondary Governance and Finance, the authors interviewed 32 active university presidents representing a broad spectrum of
institutions across higher education. The sample as selected specifically strove to include these institutions for greater generalizability such that universities “further stratified by control (public/private) and Carnegie category (research/doctoral granting), eight state colleges and eight community colleges differing in superstructure (system/non-system) and governance (bargaining/non-bargaining), and eight independent colleges further divided by program (liberal arts/comprehensive) and sponsorship (religious, non-religious)” (Neumann & Bensimon, 1990, p. 680) would be represented across a broad geographic area and community setting.

The study was produced in a cross-sectional format whereby transcribed interviews were reviewed for similarities and differences in three major ways: strategy, cognitive frames, and schools or leadership theory. Using this framework, the interviews were used to create four emergent clusters suggestive of presidential profiles (A-D). The profiles were then summarily presented with respect to target of attention, mode of action, relatedness to institution, and overall orientation in order to delineate broad categorical difference between the leadership perceptions of each type of president. The following is a brief summary of each presidential type.

Presidential type A leaders are those that oversee relatively stable institutions that despite some financial difficulties perceive that their documented or chosen strategies will be effective preventative measures to collapse. Neumann (1990) suggested that these types support faculty in a way where there are few problems with morale. Type As are directed externally in that they view the university as a piece of a larger community and are responsible for the contributing to the purpose. They further see themselves as initiators more so than reactors however, they maintain a tight level of connectedness with their respective institutions through generation and maintenance of structure.
The type B presidential category also usually oversee “stable institutions” and are highly regarded by their faculties. They furthermore see themselves as largely internally oriented such that they focus more on the affiliates both student and employee as being the primary directive. These individuals will work as “facilitators” more so than an “initiator” and in doing so prioritize relationships of people and personnel within the institution. Like the type A, B presidents are initiators although their direction of effort differs “(externally for A and internally for B)” (Neumann & Bensimon, 1990, p.688). Lastly, the type B also exemplifies connectivity with the institution; it is through a more interpersonal method rather than through structure and mechanism. Neumann offered that the type B “president makes persistent efforts to remain in touch with and active in the college’s internal life” (Neumann & Bensimon, 1990, p. 689).

Financially strapped, troubled, or universities in dynamic state of change typically exhibit presidents from category C. These individuals believe that systematic large changes are need to improve the state of the university and differences in the ages of C types offer that older C types “work with distressed faculty” while younger C types “work with faculty who are more hopeful” (Neumann & Bensimon, 1990, p.689). Type Cs direct their attentions externally and are motivated by establishing short-term payoffs and goals. Type C are usefully for fund raising and overcoming systemic issues in a reactionary manner.

The final category, D, are those that “have passed through financial crisis, and the fear of a possible recurrence hangs in the air” (Neumann & Bensimon, 1990, p. 691). The subordinates of these presidents register the lowest on morale. These presidents seem to feel that they are the final decision maker in all of the universities questions while they “paint bleak pictures of the college’s condition before they arrived” (Neumann & Bensimon, 1990, p.691). Type Ds advocate the idea of cutting programs perceived to be problematic or not sufficiently pulling
their weight thus directing the focus internally. They react to problems, conflict, and the environment instead of provide vision and initiative for the future. Type Ds are extremely strong in adherence to structural proceedings and bureaucracy as a way to control and maintain policy.

The authors conclude by offering that their work “represents a tool for analyzing presidential thinking at a given moment in time” (Blake et al., 1964, p. 698) while providing a baseline for establishing change in style over time. In total, this article appears to be a derivative of style theories of leadership originally proposed by Blake et al. (1964) with the exception that this study focused on the style as presented by the cognitive domain perception of the president instead of that of the followers or the more qualitative objective measures of leadership.

**Grassroots (bottom-up) approaches.**

According to Kezar & Lester, (2009) grassroots leadership is “the level at which faculty are working” (p. 717) and spring forth from the bottom up rather than from traditional top-down styles of leadership. This emergent style of leadership calls upon referent and expert sources of power rather than legitimate sources seen in the traditional top-down approach. Their work came about due to what they interpreted as a decline in the environmental conditions at American universities where faculty are bearing a smaller contribution of shared leadership throughout campuses. Kezar, (2009) as cited from Schuster Finkelstein, (2006) attributed this decline to:

- rise in part-time and non-tenure track faculty, increasing pressure to publish and teach more courses and adopt new technologies and pedagogies, increasing standards for tenure and promotion, ascension of academic capitalism, and heavy service roles for women and people of color. (Kezar, 2009, p. 716)

Using a case-study design format, they interviewed 81 faculty members from five selected institutions or higher learning representing a varied directive of purpose and sources of funding. All participants were selected due to their current participation in what was deemed to
be grassroots campaigns of change throughout the university structure. Their findings suggest that for institutions to promote grassroots leadership they should utilize a two-level approach encompassing a total of seven areas. This approach is outlined below.

1. Departmental or school wide approaches that would include a) supportive individuals who remove obstacles, b) providing autonomy and flexibility for faculty workload and role, and finally c) sending faculty to off campus conferences and professional development.

2. Campuswide approaches that would include a) collegiality of campus networks, b) developing policies for including the nontenure track faculty in governance and leadership, c) addressing the lack of community and dysfunctional departments, and d) campuses that see questioning as healthy: not threatening. (Kezar, 2009, p. 716).

The authors concluded that by addressing each of these areas in turn, leadership can emerge from faculty self-selecting the most important issues to their own personal agendas, and therefore serve as a “great source of innovation, creating high-quality teaching, experimental curriculum, cutting edge research, intellectual enrichment, student engagement, improved student outcomes, a more responsive campus to community needs, among other things” (Kezar, 2009, p. 736).

In another grassroots investigation, Thomas & Willcoxson (1998) presented an application of Schein’s (1985) four-step model in the process of grassroots leadership that occurred in a case-study of emergent curricular and culture change that occurred at a Veterinary University located in Australia. These researchers confirmed that bottom-up leadership is evident in the desires of junior faculty that bind together in a common cause of adapting curriculum and instructional practices by attending to the following four steps: a) developing a supportive “critical mass” b) relating change aims to university objectives c) “enlistment of
potential antagonists” and d) creating support and rewards for successful change (Thomas & Willcoxon, 1998).

**Museums**

The current state of leadership in museums seems to focus on the philosophies in conjunction with state of traditional leadership research theory. Literature is replete with discussion of emotional intelligence, authenticity, and transforming discussions. Griffin & Abraham (2000) undertook an expansive investigation into the items associated with successful museums in terms of leadership, public programming, and influence on the discipline. This analysis included 241 individual assessments or 66 experts, addressing 33 worldwide museums. The findings support the notion that leadership is a vital factor and more specifically, forward thinking, vision, and modeling of proper behavior scored very high. The ideals espoused by George persist through the discussion especially with reference to the five steps in demonstrating authenticity (George, 2004). The results from the interviews of Griffin & Abraham (2000) suggest that a clear understanding of purpose as seen through vision of the present and the future are keys as well as building strong relationship while serving as a well-disciplined model for followers will lead to successful curatorship of museums. Writings by Suchy (1999) further support the need for leaders in museums to exhibit emotional intelligences (Goleman, 1995) while also calling upon “flow theories” as guidelines for the leadership roles of museums. In brief, Suchy (1999) suggests that by adhering to clear goals, support, discretionary decision-making, and a sense of trust which allows total involvement in the task one can exist in a state of flow more consistently, thus promoting authenticity and serving as a powerful leader in the goal of transformation.

**Libraries**
The card-catalog and dusty basements might be permanent casualties of the digital age but, the library is far from gone. However, it is safe to say that while the library mission is not changing, the way in which it pursues and provides others with the substance to their respective missions is undergoing massive change. Change in the form of transformation is more appropriately occurring as a result of “a competitive environment, constrained resources, re-engineering and outsourcing, change management, culture of assessment” and the “extraordinary pace at which information and knowledge is being digitized” (Hernon & Schwartz, 2008, p. 243).

As presented by Hernon & Schwartz, (2008) the libraries of today and tomorrow are undergoing vast redesigns to match the evolving world of information storage and dissemination. It is now considered mainstream for libraries to:

- collaborate with other units on campus in creating new services, ones representing partnerships with centers for teaching excellence, tutorial and writing centers, information arcades, facilities for multi-media production and delivery, information and learning commons, cafes, centers for distance education, publishing facilities (e.g., university presses and digital collections), counseling and career centers, and so forth. (Hernon & Schwartz, 2008, p. 243)

Hernon and Schwartz (2008) therefore set out to outline the current states of research on change management, leadership, and managerial leadership, what the authors consider to be the most important issues facing libraries into the immediate future. They, (the authors) wrote that for libraries to be successful under the auspices of such significant challenges, leadership would be necessary for the “influencing others to attain group, organizational, and societal goals” (p. 244) in line with the necessity of re-focusing of library designs and purpose in the future. One of the major suggestions of Hernon & Schwartz (2008) was that where leadership and management circles overlap, there would exist managerial leadership. They tendered a research agenda itemizing transformation, accomplishments, and people in developing a broader base of
literature on library leadership that would provide Library Information Services with “an increased focus on managerial leadership and how it functions in practice” (Hernon & Schwartz, 2008, p. 248).

Riggs (2001) addressed what he viewed as a growing schism between the library of tomorrow and the leadership discussion of today. Citing the Bennis (1997) definition of leadership, he argues that literature for library functioning is daringly narrow and devoid of leadership instruction, philosophy, and research. Some work has been completed to relax this since the original publication date, as the work of Hernon and Schwartz (2008) would suggest. Nonetheless, Riggs then clarified a number of what he perceived as myths in the minds of library affiliates. These include the concepts that all individuals of a team are indeed leaders in one way or another, leaders (authentic we suppose) can be trusted, librarianship is not interchangeable between similar institutions, and that the trait theory is outdated and has been dismissed (Riggs, 2001). He then concludes by offering a very transformational view of leadership that he felt should be adopted wholeheartedly through visionary thinking.

In a 2004 article, Mason & Wetherbee (2004) composed a systematic review of the state of library leadership programs. They believed first, that the genetically inclined trait theory is in fact obsolete and that whether or not leadership training “long a fiercely debated topic, it is now accepted as true” (Mason & Wetherbee, 2004, p. 188). Their review of leadership training program effectiveness revealed that almost all of the data collected in the field is that of a subjective questionnaire addressing the participants’ perception of effectiveness and satisfaction in the short term. While the results of training programs appear to garner unanimous approvals with huge rates of satisfaction (as high as 94%), there is a paucity of data of any objective measure from follow ups in a prospective long-term nature. The authors commented that:
The review of leadership and leadership development training makes it clear that, although many training programs have been developed and conducted successfully, the evaluation methods used to date to assess the success of these programs have, in most cases, not yielded definitive results about the success or failure of programs to achieve their stated objectives, such as individual personal development, career mobility, workplace improvement, and so forth. Most evaluation methods employed to date have measured short-term goals, including participants’ self-assessments of whether the training met expectations and the extent of their personal satisfaction with the training. For the future, if the designers of leadership training hope to claim that such programs improve productivity and achieve an economic payoff for libraries, better evaluation methods must be developed and used in a systematic way. (Mason & Wetherbee, 2004, p. 214)

Therefore, the authors suggested improvements in the way in which trainee groups are assigned to more carefully counteract confounders and elicit more concise, agreed-upon experimental variables. They secondarily offered that longitudinal measures based on objective outcomes would give greater insight to the actual and not perceived effectiveness of these training programs and finally, that more consensus could be made as to what constitutes library leadership. The respective traits and skill sets suggestive of successful library leaders could then be greatly refined and therefore better strategized for and targeted with innovative or evolving training programs (Mason & Wetherbee, 2004).

**Women and Leadership**

Historically, women have been the subject of much undue and unjust discrimination. Professionally speaking, this was demonstrated through unfair hiring practices, inequality of pay, promotion methods, and sexual harassment in the work place. While these issues are unfortunately unlikely to disappear completely, significant progress has been shown (Deyrup, 2004). For example, statistics from the Association of Research Library, that female librarians “constitute 57% of all college and university library directors” (p. 242) and that “perhaps more significant, women essentially have achieved the same wage parity with their male counterparts”
(Deyrup, 2004, p. 242). The actual reported number of salaries that are 92% of their male counterparts while close to equitable, are diminished in importance when compared to female librarians at public libraries. However, in the context of academic librarians, the jobs are more common in women, they earn similar wages, and in fact, “at the top-tier research institutions, women directors, on average, actually earn slightly more than men” (Deyrup, 2004, p. 243). In furthering the gender equity discussion for libraries, the authors then posited four questions: 1) how do librarians compare to corporate America? 2) what led to equity approximation at academic institutions, 3) is this in response to a “women-centered” agenda, and 4) should the improvements in libraries be sued elsewhere as a model? (Deyrup, 2004).

To the first point, the authors cited data highlighting great disparity in frequency and pay scales for women in leadership positions in the big business. It was further noted that progress in this area while disparate is also very slow in change with only a shift from 11.9 to 12.5% of leadership officer positions in Fortune 500 companies held by women from 1999 to 2000 (Deyrup, 2004). The prevalence numbers improve slightly in all academic fields including approximate numbers in teaching, and librarianship. However, university presidents hovered around 19% as of data in 2000 (Deyrup, 2004) and these were more likely to be small, liberal arts focused colleges or universities in small communities.

In addressing the second point Deyrup (2004) cites “affirmative action, advancement through a process of mentoring and professional affiliation, and the recognition by women administrators that they have different leadership styles than men and can use this understanding to their advantage” (p. 246). This last notion, maintains adherence to both the authenticity approaches of George (2004) and the StrengthsFinder approaches to leadership and personal success ascribed to Buckingham (2001).
Point three is addressed by examining the online postings, resumes, and mission statements of female contributors, the authors seemed inconclusive offering both evidence supporting the idea that females promote a feminist agenda and additional research in contradiction (Deyrup, 2004). However, they did conclude the section by saying that “the overall impressions of library administrators is of conservatism, in terms of both a managerial culture and leadership values” (Deyrup, 2004, p. 248).

The last question posed by Deyrup was answered as a definitive yes in favor of distributing this model to other avenues in a way to promote equality across other fields. The authors conclude by saying:

The women are just now making the transition from being heads of liberal arts colleges and the traditionally female-dominated schools of nursing and education to becoming heads of other academic schools and colleges. It might prove useful for this generation of academic administrators to take a look at what their colleagues within the library profession already have achieved. (Deyrup, 2004, p. 249)

Collaboration

The final step we take towards understanding the leadership process of interinstitutional collaboration is to examine how all of this fits together. Because of the novel integration of the three entities which we have chosen to investigate previous work in this field is scarce beckoning the need for investigations like this one. However, seeking out appropriate sources that have previously addressed one of a combination of factors similar to ours is a relevant approach that can be built upon.

One of these studies comes from an article in the Journal of Library Management where the librarians from three different Canadian Universities presented a summary manuscript addressing the principles of successful interinstitutional collaboration (Shepherd, Gillham, & Ridley, 1999). Each of these three individuals was involved as a leader of their respective
institutions during a merger of resources in order to create a “seamlessly integrated program of library collections and services” (Shepherd, Gillham, & Ridley, 1999, p. 332) resulting in the sharing of library resources and collections, joint storage facilities, and integration of library systems. This case study focused on the presentation of four critical areas of collaboration: a) building relationships, b) learning, c) leadership, and d) community building. In addressing the concepts of leadership, the authors were careful to differentiate between management and leadership where the terms “set”, “delegate,” “control,” and “establish” were used in four areas of proposed managerial importance. Conversely, the terms “share,” “model,” and “openly” permeated the points of concentration for leaders (Shepherd et al., 1999). Clearly these authors, while not specifically identifying so, share the concept of collaborative library leadership as being predicated on vision and relationship elements of contemporary leadership theory.

Another study of collaborative interest sought to present recommendations in a case-study format resulting from a collaborative endeavor between two universities located in Scotland (Shaw & Holmes, 2005). These two universities, both residing in Glasgow, formed the opinion that a litany of benefits could be had in expanding research initiatives and funding awards by expanding the scope of team to elicit greater faculty experience and thus support efficacy of research success. While the two universities differed greatly in principal mission, they felt that the common benefits could far outweigh the initial costs of set-up and transformation that would eventually provide growth to each institution to an extent greater than they would have independently achieved. The authors suggested that collaboration “is seen as a continuum ranging from loose voluntary co-operation to collaboration so close that it leads to its own demise through merger and the creation of a single organizational form” (Shaw & Holmes, 2005, p. 481). They then put forth three focused areas of leadership they felt were critical to
successful collaborative change tasks: a) defining purpose and establishing success criteria, b) establishing governance systems and c) nurturing the development of activity. These three criteria call heavily upon some language that is offered elsewhere dealing with leadership vision (Blanchard & Stoner, 2004) and relationship building of transformational leadership approaches requiring “individualized consideration, intellectual stimulation, idealized influence (charisma), and inspirational motivation” (Yukl, 1999, p. 36). In summary, the authors concluded in support of what they considered a successful inter-institutional collaboration and offered the following:

The culture of two universities and their attitudes towards each other can be changed by top-down communication of a timely idea and through voluntary cooperation. While setup costs are high, new inter-organisational structures are workable. Finally, despite the complexities, the looser form which an alliance offers can provide significant benefits. (Shaw & Holmes, 2005, p. 487)

A progressive study put forth by Vangen and Huxham (2003) strove to add to the theory and practice of collaboration by examining and categorizing the leadership “activities undertaken by participants in collaborations” (Vangen & Huxham, 2003, p. S62). One of their major premises from previous work was that in true situations of collaboration, there is a void of traditional hierarchical forms of top-down leadership. Leaders still exist, but do not often carry legitimate power across boundaries into the team of collaborators so that Vangen and Huxham (2003) postulated that their collaborative theory “conceptualizes leadership as the mechanisms that make things happen in a collaboration” (p. S62). Working with data from 13 diverse examples of collaborative institutions, their work centered on the premise that three areas of “leadership media” (structures, processes, and participants) be addressed in order to fully describe the leadership process. They offered two descriptive processes that were eventually posed in a frame of “ideology and pragmatism” where the former would involve embracing, empowering, involving, and mobilizing the followers in each case towards the common goal
along this stepwise progression. The opposing viewpoint sees the focus of collaborative leadership as requiring one to manipulate the collaborative agenda while playing politics. Presented first as two differing perspectives, the authors tie these two together in intertwined system of what is strived for and what will actually occur. In essence they propose a middle ground of pragmatism that falls in between the polar theories “democratic versus autocratic, participative versus directive, relationship oriented versus task oriented and consideration versus initiating structure offered by Stogdill (Bass, 1981), or to the transactional versus transformational leadership dichotomy raised by Burns (1978)” (Vangen & Huxham, 2003, p. S73). Their conclusion is that an effective or rather the most effective leaders in collaborative settings will be those that are adept at negotiating both sides of the spectrum. This is not seen as someone that rides the middle ground in all cases, rather that they can drift between opposite ends of the spectrum as required by the situation. Vangen & Huxham (2003) further clarify that their conception of leadership is in contrast to both the contingency and style approaches by demanding that both are “operating together at the same time” ( p. S73).
Data Analysis and Findings

In total across these six interviews, there were 68 confirmed references affiliated with the chosen eight categories. The combined frequencies and cumulative percentages of all categories are displayed in figure 1. Surprisingly, the most frequently addressed category was collaboration with transformational, trait, and skills representing similar frequencies at the next highest cluster of items.

Figure 1- Pareto Chart of Quantitative Categorical Analysis of Interviews. The dependant variable on the left is the frequency of occurrence that each of the categories (x-axis) was addressed either directly by the interviewee or via inference of the research team.

Collaboration

It was common for the participants to mention working collaboratively in teams and focusing on the relative contributions of each member. Referring to the collective democratic ways of collaboration one of the participants spoke of the following: "I do not follow the 'my
way or the highway' method of management, but much more inclusive—trying to figure out what everybody thinks is the right idea or the wrong idea or the path to pursue". While another offered:

I think in terms of the style, I like to seek consensus, I like to bring people into the process of being informed. I don’t like to be just top-down. I like to think of working with my colleagues as more collaborative, even if they are people who are reporting to me, I still like to make them feel that they are part of the process and not just receiving orders.

These collectively gave insight that in general, these leaders see themselves as member of a large collaborative team where members were prioritized and encouraged to provide emphasis along the lines of the own perceptions of strength and passion.

One of the interviews revealed that they believed “women to be more collaborative. Grew up in household with four women. No doubt there are still perceptions in the work place.” The previous statement was offered by a male whereas one of the females said “I think we can bring a lot to the leadership table because they’re seen as being more empathetic than men…..I think that they [women] are team builders more than men are.” These statements of gender differences in collaboration were interesting, albeit infrequent statements in this category.

**Transformational.**

As part of transformational theory, a supposition exists that in this dualistic process, inspiration is seen throughout and morality is increased in both the leaders and the followers. We saw evidence of both of these where one said “Uh, I really enjoy my job. I absolutely love it. And I try to get people to enjoy their jobs equally is one of my biggest challenges.” Another quote was identified which revealed “so whatever challenges there were I remedied within a
week which was to get everybody to just relax and enjoy doing their jobs.” These both speak to inspiration and elevating the general atmosphere surrounding the workplace.

Other evidence pointed to the elevation of morality in the team. As suggested by one, “You know there are lots of reasons why people aren’t honest about things, and I can understand them, but I think you need to be fair, you need to be tolerant.” A second statement to this effect endorsed the priority of loyalty: “I like loyalty, but let me explain what that means….it means I feel that I need to be loyal to my people that I serve first, before I expect them to do anything for me.” While this suggests trait theory in the identification of a positive quality along with LMX theory due the exchange of honesty between leader and follower, it also demonstrates the concept of increasing the idealized notion of loyalty throughout the organization.

Trait.

From the straightforward “I think that people are born with certain leadership styles” to the not so the contrast of positive traits, but also the negatives associated with obstruction or poor leadership performance also appeared:

Myself. My obstacles are mainly the kinds of things….baggage, personal baggage. I don’t feel, I never felt that I’ve been held down, but what I do feel is that some of my own beliefs in my own limitations, whether they are real or not, get in my way.

One of the interviewees provided the following powerful insight:

Are leaders born? I think that to a certain extent they are but I think that the characteristics that you are born with are going to determine what kind of leader you are. I think that you put anybody in the right position and they can lead- it depends on how effective they are.

Interestingly, the belief that humor was an important trait of effective leaders appeared in three of the interviews. In addition to humorous approaches and having a sense of humor, one of these same participants also said that joviality was very important in their trait based belief system. Subjectively this could also speak to one of the limitations of the study in that the
participants were selected through previous affiliation and a selection bias could have been seen here as well as throughout the data collection.

**Skills.**

Leadership being nothing more than possessing a desired set of skills which can be crafted and obtained throughout one’s life definitely resonated with our sample. While one simply said “craft can be taught” others offered multiple instances suggestive of the ability to learn skills was at play in effective leadership. One interviewee combined elements of skills, traits and authenticity all into one by offering:

> I think that you can train people for that kind of run-of-the-mill [word drowned by traffic noise] is how you do strategic planning is how you is how you [word drowned by traffic noise]. But when it comes down to, ah, when the pressure is on, I think, you know, all that stuff gets thrown out the window, you revert to what kind of person you are.

Here they spoke of the ability to train and thus adapt in alliance with skills theory while at the same time hinting that genetic traits still dominate the depths of the authentic person.

**Style.**

With a declining set of examples or occurrences, the quality and robustness of samples declines, but we were able to garner evidence that style of the leader is evident in the following citation: “I would have had to discover them and that would have taken a level of trust that would have taken some time to get to because people are naturally protective of themselves.” Furthermore, the behaviors of the leader demonstrated in this interplay of confidence and openness in the relationship that has been developed over time with the supervisor.

> You do have to be a kind of a special person, to be able to tell your boss 'What are you thinking…that’s really not the way to deal with this,' and to have...a disagreement and still maintain a professional relationship, and so I think I do that personally and I really value it in my employees when they do it.

**Contingency.**
We did observe a single point of reference to contingency theory whereby the leader or individual is selected for the proper position or environment with this offering “To me it’s all about getting the right people under you, so hiring is hugely important.”

**Situational.**

We clearly saw an instance of situational or the ability of the leader to modify their respective approach to the given situation in a model of flexibility. In the following excerpt, we see that this leader has a preference for viewing the supervisor-subordinate relationship, but is able to modify his preferred approach to meet the perceived needs of the follower.

At a certain point I instituted a regular, weekly meeting, a staff meeting even though I do not have a staff other than one. But we meet at a regular, designated time every week and that is sacrosanct and by doing that I was really able to close the door and open up more lines of communication, so that has helped. I work with an employee who is very, she is a very private person, she holds her private life close to her, it’s not something to share. I am much more willing to share my outside life. And I learned through this process learning about different styles that the way to give her direction the best way is to do it in writing. She responds best by receiving it in an email, rather than, even though our offices are nearby, rather than my going to tell her to do something.

**Transactional.**

We identified a more pronounced transactional situation where our leaders mentioned more of the removal of negatives or punishments away from the environment instead of discussing the common approach of rewarding or giving of positives in order to encourage or promote given behavioral recurrences. In this form of stimulus- response system we heard evidence of such as “you enable people” and “yeah, I guess you enable people by letting them know it’s okay to fail.” Here we have removed the negative stigma of failure giving the followers greater stimulus to try new things and in doing so create greater results. We also heard:

if you want creativity and you want hard work, you have to let people know that there is not a consequence for screwing something up. So I rarely reprimand, you know if
somebody does something wrong I rarely say “you screwed up”, you’re a bad person kind of thing, it’s more “what do you learn from that?
Conclusions and Implications

In an ever expanding world of people and information, there is no question that social means of collaboration will be taking on a greater and more mandatory role for professionals (Shirky, 2008; Tapscott & Williams, 2006). Because leadership is viewed as a process of interaction between individuals where one exercises influences others towards a common goal, it is imperative that we participate in identifying the mechanism of leadership in order to prescribe methods of improving these relationships in the vision of cooperation and efficiency.

It is clear that the field of leadership theory has moved from an egocentric perspective to one that is based in a process of social interactions between people. To date, the field is dominated by transformational leadership investigations that are undergoing constant modification and application to other fields. Collaborative efforts (that are the way of the future), such as exist across institutions of higher learning, libraries, and museums are no exception. Currently researchers in each of these areas are working to expand the current sets of generalizability for future applications.

Transformational leadership, in its current conception, concerns leaders who inspire their followers to greater outcomes and rewards than would have been possible alone. In doing so they literally transform or change the followed, the environment, and the working culture in a substantive way for indefinite time into the future. We believe this to be the central premise of interinstitutional collaboration and argue that further investigations into the traits, perceptions, and behaviors of successful leaders involved with these processes be examined. This will give a foothold into greater expansion of that which is desirable in a leader for the purpose of selection, training, and retention of the members of each collaborative network. With the largest identified categories in this analysis being collaboration and a second greatest in transformational, we are
in line with the current leanings of leadership theory that suggest that this is the most researched theory at present (Wolverton et al., 2001).

As mentioned previously one of the major limitations of this study is the selection process of these participants, and the relatively small sample size which reflects a smaller investigative power. However, in this sample of leaders representing entities of nonprofit collaborative institutions, we found a large occurrence of belief in collaborative communication and contributions from team members. A second major finding was that we sampled relatively similar instances of transformational, trait, and skills. This is not surprising and does not necessarily contradict the support for either theory. These theories, through time, can be seen as building upon the previous where in order to elicit true inspiration as suggestive of transformational leadership, the leader might possess and believe that certain traits helped in accomplishing that task, while also prioritizing behaviors that will be adjusted to suit varied situations. This can be further produced by instilling a reward system for excellence and reducing punishments and systems of coercion in line with transactional styles all while participating in workshops and training groups to encourage the awareness and adaption of additional techniques to the leadership repertoire. Perhaps this integration of approaches and philosophies is the best approach and the most taken by leaders in the collaborative next generation.
References


Appendix A  IRB Application Cover Letter

January 4, 2006

Laura Hyatt, Ed.D., Chair
Graduate and Professional School Institutional Review Board (GPS IRB)
Graduate School of Education & Psychology
6100 Center Drive
Los Angeles, CA 90045
Dear Dr. Hyatt:

I am hereby requesting my proposed study titled “Leadership Characteristics Influential Leaders” is reviewed for a claim of exemption. This is study aligned with my research interest in the area of Leadership and will be a part of my scholarly work in the next three academic years.

To facilitate the submission and review of my IRB application, the Pepperdine GPS IRB Initial IRB Checklist is followed. Enclosed, please find:

- Two (2) copies of completed IRB application for a Claim of Exemption including copies of Modified Informed Consent Form and Interview Protocol designed for the study.
- Two (2) Copies of completed Pepperdine IRB Application for Waiver or Alteration of Informed Consent Procedures.
- One (1) Electronic copy of the complete IRB package on a CD-ROM

Please also be advised that I have:

- read and will act in accordance with the ethical principles for human research protections
- not violated any copyright laws in the use of the instruments for the proposed study

No additional departmental requirements exist, as this research as I will be conducting this research as a faculty member of GSEP. As such, the “Faculty Supervisor Review” form is not applicable. Evidence of completion of human subjects training is already on file with your office. HIPAA education is not required for this study.

If I can be of any assistance, please feel free to contact me.

Sincerely,

Margaret J. Webber, Dean, GSEP
Farzin Madjidi, Professor of Leadership, GSEP
Appendix B - IRB Application

PEPPERDINE IRB

Application for a Claim of Exemption

IRB Application/Protocol #: ______________________________ (To be assigned by the IRB)

PrincipalInvestigators: **Margaret J. Weber and Farzin Madjidi**

Faculty: __X__ Student: ______ Staff: __________

Address: 6100 Center Dr. suite 518, Los Angeles, CA 90045_________________________

Telephone: (home) 310-207-3801________ (work) 310-568-5726 __________

School: GSBM __GSEP__ SEAVER __ SOL __ SPP __ Other Dept. __

Faculty Supervisor (if applicable):__________________________________________________


Faculty Research: __X__ Other: ____________________________________________________

Is the Faculty Supervisor Review Form attached? Yes   No   N/A

Has the investigator(s) completed education on research with human subjects? Yes No
Please attach certification form(s) to this application.

**Investigators are reminded that Exemptions will NOT be granted for research involving prisoners, fetuses, pregnant women, or human in vitro fertilization. Also, the exemption at 45 CFR 46.101(b)(2), for research involving survey or interview procedures or observations of public behavior, does not apply to research with children (Subpart D), except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.**

Title of Project: _Leadership Characteristics of Influential Leaders _________

1. Briefly summarize your proposed research project, and describe your research goals/objectives.

   **Leadership has been receiving more attention in the literature than most other contemporary business topics. A simple search for the word “leadership” on the two most popular online book stores, BanrsandNoble.com and Amazon.com revealed 142,200 and 178,520 leadership books available for sale, respectively. Yet the topic seems to attract more attention and absence leadership in organizations remains conspicuous.**
There are a great number of views on and definitions for leadership. Gardner and Schermerhorn (2004) describe their model, authentic leadership, as “a process that draws from both positive psychological capabilities and a highly developed organizational context which results in both greater self-awareness and self-regulated positive behaviors on the part of both leader and associates, fostering positive self-development. Hogg (2004) emphasizes the effect of social identity on leadership by stating that where group membership is situationally salient, people self-categorize into in-groups and conform to the in-group prototypes and exhibit normative behaviors. Others such as Hall (2004) emphasize self-awareness and adaptability as meta-competencies for leadership.

While these and other authors have contributed a great deal to our general understanding of this developing field, there are still a great deal of ambiguity about leadership and leaders of various fields. In particular, our existing knowledge and understanding of leadership can be improved by learning about leadership styles, assumptions and approaches in fields such as education, healthcare, non-profit and religious organizations, to name a few.

To complete the requirements for their Leadership Theory and Practice course, students in the Organizational Leadership doctoral program (OL) are required to interview influential leaders in their fields of interest. The objective of the assignment is to interact with leaders in healthcare, industry, government and education to examine their leadership styles and beliefs about leadership and developing leaders in their organizations.

As such, their assignment aims to answer the following research questions:

a. What are the common approaches and styles to leadership among leaders in various fields?

b. What are the fundamental assumptions of leaders with respect to the leadership abilities of their employees?

c. How do International leaders make decisions in their organizations?

d. What are the views of leaders with respect to women in leadership?

2. Using the categories found in Appendix B of the Investigator Manual, list the category of research activity that you believe applies to your proposed study.

This study meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states: (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
Category (2) of 45 CFR 46.101. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

3. Briefly describe the nature of the involvement of the human subjects (observation of student behavior in the classroom, personal interview, mailed questionnaire, telephone questionnaire, observation, chart review, etc):

Leaders who agree to participate in an interview and discussion with OL students as part of their Theory and Practice of Leadership will be given a modified informed consent and will be asked if the interview might be recorded and the content may be used for this research. Participants will also be asked if they consent to their identities and the names of their organizations to be revealed in the study. An interview protocol consisting of 6 open-ended questions will be used and is attached.

4. Explain why you think this protocol should be considered exempt. Be sure to address all known or potential risks to subjects/participants.

Risk to participants in the study is minimized in the following manner:
a. Should the participants not consent to their identities and names of their organizations being used, their names and the name of their organizations will be replaced with a generic title. No other specific identifying information will be used or reported in any part of the study
b. Should the participants not consent to their identities and names of their organizations being used, the identity of participants will only be known to the researcher and this information will be destroyed at the completion of the study.
c. A modified informed consent will be sought that ensures that participation is voluntary, the participant has the right to withdraw at any part of the interview, that there are no known risks to the participant and confidentiality will be maintained, and the results of the study are available for the participant’s review at the completion of the study.

5. Explain how records will be kept.

Interviews will be taped and later converted to MP3 files and saved on Compact Disks (CDs). Content of the interviews will be transcribed. Transcriptions, coding sheets and CDs will be kept in a locked cabinet at the researcher’s residence for five years. All other records will be destroyed.

6. Yes Are the data recorded in such a manner that subjects can be identified by a name or code? If yes:

Who has access to this data and how is it being stored?
The Informed Consent form gives participants the option of allowing their identities to be used in the study. If they do not choose this option, their names will be replaced by a generic title and reference to their organization. For example, John Doe, a Chief Medical Officer at a for-profit hospital, will be referred to as a high ranking leader at a for-profit hospital. The only reference to the actual names of these participants will be on a coding sheet that will be only available to the researcher.

A “sanitized” final transcript of the interviews will be generated which will have disguised the identities of those who did not consent to have their identities revealed. This transcript will be maintained in a locked filing cabinet in the researcher’s office.

If you are using a health or mental health assessment tool or procedure, what is your procedure for referring the participant for follow-up if his/her scores or results should significant illness or risk? Please describe

Will the list of names and codes be destroyed at the end of the study? Explain your procedures.

The coding sheet containing the lists of names of participants will be destroyed at the completion of the research.

7. Attach a copy of all data collection tools (e.g., questionnaires, interview questions or scripts, data collection sheets, database formats) to this form. Be sure to include in such forms/scripts the following information:

- a statement that the project is research being conducted in partial fulfillment of the requirements for a course, master’s thesis, dissertation, etc. (if applicable)
- purpose of study
- a statement that subjects’ responses will be kept anonymous or confidential (explain extent of confidentiality if subjects’ names are requested)
- if audiotaping or videotaping, a statement that subject is being taped (explain how tapes will be stored or disposed of during and after the study)
- All recordings of the discussion will be converted to CD or DVDs and will be stored in a locked cabinet at the researcher’s home for a period of 5 years.
- a statement that subjects do not have to answer every question
- a statement that subject’s class standing, grades, or job status (or status on an athletic team, if applicable) will not be affected by refusal to participate or by withdrawal from the study (if applicable)
- a statement that participation is voluntary
Please note that your IRB may also require you to submit a consent form or an Application for Waiver or Alteration of Informed Consent Procedures form. Please contact your IRB Chairperson and/or see the IRB website for more information.

8. Attach a copy of permission forms from individuals and/or organizations that have granted you access to the subjects.

**Permission for interviews is granted directly by the participants. No other approvals/permissions from individuals or organizational are needed.**

9. **Yes** **No** Does your study fall under HIPAA? Explain below

9.1 If HIPAA applies to your study, attach a copy of the certification that the investigator(s) has completed the HIPAA educational component. Describe your procedures for obtaining Authorization from participants. Attach a copy of the Covered Entity’s HIPAA Authorization and Revocation of Authorization forms to be used in your study (see Section XI. of the Investigator Manual for forms to use if the CE does not provide such forms). If you are seeking to use or disclose PHI without Authorization, please attach the **Application for Use or Disclosure of PHI Without Authorization** form (see Section XI). Review the HIPAA procedures in Section X. of the Investigator Manual.

I hereby certify that I am familiar with federal and professional standards for conducting research with human subjects and that I will comply with these standards. The above information is correct to the best of my knowledge, and I shall adhere to the procedure as described. If a change in procedures becomes necessary I shall submit an amended application to the IRB and await approval prior to implementing any new procedures. If any problems involving human subjects occur, I shall immediately notify the IRB Chairperson.

____________________________________ ____________________________________
Principal Investigator's Signature Date

____________________________________ ____________________________________
Principal Investigator's Signature Date

____________________________________ ____________________________________
Faculty Supervisor's Signature Date (if applicable)
Appendix C - IRB Application for Waiver or alteration of Informed Consent

Pepperdine IRB
Application for Waiver or Alteration of Informed Consent Procedures

Principal Investigator: Margaret J. Weber and Farzin Madjadi

Address: 6100 Center Drive, suite 518. Los Angeles, CA 90045

Telephone: (home) 310-207-3801 (work) 310-568-5600

School: GSBM _ GSEP _ X_ SEAVER __ SOL __ SPP __ Other Dept. __

Faculty Supervisor (if applicable):

Title of Project: _____ Leadership Characteristics of Influential Leaders

1. Please explain the purpose for the request for waiver of informed consent, or alteration of informed consent process (e.g., no written consent obtained; written consent obtained but not discussed with subjects).

   **The purpose of requesting an alteration to informed consent is to allow interview participant to send a copy of the Informed Consent form to the participants in advance of the interview date. The researcher believes this step allows participants ample time to read the form carefully in advance of the interview, thus providing an additional safeguard for them.**

2. Is the research or demonstration project to be conducted by, or subject to the approval of, state or local government officials, and designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs? Yes **No**. If yes, please explain.

3. Does the study involve procedures for which written consent is normally required outside of the research context? Please explain.

   **No.**

4. Explain why the research as proposed involves no more than minimal risk to the subjects.

   **Risk to participants in the study is minimized in the following manner:**
a. Should the participants not consent to their identities and names of their organizations being used, their names and the name of their organizations will be replaced with a generic title. No other specific identifying information will be used or reported in any part of the study.

b. Should the participants not consent to their identities and names of their organizations being used, the identity of participants will only be known to the researcher and this information will be destroyed at the completion of the study.

c. A modified informed consent will be sought that ensures that participation is voluntary, the participant has the right to withdraw at any part of the interview, that there are no known risks to the participant and confidentiality will be maintained, and the results of the study are available for the participant’s review at the completion of the study.

5. Explain why the waiver or alteration will not adversely affect the rights and welfare of the subjects.

Participants will be given full informed consent, except that the form will be sent to them in advance of the interview taking place. This step will not in any way affect the rights and welfare of subjects.

6. Explain why it is not practicable to conduct this research without a waiver or alteration of informed consent procedures:

If seeking waiver of the written documentation requirement, explain why it is not practical to get participants’ written informed consent.

7. If seeking waiver of the written documentation requirement, will the investigator provide subjects with a written statement regarding the research? Explain.

This application does not seek waiver of the written documentation.

8. If seeking waiver of the written documentation requirement, will the only record linking the subject and the research be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality? Please explain.

9. If so, will each subject be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern? Explain.

This application does not seek waiver of the written documentation.
10. Will the subjects be provided with additional pertinent information after participation? Explain.

Should the results of the study be accepted for public dissemination, a copy of the study will be provided to the participant, upon their request.

11. Have all personnel who will participate in the activity/project been trained in all required policies and procedures relating to research protections for human subjects/participants? Please explain.

The interview questions will be asked only by Pepperdine University students and faculty who have completed IRB training.

In signing this form, the investigator warrants that s/he will protect the information accessed as described, cannot practicably conduct the research without a waiver (or alteration to standard practices) of informed consent, and cannot practicably conduct the research without a waiver.

Signature: ___________________________________________

Date: _______________________________________________

Signature: ___________________________________________

Date: _______________________________________________
Appendix D - Interview Request (Participant Recruitment Form)

Hello. My name is Professor Todd C. Shoepe of Loyola Marymount University. I am also a doctoral student in Educational Technology at Pepperdine University’s Graduate School of Education and Psychology. I am conducting a study on leadership of inter-institutional collaborations.

You have been carefully selected to participate in the study. Participation in the study is voluntary and confidentiality and anonymity are maintained to your satisfaction. Participation entails an approximately 45-60 minute interview. Questions asked in the interview and an informed consent form will be sent to you in advance of the interview. Your participation in this study will be extremely valuable to new and aspiring executives in institutional collaboration as well as other scholars and practitioners in the field.

I would like to ask if you would be willing to be interviewed as part of this study.

Myself and my colleagues greatly appreciate your time and consideration of this matter in light your extremely busy schedule.

Sincerely,

Todd C. Shoepe MS, CSCS, ACSM-HFS
Clinical Professor
Department of Natural Science
Loyola Marymount University

Office: North Hall 201 Mailing Address: 1 LMU Drive, MS 8160 Los Angeles, CA 90045-2659 Phone: 310-338-7825 Fax: 310-338-7882
Appendix E - Informed Consent

The following information is provided to help you decide whether you wish to allow us to use the information we gain in our conversation with you today in our research and scholarly work at Pepperdine University.

The purpose of our conversation today is to learn about your leadership characteristics, style and decision making. This study will allow us, and those who read our research, to gain a better understanding of leadership styles and approaches of leaders. In order for me/us to use what we learn from you today in our research and publications, our University requires that I/we read to you the following statement and ask for your permission. I would like to ask you if you would agree with one of the following to arrangements:

___________ I agree to permit the researcher to use my name, (please initial) professional affiliation and the name of my organization.

I understand that prior to submission of this research for publication; I will receive a copy of the manuscript and review it for two weeks. I may then request revisions to any quotes/information directly attributed to me. If the researcher cannot accommodate my request, the researcher will then delete my name, professional affiliation, name of my organization, and any other pertinent identifying information related to me and simply refer to me by a pseudonym and my organization as a “generic organization”, e.g., Dr. Jones, President of medium size community college.

OR

___________ I agree to permit the researchers to refer to me (please initial) only by a pseudonym from a “generic organization.” I understand my identity and the name of my organization will be kept confidential at all times and in all circumstances any research based on this interview is presented.

In either case, you should be aware that your participation in this study is voluntary. You are free to decide not to participate or to withdraw at any time without affecting your relationship with me/this group or Pepperdine University or ______________. Upon your request, I will provide a copy of any published papers, dissertations or professional presentations that take place as a result of this interview.
Appendix E - Informed Consent

With your permission, I will be recording this interview. Please feel free to ask us to stop or resume taping this discussion at any point in our conversation. Your name, your position and the name of your organization will be kept confidential at all times and in all of our research. May I record this interview?

Please feel free to ask any questions about this study before we begin or during our conversation. If you have any additional questions, please feel free to contact Dr. Farzin Madjidi, Principal Investigators at 310-568-5726 or (fmadjidi@pepperdine.edu), or Dr. Doug Leigh, Chairperson, GPS Institutional Review Board at 310-568-5600 or Dleigh@pepperdine.edu

At this point, I am required to ask you if you fully understood my statements and if so, to initial next to the category that applies to you and sign this form.

______________________________    ________________
Researcher’s Signature      Date

______________________________    ________________
Investigator’s Signature      Date
Appendix F - Interview Protocol

1. Tell me a little about your career
2. What were some of the obstacles you have faced in your career?
3. How would you describe your leadership style?
4. What leadership characteristics do you value in your employees?
5. What challenges do you face in your day-to-day dealings with your employees?
6. Describe to us your decision-making process. For example, when your staff brings to your attention a problem, how do you go about selecting a solution?
7. What role do you see women playing in leadership and what advantage or disadvantages do women face in leadership positions?
The benefits of peer review have been well documented in both first language (L1) and second language (L2) writing literature, but concerns have been frequently raised about the effectiveness of peer review in the context of L2 writing, particularly in English as a foreign language (EFL) due to a variety of reasons such as cultural differences, students’ limited language proficiency, their lack of knowledge of the English rhetorical conventions, and their unfamiliarity with peer review activities. In response to these concerns, this study examines the applicability of peer review in the context of an EFL Academic writing course where peer review is an emerging but not well-established practice. Using a qualitative case study approach, this study explores the researcher-teacher’s three–semester experiences while implementing peer review in an Academic writing course at a Korean university. Data include the teacher’s reflective journals, and students’ journals, feedback, drafts and revisions. By analyzing these multiple data sources, this study presents an in-depth description of the challenges the teacher encountered, the solutions he came up with, and the perceptual changes of peer review he went through. Based on the findings, this paper discusses pedagogical implications of using peer review and suggests the ways to improve using peer review in an EFL context, Korea.
A Needs Analysis: Differing Perspectives.

Brian Shoen
Lecturer
Kanda University of International Studies, Japan
M.A. in Second Language Studies
Department of Second Language Studies
University of Hawai’i at Manoa

This presentation will discuss the findings of a broad-scale needs analysis, conducted at a Japanese university, which incorporated the perspectives of four diverse stakeholder groups. The study participants included Japanese university administrative staff and faculty, native English-speaking instructors, senior-level Japanese university students, and recruiters from domestic companies looking to employ graduates with foreign language skills. The project was undertaken to evaluate the suitability of the current English-language curriculum and inform the future direction of the program. It focused upon the extent to which our current curriculum was preparing students for entry into the job market.

The study was motivated by the following research questions:

- What English language-related knowledge and skills are beneficial for Japanese university students entering the job market?
- What non-language-related knowledge and skills are beneficial for Japanese students entering the job market?

The project employed a mixed-method approach (i.e. structured and semi-structured qualitative interviews, computer- and paper-based questionnaires) that allowed for the collection of a broad range of data. This was deemed necessary given the diversity of the stakeholders participating and the difficulties associated with accessing members of each group. Results will be presented from each group independently to be followed by a cross-group comparison focusing on significant areas of overlap and divergence. Finally, implications and directions for potential further research will be discussed.
TITLE: Attachment trauma and loss: An examination of university students’ responses to stress and coping

Arwen Franquez, M.A.    Stephen W. Kane, Ph.D.
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One hundred eighty five freshmen at the University of Guam participated in this study to examine the prevalence of loss they had experienced in the previous year, the level of stress related to the loss, and specific coping strategies they used to manage the loss.

While the intent of this study was to replicate Rheingold’s (2004) establishment of baseline frequencies of loss experienced by adolescents on the mainland United States, this study focused only on young adults within the age range of 18 to 22 in this region of the world. This study likewise broadened Rheingold’s examination of loss to include the elaboration of various categories of family loss which are defined in this study as attachment traumas (Kane, 2005).

The prevalence of loss was examined with the use of the Life’s Challenges Questionnaire (Franquez & Kane, 2009) which is a modified version of the Family Crisis Scale (Kane, 2005). The Questionnaire elicits responses to the experience of loss within the perspective of the family, or attachment traumas, which include: the family moves, someone in the family experiences a developmental conflict, a family member loses financial security, a threatening illness, threats of separation, a divorce or abandonment, terminal illness and loss of the family member. The Questionnaire also added two other variables, death of a friend and breakup of a significant relationship.

The rank order of loss for this sample included: 1) break up a relationship, 2) developmental distress of a family member, and 3) loss of financial security. And while results indicated that females reported higher responses to stress than males, the stress levels of attachment traumas for this sample of young adults in their first or second year of university ranked “threatening illness” and “terminal illness” as more serious than the western mainland rank order of “threats of dissolution of the family” and “dissolution of the family”.

Finally, coping strategies for dealing with stress revealed that this sample of young adults preferred alternating patterns of “being alone” or “being with friends” regarding their experiences of loss vis a vis break up a relationship, death of a friend and family attachment traumas. An understanding of these results are discussed from an ethno-specific perspective and a case is made for appreciating these young adult university students as an understudied population of grievers in this region of the world. Recommendations are suggested for supplemental student affairs programming to raise entering student’s awareness of these complicating adjustment factors and for providing supportive counseling services.
9th Annual Hawaii International Conference on Education
January 4-7, 2011
Honolulu Hawaii, USA

TITLE: “The Path to Cultural Competence for Pre-service Teacher Candidates, focus on Islam.”

TOPIC AREA: Teacher Education, Social Studies Education

PRESENTATION FORMAT: This will be a presentation of a Power Point and Paper Session of research about attainment of cultural competence, knowledge about, skills to teach, and dispositions about Islam.

NAME OF THE AUTHOR: Leah G. Stambler, Ph.D.

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CORRESPONDING AUTHOR: Same as lead author listed above
Abstract:

Teacher Educators have the responsibility to lead their pre-service teacher candidates to prepare themselves to be culturally competent in the K-12 classrooms. There are an ever increasing number of people in the American population who are of the Muslim faith, and whose children attend public schools, charter schools, and/or are home schooled. Appropriate educational grounding for teachers is critical in the American multiethnic society. It is important for pre-service teacher candidates to address multicultural situations and look at their K-12 students with a variety of perspectives that allow the teachers to apply their knowledge, skills, and dispositions to teach their courses in an even handed manner. The pre-service teacher candidates need to develop culturally competent and responsive attitudes and techniques to teach an increasing diverse student population that includes Muslim K-12 students.

Section One Introduction

RATIONALE FOR CHOOSING THE TOPIC

The author is responsible for infusing diversity issues and curriculum content about multicultural, global, and comparative education into the courses that she teaches at Western Connecticut State University, in Danbury, Connecticut. The pre-service teaching candidates will be teaching History, Geography, Social Studies, Language Arts, Mathematics, Biology, and Cultural issues in their own classrooms after graduation from college/university.

It is important for the pre-service teacher candidates to address multicultural situations and look at their K-12 students with a variety of perspectives that provide them with the knowledge, skills, and dispositions to teach their courses in an even handed manner. Also, the pre-service teacher candidates need to develop culturally responsive attitudes and techniques to teach an increasing diverse student population that includes Muslim K-12 students.

Pre-service teacher candidates need to see themselves as American citizens with global understandings about various societies. Given the contemporary concerns about homeland security since September 11, 2001, and American involvement in Afghanistan, Iraq, and other Middle Eastern states with predominantly Muslim populations, it is vital that pre-service teacher candidates have the opportunity to become culturally competent about the knowledge, skills, and dispositions related to Islam the religion, Muslim society, and Islamic culture.

The author has a major responsibility to her students to lace her courses with the knowledge, skills, and dispositions about Islam that will assist her students with achieving the objective of cultural competence about Islam. The course description and students' learning requirement in one of the professional semester courses taken by Secondary Education students exemplifies this principle.
ED 440 Integrating Language: A literature based approach to the teaching of language arts across the K-12 curriculum, including an understanding of literary values, elements, and genres. Classics and content area texts will be used to enhance listening, writing, spelling, drama, and debate. The study of linguistic variations will provide methods for meeting the needs of special as well as culturally diverse students. The K-12 curriculum requires quality literature to transmit the values of society to the future citizenry. A language arts program allows teachers to go beyond speaking, writing, and reading to integrating language, literature, and composition. A required literature based language arts course for certification is necessary to promote reading throughout the content areas in K-12 curriculum.

STUDENTS‘ REQUIREMENT: Creation of a curriculum module that must include: cultural diversity perspectives [global, multicultural]; character and civic education perspectives, presence of the integrated language approach; activities representative of lower and higher order thinking skills; examples of how to read/write/study techniques; assessment techniques using rubrics/portfolios; and, techniques for teaching students with limited English skills/ELLs. Problem based learning should be included in the lessons. The use of technology in teaching the module and in students' activities should be present. Include the print out of a power point presentation. The module must adhere to discipline specific aspects of the CSDE Curriculum Frameworks and to the CSDE Common Core of Learning

THE PROBLEM STATEMENT

There are an ever increasing number of people in the American population who are of the Muslim faith, and whose children attend public schools, charter schools, and/or are home schooled. These children are part of the future adult citizenry of the United States. All American students need to be well versed in what it means to live in, be loyal to, and protect the American representative pluralistic democracy. In addition, acceptance of various creeds and respectful interaction among America’s various populations are important to the continuous operation of the Constitutional principles upon which this nation was founded and has expanded.

Appropriate preparation for the instructors of K-12 and university students is critical in the American multiethnic society. It is necessary for the author, a Teacher Educator, to have cutting edge information to infuse in her courses in order to maintain a high level of preparation for her students as they move into the teaching profession. It is the author’s responsibility to equip her students to teach all students of multiple ethnic and religious backgrounds and prepare pre-service teacher candidates to be culturally competent or –Culturally Skilled Educators.―

Each of the courses that the author teaches requires the students to write a position statement about how they intend to become –Culturally Skilled Educators.― This requirement is due after the author instructs her students about the pluralistic nature of American society and its impact on the nation’s system of schooling. The author includes in her instruction a variety of resource materials, opportunities for discourse, and interactive lessons about the history of immigration, historic –victimized” ethnic and religious groups, and the Constitutional push for equal access to education in the
United States. It is the author’s intent to prepare and apprise her students that it is their responsibility to include Moslem students and Islam in their position statements about becoming culturally competent. This position statement only represents one of the many ways that pre-service teaching candidates may bolster their cultural competence about Islam and Muslims.

Many research questions may be posited about cultural competence for educators. These questions will follow and will form the data portion of this paper, with the “Work in Progress” collection of readings and activities based on those readings. All questions will converge toward the topic of “What is the path to cultural competence for pre-service teacher candidates, with a focus on Islam?”

**Section Two [Selected] Review of Literature:**
[to be added with the next iteration of this piece]

**PRELIMINARY RESEARCH QUESTIONS:**

1. What is culture?
2. What is cultural proficiency?
3. What is cultural competence?
4. How does the review of literature about cultural competence inform Teacher Educators?
5. Why is cultural competence important for teachers?
6. Issues related to teaching cultural competence in higher education
7. How do we teach for cultural competence and which “tools” may be used to teach cultural competence in higher education?
8. What are some of the issues faced by Muslim students in a non-Muslim nation?
9. How can a teacher understand his/her own sensitivity and level of cultural competence?
10. What does a teacher have to do to be culturally competent and responsive?
11. What is a culturally competent K-12 curriculum?
12. How is cultural competence integrated into Education?
13. What are some examples of knowledge about Islam, skills of teaching about Islam, and dispositions about Islam that are necessary to incorporate in pre-service teacher candidate courses?

**Section Three Analysis of Data and Findings**
[Responses to the Preliminary Research Questions will be answered in this section for the actual 9th HICE 2011 presentation]

[Sample readings about cultural competence and Islam, with corresponding directions for pre-service teacher candidates’ activities, are included in this “Work in Progress” section for the 9th HICE Conference presentation, and inclusion in the 9th HICE Proceedings.]

See the Table of Contents, readings, and activities to be included in the manual.

**NOTE:** THIS FIRST COLLECTION OF READINGS AND ACTIVITIES DESIGNED TO ASSIST STUDENTS WITH THEIR PATH TO CULTURAL COMPETENCE IS A WORK IN PROGRESS THAT WAS

Section Four Summary

Brief Reiteration of Research Questions [to be added with the next iteration of this piece]

Concise Description of Findings and Limitations [to be added with the next iteration]

Section Five [Selected] Reference List:


Condensed from Crossing Over to Canaan (San Francisco: Jossey-Bass, 2001).


Nieto, Claudia [2008]. Student Cultural Awareness Inventory. Developed for Master Thesis at Bowling Green State University.


http://www.lpfch.org/informed/culturalcompetency.pdf
The Path to Cultural Competence for Pre-service Teacher Candidates, focus on Islam.

Leah G. Stambler, Ph.D.
WCSU Danbury CT 06810

TABLE OF CONTENTS

INTRODUCTION: This is a resource activity packet for the use of students in Education Programs.

READING NUMBER 1 Teaching and Cultural Competence

READING NUMBER 2 Excerpts from Cultural Competency: What It Is … Matters

READING NUMBER 3 Oregon Resources on Cultural Competency: Working Definition

ACTIVITY NUMBER 1 Intercultural Sensitivity Matrixes

VIEWING NUMBER 1 MUHAMMAD, LEGACY OF A PROPHET [PBS]

ACTIVITY NUMBER 2 Plan to Become A Culturally Competent Educator

READING NUMBER 4 SKILLED DIALOGUE GUIDELINES, 3Rs OF DIALOGUE

ACTIVITY NUMBER 3 PLAN TO BECOME CULTURALLY COMPETENT /SKILLED

READING NUMBER 5 MODIFIED TIMELINE OF ISLAM

READING NUMBER 6 Glossary from Guidelines for FRONTLINE video

READING NUMBER 7 Easy Vocabulary Words in Arabic AND The Arabic Alphabet

READING NUMBER 8 Teaching Islam and Muslims in Pluralistic Societies

READING NUMBER 9 The Purpose of an Islamic School and the Role of an Islamic School Teacher

READING NUMBER 10 Guide for Non-Muslims Working in Islamic Schools

ACTIVITY NUMBER 4 Significant Reflections from Readings Numbers 5-10
READING NUMBER 11 Sample Letter: To your child's Non-Muslim teacher

ACTIVITY NUMBER 3 based on reading numbers 5-10 and 13-14

READING NUMBER 13 Muslim Holidays

READING NUMBER 14 Goat and Lamb Holidays

READING NUMBER 15 Designing a Curriculum for Muslim Students

ACTIVITY NUMBER 6 Compare CSDE Frameworks and Curriculum for Muslim Students

READING NUMBER 16 Study Guide for FRONTLINE Video MUSLIMS

ACTIVITY NUMBER 7 Create a Lesson Plan based on the FRONTLINE guide/video MUSLIMS

READING NUMBER 17 CMES Web Quest

ACTIVITY NUMBER 8 Create a Web Quest about any aspect of Islam

Designing A Curriculum For Muslim Students

READING NUMBER 18 A Cultural Inquiry into the Education of Muslim Students in America

ACTIVITY NUMBER 9 Cultural Inquiry Process Steps: Overview

APPENDIX A: ISLAM a power point compiled by Leah G. Stambler, Ph.D.

APPENDIX B: CMES Resource List - CMES Lesson Plans and Power Points
READING NUMBER 1


Teaching and Cultural Competence

By Gloria Ladson-Billings

THE TEACHER SHORTAGE

One of the current concerns plaguing the nation's schools is how to find teachers who are capable of teaching successfully in diverse classrooms. Although teacher education programs throughout the nation purport to offer preparation for meeting the needs of racially, ethnically, culturally, and linguistically diverse students, scholars have documented the fact that these efforts are uneven and unproved.

Several factors interfere with the ability of teacher education programs to prepare teachers for diverse classroom settings. One factor that is rarely discussed in the literature is that most of the teacher education faculty are white. As I said earlier, there are approximately 35,000 faculty in the United States; 88 percent of the full-time education faculty are white; 81 percent are between the ages of 45 and 60 (or older). These numbers alone do not prove anything about the ability of the teacher education faculty. However, they may cause us to wonder about the incentive of teacher education programs to ensure that all of its graduates are prepared to teach all students.

WHAT DIVERSITY MEANS TODAY

The diversity that today's new teachers face is qualitatively different from what I faced as a new teacher in the late 1960s. My students were clearly differentiated by their ethnic, cultural, religious, and racial differences during a time when such differences seemed more consequential; today, notions of diversity are broader and more complex. Not only are students likely to be multiracial or multiethnic, but they are also likely to be diverse along linguistic, religious, ability, and economic lines that matter in today's schools.

The "success" of the 1960s Civil Rights Movement helped to create an African-American middle class with experiences and backgrounds different from their brothers and sisters who remained in the old neighborhoods. Indeed, changes in the economy and political climate created an African-American underclass that is less trusting of schools and education. Urban centers began to serve growing numbers of immigrant students from Mexico, Central America, and Southeast Asia. The working-class, ethnic neighborhoods of the 1960s knew nothing of the scourge of drugs like crack cocaine or diseases like AIDS. The industrial economy of the 1960s meant that there was plenty of work for people with high school diplomas and even less education. Homelessness was a condition left to indigent men who
struggled with drugs and alcohol, not to families with school children. In addition to the problems the students experience in their personal lives away from school, the schools create a whole new set of problems for children they deem different. As schools become more wedded to psychological models, students are recruited into new categories of pathology. Students who do not conform to particular behavioral expectations may be labeled "disabled" in some way, that is, suffering from attention deficit disorder, emotional disability, or cognitive disabilities. Students do in fact confront real mental and emotional problems, but we need to consider the way students' racial, ethnic, cultural, linguistic, and socioeconomic characteristics are deployed to make their assignments to these disability categories more likely.

WHAT TEACHING WELL MEANS TODAY
Who are the teachers capable of transcending the labels and categories to support excellence among all students? Martin Haberman calls them star teachers; I call them dreamkeepers. But in both my work and that of Haberman, we have identified experienced teachers who knew how to teach well in challenging circumstances. Teaching well, in this instance, means making sure that students achieve, develop a positive sense of themselves, and develop a commitment to larger social and community concerns.

Such teachers are inspiring and admirable, but their ranks are decreasing with each passing school year. The question facing most urban school districts is how to ensure a faculty of effective teachers when there is high teacher turnover and relative inexperience.

One issue is that new teachers are the more vulnerable professionals in schools; they need to be nurtured and supported in the profession. They expect — and should receive — well-planned and implemented professional development that helps them learn about their work as they make those first, tentative steps in the profession. Knowing that new teachers need support and providing such support are two very different things. In an attempt to make a more seamless transition between preservice and inservice, my colleagues and I developed a program for college graduates who have expressed a desire to teach school in communities serving diverse racial, ethnic, and socioeconomic populations. We called the program Teach for Diversity or TFD.

THE IMPORTANCE OF CULTURE
The average white teacher has no idea what it feels like to be a numerical or political minority in the classroom. The persuasiveness of whiteness makes the experience of most teachers the accepted norm. White teachers don't understand what it is to "be ashy" or to be willing to fail a physical education class because of what swimming will do to your hair. Most white teachers have never heard of the "Black National Anthem," let alone know the words to the song. Most have never tasted sweet potato pie or watched
the intricate process of hair braiding that many African-American girls (and increasingly boys) go through. And although African-American youth culture has become increasingly popular, and everyone can be heard saying, "You go, girl!" and belies she has the right to sing the blues, the amount of genuine contact these people have with African Americans and their culture is limited.

Similarly, the growing Latino population has forced a change in popular culture. Ricky Martin, Christina Aguilera, and Enrique Iglesias are enjoying huge popular success. But most white teachers cannot speak even rudimentary Spanish — enough even to signal an emergency or satisfy a basic need. More disturbing is the way Latinos are racialized into a unitary category. Few teachers (and prospective teachers) know the distinctive histories of Mexican Americans, Puerto Ricans, Cuban Americans, Salvadorans, Guatemalans, Peruvians or the countless groups who originate in the Spanish-speaking Americas.

The indictment is not against the teachers. It is against the kind of education they receive. The prospective teachers with whom I have worked generally express a sincere desire to work with "all kinds of kids." They tell me that they want to make sure that the white children they teach learn to be fair and to get along with people different from themselves. But where is the evidence that the prospective teachers can get along with people different from themselves? When asked, most of my students admit that they have never gone to a movie or shared a meal or visited the home of a peer who is racially or culturally different. Some, because of program requirements or their own faith commitments, have worked in a soup kitchen or shelter or in other "helping" roles with people different from themselves. But these brief forays into the lives of "others" often serve to cement the impression that others are always needy and disadvantaged. "Helping the less fortunate" can become a lens through which teachers see their role. Gone is the need to really help students become educated enough to develop intellectual, political, cultural, and economic independence. Such an approach to teaching diverse groups of students renders their culture irrelevant. There is nothing there to be learned, let alone built upon and developed. Certainly, every group has some "worthies" like Martin Luther King, Jr. or César Chávez, but even these cultural heroes have become sanitized to meet normative standards. Students are encouraged to be like (Martin Luther King, Jr., César Chávez, Sojourner Truth, Dolores Huerta, and so on) because they were "good Americans."

Rarely are students invited to learn about the way such people stood up to America (not just to a "few bad people") and demanded that the country live up to its own democratic rhetoric.

Culture is a complex concept, and few teachers have an opportunity to learn about it. Most teacher education programs are founded on the social science discipline of psychology (and some sociology). Rarely do prospective teachers examine education through the discipline of anthropology. And although it is important for teachers to understand their
students' culture, the real benefit in understanding culture is to understand its impact on our own lives. Thus, the TFD program was interested in helping prospective teachers look at the way their cultural background influences and shapes the way they understand and act in the world.

**NOTIONS OF WHITENESS**

Helping students become culturally competent is not an easy task. First, it requires that teachers themselves be aware of their own culture and its role in their lives. Typically, white middle-class prospective teachers have little or no understanding of their own culture. Notions of whiteness are taken for granted. They rarely are interrogated. But being white is not merely about biology. It is about choosing a system of privilege and power. The white ethnic students in my first teaching job called themselves Italian or Irish or Polish. Their working-class backgrounds made it difficult, if not impossible, for them to identify with whiteness. In our current society, people with ethnic and cultural identities often find themselves choosing whiteness over those identities. Such a choice comes at a cost.

I gave a lecture at a local community college when a young man approached me at the end of the question-and-answer period and said, "You said a lot about Native American history and African-American history and Asian-American history, but what about white history—what about my history?"

I followed up with a question that seemed to startle the young man "Are you white?" I asked. "Or do you have an ethnic or cultural heritage other than white?" He responded by saying, "I'm Irish." I then began to tell him about some of the aspects of Irish history—how the Irish were the first group the British exploited for slave labor in the Americas. I told him about the intricate clan structure the Irish had developed that allowed them to hold land in common and prevent exploitation. The young man knew nothing of this. I was not surprised. I suggested that he did not know his history because, somewhere along the line, his family may have chosen whiteness over all else. And when one chooses whiteness as a primary identity, one's ethnic and cultural history disappears. All he has left to signal his existence is something about a potato famine and St. Patrick's Day.

It would be simplistic and wrong to suggest that cultural and ethnic identities are fixed and discrete. Few Americans have a pure heritage or identity. But the customs and traditions we observe, the people with whom we associate, and the ideas we cultivate all shape our identities; in a society that places such priority on racial identity, we are naive if we attempt to ignore race. Indeed, ignoring race may prove to be a dangerous decision for some.

Teachers who are prepared to help students become culturally competent are themselves culturally competent. They do not spend their time trying to be hip and cool and "down" with their students. They know enough about students' cultural and individual life circumstances to be able to communicate well with them. They understand the need to study the
students because they believe there is something there worth learning. They know that students who have the academic and cultural wherewithal to succeed in school without losing their identities are better prepared to be of service to others; in a democracy, this commitment to the public good is paramount.

Gloria Ladson-Billings is a professor in the Department of Curriculum and Instruction at the University of Wisconsin-Madison. She is also the author of The Dreamkeepers (San Francisco: Jossey-Bass, 1997).

The above is condensed from Crossing Over to Canaan (San Francisco: Jossey-Bass, 2001). This material is used by permission of Jossey-Bass, a subsidiary of John Wiley & Sons, Inc.

Summer 2001
READING NUMBER 2

http://www.lpfch.org/informed/culturalcompetency.pdf

EXCERPTS FROM
CULTURAL COMPETENCY:
WHAT IT IS AND WHY IT MATTERS

This brief, prepared by California Tomorrow, was part of a convening of grantees that the Lucile Packard Foundation for Children's Health held on Thursday, Dec. 7, 2006.

By Laurie Olsen, Jhumpa Bhattacharya and Amy Scharf
California Tomorrow
LUCILE PACKARD
FOUNDATION FOR CHILDREN’S HEALTH

What is Cultural Competency? P.3
Cultural competency is the ability to work effectively across cultures. For individuals, it is an approach to learning, communicating and working respectfully with people different from themselves. Culture can refer to an individual’s race, class, gender, sexual orientation, religion, immigration status and age, among other things. For organizations, cultural competency means creating the practices and policies that will make services more accessible to diverse populations, and that provide for appropriate and effective services in cross-cultural situations.

What is Culture? PP.4-5
Cultural competency begins with understanding “culture.” Culture encompasses all the learned beliefs, traditions, language, values, customs, rituals, manners of interacting, forms of communication, expectations for behaviors, roles and relationships commonly shared among members of a particular group, and often transmitted from generation to generation. It shapes experiences, large and small – the ways parents discipline their children, the structure of family relationships, expectations of what it means to be a boy or a girl, values about health and approaches to healing, body language, what types of things get said and what types go unspoken. All of these define how things are supposed to be for the members of a given culture. They become, for that group, the “norm,” and feel so natural that they often become unconscious and invisible to people within that culture.

- Everyone has a culture. It is core to their identity, behavior and perspectives on the way the world works and should be. In fact, everyone lives as part of multiple cultural spheres: ethnic, religious, class, gender, race, language, and others. Culture is not just the group a person is born into. It is possible to acquire a new culture by moving to a new country or region, for example, or by a change in economic status, or by becoming disabled. (University of Kansas’ Community Tool Box, http://ctb.ku.edu.)
There is diversity within cultures. While two people may both be Latinos with parents from Mexico, for instance, a religious Catholic daughter of professionals who lived in Mexico City will have very different cultural norms and perspectives from the son of an indigenous farmer who spent early years in a very poor rural area.

Cultures are not static. They grow and evolve in response to new circumstances, challenges and opportunities. The ways of being female learned by young girls in South Asian culture, for example, have changed from one generation to another, and as people have moved from place to place.

Culture is not determinative. Different people take on and respond to the same cultural expectations in different ways. Assumptions therefore cannot be made about individuals based on a specific aspect of their cultural experience and identity.

Cultural “differences” are complicated by differences in status and power between cultures. When one cultural group has more power and status, the norms of that culture permeate the institutions of society as the “right” way. Cultures of less status and power become seen as “other,” or even deviant and deficient. In addition to understanding cultural norms and experiences, service providers and professionals in agencies that work with diverse populations need to be aware of these kinds of cultural biases, both as they play out in the lives of communities, and as they affect the practices and policies of organizations.

“Everyone has a culture, and it is core to their identity, behavior, and perspectives on the way the world works and should be.”

this involves ongoing learning – about one’s own responses and about the cultures of others – and then changing responses to situations based on that learning. Central to this is becoming aware of one’s own culture, position in society, and assumptions. This may be through learning family history, reading about the history of one’s heritage, and observing carefully what kinds of things seem natural and what seems “different” or “uncomfortable.” Often, it is the moments when a person is tempted to judge negatively the behaviors of people who are different from them that provide clues to their own cultural assumptions or biases. In addition to learning about one’s own culture, it also is important to learn about the history of different cultural groups in the communities served – where they came from, when they came, and why they came – by asking people, by reading, by seeking out community events. And it is important to learn about the history and dynamics of power that have shaped and continue to affect the relationships between cultural groups – both within organizations and in the broader society. Key to all this is developing the skills of listening carefully, observing without judgment, and recognizing that one person’s way of doing things is not the only way – or the best way – it can be done. Attitudes that contribute toward cultural competency also include empathy, comfort with differences, self awareness and reflectiveness, flexibility, and an appreciation of multiple perspectives.

References

READING NUMBER 3

http://www.ode.state.or.us/search/page/?=656

Resources on Cultural Competency

Working Definition of Cultural Competency

Cultural competence is based on a commitment to social justice and equity.

Culture refers to integrated patterns of human behavior that include the language, thoughts, communication, actions, customs, beliefs, values, and norms of racial, ethnic, religious, or social groups.

Cultural competence is a developmental process occurring at individual and system levels that evolves and is sustained over time. Recognizing that individuals begin with specific lived experiences and biases, and that working to accept multiple world views is a difficult choice and task, cultural competence requires that individuals and organizations:

a. Have a defined set of values and principles, demonstrated behaviors, attitudes, policies and structures that enable them to work effectively in a cross-cultural manner.

b. Demonstrate the capacity to 1) value diversity, 2) engage in self-reflection, 3) facilitate effectively (manage) the dynamics of difference, 4) acquire and institutionalize cultural knowledge, and 5) adapt to the diversity and the cultural contexts of the students, families, and communities they serve, 6) support actions which foster equity of opportunity and services.

c. Institutionalize, incorporate, evaluate, and advocate the above in all aspects of leadership, policy-making, administration, practice, and service delivery while systematically involving staff, students, families, key stakeholders, and communities.

The Oregon Department of Education's working definition of cultural competency was created at the May 2004 Summit by a diverse group of education stakeholders throughout the state. We welcome any feedback on this definition. Please send comments to Cultural.competency@ode.state.or.us.

SELECTED LINKS TO CONSULT AND USE FOR YOUR ACTIVITY NUMBER 1

- Culturally Responsive Practice for Student Success (NWREL)  PDF 07/07/2005 (302.95 KB)
- The First Amendment Center Education Programs
- Intercultural Communication Institute
- National Center for Cultural Competence
- Northwest Regional Educational Laboratory (NWREL)
ACTIVITY NUMBER 1

http://etd.ohiolink.edu/send-pdf.cgi/Nieto%20Claudia.pdf?bgsu1209753315

PP. 47-50 APPENDIX B Intercultural Sensitivity Scale Teacher Survey

Part A: Instructor Information

In what department do you teach? __________________________

What level do you teach? Graduate_____ Undergraduate____

Are you an ESL instructor? Yes____ No____

Approximately how many students do you teach each semester? ______________

Were you born in the United States? Yes____ No____ If no, where were you born? ______________

My Gender: Male_____ Female_____

Part B: Use the following key to circle the appropriate letters.

SA: If you strongly agree with the statement.

A: If you agree.

U: If you are uncertain.

D: If you disagree.

SD: If you strongly disagree.

1. I enjoy interacting with people from different cultures. SA A U D SD

2. I think people from other cultures are narrow-minded. SA A U D SD

3. I am pretty sure of myself in interacting with people from different cultures. SA A U D SD

4. I find it very hard to talk in front of people from different cultures. SA A U D SD

5. I always know what to say when interacting with people from different cultures.

   SA A U D SD

6. I can be as sociable as I want to be when interacting with people from different
cultures.

7. I don't like to be with people from different cultures. SA A U D SD

8. I respect the values of people from different cultures. SA A U D SD

9. I get upset easily when interacting with people from different cultures. SA A U D SD

10. I feel confident when interacting with people from different cultures. SA A U D SD

11. I tend to wait before forming an impression of culturally-distinct counterparts. SA A U D SD

12. I often get discouraged when I am with people from different cultures. SA A U D SD

13. I am open-minded to people from different cultures. SA A U D SD

14. I am very observant when interacting with people from different cultures. SA A U D SD

15. I often feel useless when interacting with people from different cultures. SA A U D SD

16. I respect the way people from different cultures behave. SA A U D SD

17. I try to obtain as much information as I can when interacting with people from different cultures.

SA A U D SD

18. I would not accept the opinions of people from different cultures. SA A U D SD

19. I am sensitive to my culturally-distinct counterpart's subtle meanings during our interaction.

SA A U D SD

20. I think my culture is better than other cultures. SA A U D SD

21. I often give positive responses to my culturally different counterpart during our interaction.

SA A U D SD

22. I avoid those situations where I will have to deal with culturally-distinct persons.
SA A U D SD

23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.

SA A U D SD

24. I have a feeling of enjoyment towards differences between my culturally distinct Counterpart and me.

SA A U D SD


**Part C: Student Cultural Awareness Inventory. Please circle the letters to the right that most appropriately answer how you feel about the statement.**

SA: If you strongly agree with the statement.

A: If you agree.

U: If you are uncertain.

D: If you disagree.

SD: If you strongly disagree.

1. I see international students as a population with privilege since they have the opportunity to study in the United States.

SA A U D SD

2. International students face financial challenges on a daily basis in the United States while pursuing a college degree.

SA A U D SD

3. International students encounter cultural challenges on a daily basis in the United States while pursuing a college degree.
4. International students come across language challenges on a daily basis in the United States while pursuing a college degree.

5. International students meet gender challenges on a daily basis in the United States while pursuing a college degree.

6. International students face daily challenges in the United States that are primarily related to racial or ethnic differences.

7. It is important for teachers to understand the challenges of getting a degree in a second language.

8. I think it is essential for teachers to help international students to feel welcomed in this culture.

9. It is important to focus on creating an engaging environment when teaching ESL (English as a Second Language) students.

10. It is essential to have different teaching practices from US students when teaching international students

11. It is vital for teachers to understand various cultures in order for them to be effective educators.
12. Conflicts are likely to occur when teachers and students come from different cultures.

SA A U D SD


Please use the following space to explain any of your responses:

APPENDIX C

Intercultural Sensitivity Scale

Student Survey

Part A: Student Information

Where were you born? US ____ Other ____ If other, where? ________________________________

How long have you been in the United States? ______

I am a: graduate student ____ an undergraduate student ____

What is your major? ________________________________

My gender: Male____ Female____

Part B: Use the following key to circle the appropriate letters.

SA: If you strongly agree with the statement.

A: If you agree.

U: If you are uncertain.

D: If you disagree.

SD: If you strongly disagree.

1. I enjoy interacting with people from different cultures. SA A U D SD

2. I think people from other cultures are narrow-minded. SA A U D SD

3. I am pretty sure of myself in interacting with people from different cultures. SA A U D SD

4. I find it very hard to talk in front of people from different cultures. SA A U D SD
5. I always know what to say when interacting with people from different cultures.
   SA A U D SD

6. I can be as sociable as I want to be when interacting with people from different cultures.
   SA A U D SD

7. I don't like to be with people from different cultures. SA A U D SD

8. I respect the values of people from different cultures. SA A U D SD

9. I get upset easily when interacting with people from different cultures. SA A U D SD

10. I feel confident when interacting with people from different cultures. SA A U D SD

11. I tend to wait before forming an impression of culturally-distinct counterparts. SA A U D SD

12. I often get discouraged when I am with people from different cultures. SA A U D SD

13. I am open-minded to people from different cultures. SA A U D SD

14. I am very observant when interacting with people from different cultures. SA A U D SD

15. I often feel useless when interacting with people from different cultures. SA A U D SD

16. I respect the way people from different cultures behave. SA A U D SD

17. I try to obtain as much information as I can when interacting with people from different cultures.
   SA A U D SD

18. I would not accept the opinions of people from different cultures. SA A U D SD

19. I am sensitive to my culturally-distinct counterpart’s subtle meanings during our interaction.
   SA A U D SD

20. I think my culture is better than other cultures. SA A U D SD

21. I often give positive responses to my culturally different counterpart during
our interaction.

SA A U D SD

22. I avoid those situations where I will have to deal with culturally-distinct persons.

SA A U D SD

23. I often show my culturally-distinct counterpart my understanding through verbal or nonverbal cues.

SA A U D SD

24. I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me.

SA A U D SD


Part C: Student Cultural Awareness Inventory. Please circle the letters to the right that most appropriately answer how you feel about the statement.

SA: If you strongly agree with the statement.

A: If you agree.

U: If you are uncertain.

D: If you disagree.

SD: If you strongly disagree.

1. I see myself in a privileged position since I have the opportunity to study in the United States.

SA A U D SD

2. I face financial challenges in order to pursue a college degree in the United States.
3. I encounter cultural challenges on a daily basis in the United States while pursuing a college degree.

4. I come across language challenges on a daily basis in the United States while pursuing a college degree.

5. I meet gender challenges on a daily basis in the United States while pursuing a college degree.

6. I face daily challenges in the United States that are primarily related to racial or ethnic differences.

7. It is important for teachers to understand the challenges of getting a degree in a second language.

8. I think it is essential for teachers to help international students to feel welcomed in this culture.

9. English as Second Language (ESL) teachers are effective in creating an engaging environment for international students.

10. Regular (non-ESL) faculty are effective in creating an engaging environment for international students.
11. It is vital for teachers to understand various cultures in order for them to be effective educators.

12. Conflicts are likely to occur when teachers and students come from different cultures.


VIEWING NUMBER 1

http://www.pbs.org/muhammad/
# Reading Number 4

For use with your position statement about becoming a culturally competent educator and responding to a letter from Muslim parents to non-Muslim teachers.

Guidelines & strategic questions for ensuring respectful, reciprocal, and responsive assessment and instruction for students who are culturally/linguistically diverse:

Isaura Barrera, University of New Mexico

Lucinda Kramer, National University

October 2005

**Figure 3: Stratégic Questions Associated with Skilled Dialogue© Guidelines**

<table>
<thead>
<tr>
<th>RESPECT</th>
<th>RECIPROCITY</th>
<th>RESPONSIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what degree and in what ways am I ensuring that selected assessment and instructional materials, procedures, activities &amp; strategies reflect the diverse languages, values, beliefs and behaviors (i.e., funds of knowledge) that define the identities of the students involved?</td>
<td>3. To what degree and in what ways am I seeking information on the contexts that sustain and give meaning to students’ values, beliefs and behaviors as compared to the contexts within which I am assessing/teaching?</td>
<td>5. To what degree and in what ways am I being responsive rather than reactive; that is, using assessment/instructional materials that reflect shared understandings generated through deep empathy, attention and curiosity rather than familiar prescribed scripts and answers?</td>
</tr>
<tr>
<td>2. To what degree and in what ways do materials, procedures, activities and strategies — as well as my own interpretations — support the notion of “spectrum” rather than “continuum” (i.e., disallow an “either-or” perspective)?</td>
<td>4. How am I dealing with contradictions between students’ values, beliefs and behaviors and the values, beliefs and behaviors underlying the materials, procedures, strategies and activities I am using to assess/teach?</td>
<td>6. To what degree and in what ways am I creating 3rd Space (i.e., developing assessment and/or instructional options that integrate students’ perspectives and strengths with desired academic goals and outcomes)?</td>
</tr>
</tbody>
</table>
Skilled Dialogue

Strategies for Responding to Cultural Diversity in Early Childhood

By Isaura Barrera, Ph.D., with Robert M. Corso, Ph.D., and Dianne Macpherson, MSW, CISW

Learn the essentials of Skilled Dialogue,

including suspending judgment;

appreciating other beliefs and value systems;

tuning in to each family’s hopes, dreams, and definitions of “success”; and

reframing differences between practitioners and families as complementary rather than contradictory.

What Three Qualities Characterize Skilled Dialogue?

Excerpted from Chapter 4 of Skilled Dialogue: Strategies for Responding to Cultural Diversity in Early Childhood, by Isaura Barrera, Ph.D., with Robert M. Corso, Ph.D., and Dianne Macpherson, MSW, CISW

“In interactions across diverse cultural parameters, three qualities are key to determining whether interactions can be described as skilled or unskilled: respect, reciprocity, and responsiveness.”
ACTIVITY NUMBER 3 [based on readings 1-4] ©July 2010 L.G. Stambler
USE THIS FRAMEWORK WHEN THINKING ABOUT AND WRITING HOW YOU PLAN TO
BECOME A CULTURALLY COMPETENT/SKILLED EDUCATOR
APPLY YOUR POSITION STATEMENT TO WORKING WITH STUDENTS WHO ARE
MUSLIMS

I. What goals do you have for teaching culturally diverse populations? Why? How will you
achieve those goals?

II. What awareness do you need to have about your own assumptions, values,
and biases? Why? What do you need to do to be
* aware of your own cultural heritage & valuing/respecting differences
* aware of your own values and biases and how they may affect your culturally diverse students
* comfortable with differences that exist between yourself and your students [in terms of
  ethnicity and beliefs]
* sensitive to circumstances that may dictate referral of the culturally diverse student to a
  member of his/her own culture or to another educator
* aware of and acknowledge your own racist attitudes, beliefs, and feelings

III. What understanding of your culturally different students' world view do you need to have?
Why? What do you need to do to
* possess specific knowledge and information about the particular group with which you are working
* have a good understanding of the sociopolitical system's operation in the
  United States with respect to its treatment of culturally diverse populations
* be aware of institutional barriers that prevent culturally diverse populations from
  accessing and using educational services

IV. What appropriate intervention strategies and techniques do you need to develop to have an
approach that is truly nondiscriminatory? Why? What do you need to do to
* generate a wide variety of verbal and nonverbal responses
* send and receive both verbal and nonverbal messages accurately and appropriately
* exercise institutional intervention skills on behalf of your culturally diverse student when
  appropriate
* be aware of your teaching style, recognize your limitations, and anticipate the impact
  upon your culturally diverse client

THIS FRAMEWORK IS BASED ON DERALD WING SUE'S DESCRIPTION OF THE CULTURALLY
SKILLED COUNSELOR, AS FOUND IN CHAPTER 8 OF Counselina the Culturally Different:
READING NUMBER 5

HISTORICAL CONTEXT OF ISLAM AS A RELIGION and POLITICAL POWER

MODIFIED TIMELINE OF ISLAM

From Teachers’ Guide for Frontline video – Muslims”


The start of Islam is marked in the year 610, following the first revelation to the prophet Muhammad at the age of 40. Muhammad and his followers spread the teachings of Islam throughout the Arabian peninsula. Soon after the death of the prophet Muhammad, there were military expeditions, called "futuhat," or literally "openings," into what is now Egypt and other parts of North Africa. In other parts of the world, Islam spread through trade and commerce. The following is a brief timeline that highlights some of the major occurrences in Islam's development, as well as the geographical spread of Islam to some of the countries featured in the film.

570 C.E. Muhammad is born in Mecca. He comes from a noble family and is well-known for his honesty and upright character.

Late 600s Ruling classes in East and West Africa convert to Islam.

610 C.E. According to Muslim belief, at the age of 40, Muhammad is visited by the angel Gabriel while on retreat in a cave near Mecca. The angel recites to him the first revelations of the Quran and informs him that he is God's prophet. Later, Muhammad is told to call his people to the worship of the one God, but they react with hostility and begin to persecute him and his followers.

622 C.E. After enduring persecution in Mecca, Muhammad and his followers migrate to the nearby town of Yathrib (later to be known as Medina), where the people there accepted Islam. This marks the "hijrah" or "emigration," and the beginning of the Islamic calendar. In Medina, Muhammad establishes an Islamic state based on the laws revealed in the Quran and the inspired guidance coming to him from God. Eventually he begins to invite other tribes and nations to Islam.

630 C.E. Muhammad returns to Mecca with a large number of his followers. He enters the city peacefully, and eventually all its citizens accept Islam. The prophet clears the idols and images out of the Kaaba and rededicates it to the worship of God alone.

633 C.E. Muhammad dies after a prolonged illness. The Muslim community elects his father-in-law and close associate, Abu Bakr, as caliph, or successor.

638 C.E. Muslims enter the area north of Arabia, known as "Sham," including Syria,
Palestine, Lebanon and Iraq.

**641 C.E.** Muslims enter Egypt and rout the Byzantine army. Muslims consider their conquest as the liberation of subjugated people, since in most instances they were under oppressive rule.

**655 C.E.** Islam begins to spread throughout North Africa.

**661 C.E.** Imam Ali is killed, bringing to an end the rule of the four "righteous caliphs": Abu Bakr, Umar, Uthman, and Ali. This also marks the beginning of the Umayyad rule.

680 Death of Husayn marks beginning of the Shi'at Ali ("party of Ali") or Shi'a sect.

**711 C.E.** Muslims enter Spain in the west and India in the east. Eventually almost the entire Iberian Peninsula is under Islamic control.

**732 C.E.** Muslims are defeated at Potiers in France by Charles Martel. Muslim empire reaches its furthest extent. Battle of Tours prevents further advance northwards.

**750 C.E.** The Abbasids take over rule from the Umayyads, shifting the seat of power to Baghdad.

**786-809** Reign of Harun ar-Rashid, best known through the stories of *The Thousand and One Nights*.

800s Written collections of Hadith (sayings of the Prophet) are compiled. Sicily comes under Muslim rule.

813-33 Reign of Ma'mun. Theological controversy over whether the Qur'an is created or uncreated and eternal. Center for translation of texts from Greek to Arabic founded in Baghdad.

869-883 Uprisings of black slaves (Zanj) are eventually defeated.

**908** First Fatimid caliph in Tunisia. 928 Umayyad Abd ar-Rahman III declares himself caliph in Cordoba.

**940** Muhammad al-Mahdi, the twelfth imam, disappears. Twelvers still await the future return of the "Hidden Imam."

**945** The Buyids (Persian) invade Baghdad and take power from caliph.

**969** Fatimids gain power in Egypt and attack Palestine, Syria, and Arabia. Cairo (Al-Qahira, "the victorious city") is founded.

late 900s West Africa begins to convert to Islam

**1000 C.E.** Islam continues to spread through the continent of Africa, including Nigeria,
which served as a trading liaison between the northern and central regions of Africa.

**1099 C.E.** European Crusaders take Jerusalem from the Muslims. Eventually Muslims defeat the Crusaders and regain control of the holy land.

**1120 C.E.** Islam continues to spread throughout Asia. Malaysian traders interact with Muslims who teach them about Islam.

**1299 C.E.** The earliest Ottoman state is formed in Anatolia, Turkey.

**1453 C.E.** Ottomans conquer the Byzantine seat of Constantinople and change its name to Istanbul.

Circa **1800 C.E.** Approximately 30 percent of Africans forced into slavery in the United States are Muslim.

**1870-1924 C.E.** Muslim immigrants from the Arab world voluntarily come to the United States until the Asian Exclusion Act is passed in 1924.

World War I ends with the defeat and dissolution of the Ottoman Empire, which was the last of the Islamic empires. Many regions populated by Muslims in Africa and Asia are colonized by Europeans. Traditional religious ways of life are threatened and, in some cases, destroyed.

**1930 C.E.** The Nation of Islam is created in the U.S. by W. D. Fard. It is based on some Islamic ideas, but contains innovations, such as the appointment or declaration of Elijah Muhammad as a prophet.

**1948 C.E.** The state of Israel is created. Some Palestinian and Lebanese refugees flee to the United States, among them, Muslims and Christians.

**1952 C.E.** The McCarren-Walter Act relaxes the U.S. ban on Asian immigration. Muslim students come to the U.S. from many nations.

**1965 C.E.** Revisions of immigration law further open the doors for Muslim immigration.

**1975 C.E.** Wallace D. Muhammad, the son of Elijah Muhammad, takes over leadership of the Nation of Islam after his father's death and brings most of his followers into mainstream Islam. He later creates the Muslim American Society, which attracts many members, most of whom are African-American.

**1979 C.E.** The Iranian Revolution results in the establishment of the Islamic Republic of Iran, the first attempt at an Islamic state in the modern era.
READING NUMBER 6


GLOSSARY FROM TEACHERS’ GUIDE WITH FRONTLINE VIDEO —MUSLIMS”

TO DO: CREATE ADDITIONAL PAGES TO THIS GLOSSARY OF ARABIC WORDS SIGNIFICANT FOR THE CONTEXTUAL STUDY OF ISLAM

Allah (A- lah'): Arabic word for God, the same God worshipped by Christians and Jews.

Arab: A person whose ethnic or national background is from an Arab country. Approximately 15 percent of Muslims in the world are Arabs.

Arab countries: Those countries whose primary language is Arabic. There are 22 Arab nations: Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen.

Fatwa (Fa'-twa): A non-binding opinion or ruling based on religious knowledge made by an Islamic scholar, mostly on matters of day-to-day life.

Hadith (Ha-deeth'): The reported sayings and actions of the prophet Muhammad which serve as a model of behavior for Muslims.

Hijab (Hee-jab'): Literally, the word translates as "curtain" or "veil." It refers to the headscarf and non-revealing clothing worn by many Muslim women to maintain modesty. The style of headscarf and dress varies from country to country. Modest behavior is mandated for both women and men.

Imam(s): Leaders of prayer in a mosque. In Shia Islam, the descendents of the prophet Muhammad whom he chose to lead the community following his death.

Islam (Is-lam'): Literal translation is "submission to the will of God." It originates from the Arabic word, "salaam," which means peace.

Jihad (Jee-had'): Arabic word meaning "striving in the way of God." This striving can take a number of forms, the most common of which is the daily inner struggle to be a better person. Armed jihad is permitted in defense of Islam.

Lunar Calendar: A calendar that is based on the moon rather than the sun, so that each month begins with the sighting of the new moon. Muslims follow a lunar calendar. This means that each Muslim month begins 11 days earlier than the year before.

Mosque: Place of worship for Muslims. Many mosques are recognized by their tall minarets or towers; however, minarets are not a physical requirement of mosques.
Typically, mosques have a prayer hall covered with carpets, and people take their shoes off at the door to maintain the cleanliness of the prayer area. In the U.S., mosques usually have additional areas including classrooms, a lecture hall, dining room and kitchen.

**Muhammad**: Muslims believe Muhammad was the last in the chain of divinely appointed prophets through whom God sent his message to humankind. Muhammad was born in the year 570 C.E., in the town of Mecca on the Arabian peninsula. Muslims believe that he was the recipient of God's last divine revelation, the Quran.

**Muslim (Mus'lim -- the "u" in Muslim is like the "u" in "put")**: One who follows the religion of Islam; literally, one who "submits to the will of God."

**Quran (Kur-ään')**: The holy scripture of Islam, believed to have been revealed to the prophet Muhammad through the angel Gabriel over a period of 23 years. It contains many of the same teachings, admonitions, and stories of earlier prophets found in Jewish and Christian scriptures.

**Shahada (Sha-ha'-da)**: The declaration of faith in Islam that "There is no deity except God and Muhammad is the messenger of God." Anyone who believes and declares this is considered a Muslim.

**Sharia (Sha-ree'-a)**: Islamic law, based on the Quran and the sayings and actions of the prophet Muhammad (hadith).

**Shiite/Shia**: One of the two major groups in Islam, comprising approximately 20 percent of Muslims worldwide. Shiites believe that Ali, the cousin and son-in-law of the prophet Muhammad, was designated as Muhammad's successor.

**Sufism**: The inner, spiritual dimension of Islam that relates to purification of the heart and involves devotional practices to bring one closer to God.

**Sunni**: The majority group of Islam, comprising about 80 percent of Muslims worldwide. Sunnis believe that the prophet's best friend, Abu Bakr, was selected by consensus of the majority to succeed him.
# READING NUMBER 7

## Easy Vocabulary Words in Arabic

<table>
<thead>
<tr>
<th>BASIC</th>
<th>Days of the Week</th>
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No: la | Saturday: al sabat  
Sunday: al ahad  
Monday: al ithnain  
Tuesday: al thalatha  
Wednesday: al arba  
Thursday: al khamees  
Friday: al juma | Bread: Khubz  
Breakfast: Iftar  
Dinner: Ashaa  
Lunch: Gadaa  
Coffee: Qahwa  
Fish: Samak  
Milk: Haleeb  
Onion: Basal  
Orange: Burdukali  
Salad: Salata | Black: Aswad  
Blue: Azrak  
Brown: Jauzi, Buni  
Green: Akhdar  
Grey: Ramadi  
Purple: Urjuwani, Banafsaj (violet)  
Red: Ahmar | Brother: Akh  
Daughter (of): Bint  
Father: Ab  
Grandfather: Jadd  
Grandmother: Jaddah  
Mother: Umm  
Sister: Akht  
Son (of): Ibn |
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Yesterday: ams  
Tomorrow: bukra, ghadan | | | |
| Hello: (reply) WA alaykum al salaam | After tomorrow: baad bukra  
In the morning: fe al sabah  
In the afternoon: baad al dhuar  
Tonight: fel al massa | | | |
| Good Bye: ma salaama Why?: lain?  
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The Arabic alphabet

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Teachers and Teaching Islam and Muslims in Pluralistic Societies: Claims, Misunderstandings, and Responses

Sarfaroz Niyozov
Published online: 22 January 2010 # Springer Science+Business Media B.V. 2010

Introduction: Data Sources, Argument, and the Structure  P. 24
This paper argues for critically engaging teachers' voices and practices in the education of Muslim minority students. Its data sources include a targeted literature review about teachers' work with Muslim students (Niyozov and Pluim 2009), activities of the OISE-based Muslim Education Project (e.g., Niyozov and Memon 2006; Niyozov 2007), my ongoing Social Science and Humanities Research Council (SSHRC) project on teachers' perspectives on the education of Muslim students in Toronto's schools, and my earlier research on pedagogy in developing Muslim societies (Niyozov 2001). From the above-mentioned SSHRC project, I have used preliminary data from interviews of six public high school teachers of English, History/Civics, and Science in schools with a significant Muslim student population.

Muslim Presence in North America  P. 24
Within the last 25 years, Muslims have become the principal non-Christian religious group in Canada and the USA, due to immigration, higher birth rates, and conversion. American Muslim population grew by 108% between 1991 and 2001, numbering 2.5 million (unofficially 7 million; Seljuk and Fine 2008, p. 39); and Canadian Muslims by 128%, increasing from 253,000 in 1991 to 842,200 in 2007 (Adams 2007, p.108). North American Muslims are relatively young (50% of Canadian Muslims age between 15–44; and 40% of American Muslims between 18–39); are well educated, i.e., above 34% of Canadian Muslims have undergraduate or graduate degrees (Moghissi et al. 2009, p. 27); two thirds of American Muslims have at least a college degree, compared with the US average 28% (Seljuk and Fine 2008, p.41). Muslims are relatively well to do (i.e., according to the Zogby survey 2004), a third of the US, Muslims' median income was $44,389 compared to the US average of $ 42,158 (Seljuk and Fine 2008, p. 41); Muslim median income in Canada in 2008 was $37,000 (Moghissi et al. 2009, p. 37). Approximately 90% of US and 95% of Canadian Muslims are legal residents (Adams 2007; Moghissi et al. 2009, pp.26–44; Seljuk and Fine 2008; Zogby 2004).

Muslim Education in Canada: A Challenge to Educational Multiculturalism  P. 25
Muslims' educational responses and strategies in the West have similarly changed with time and context, and their understanding is helpful in sensitively and effectively engaging Muslim students, parents, and communities (Daun and Walford 2004). Around 80–90% of Muslims in North America attend public and private secular schools. Several studies show that the majority of Muslim students in
the US and Canadian schools have positive attitudes towards public schools and institutions (Cristillo 2008, p. 9; see also CBC News 2007; Pew Research Center 2007).

At the same time, the number of private Islamic schools, now around 400 Islamic schools in the United States and 50 in Canada has mushroomed (Memon 2009; Zine 2008) highlighting Muslim dissatisfaction with public schools. In Ontario alone, there are 36 Islamic schools of which 35 adhere to various Sunni orientations and one to the Twelver Shi’a Muslim orientation. Formal Islamic schools are only one of many forms of Islamic education (Douglass and Shaikh 2004). While most Muslim students gain some information about Islam and Muslim societies in public schools, they receive alternative Islamic education through mosque, evening, weekend and summer schools, homeschooling, as well as through community practices, the media, internet, and transnational networking. Our students, technologically savvy, ambitious, and aware of multiple perspectives, are increasingly critical of the authorities and politicians and able to resist peer and family pressures.

A multiplicity of students' color, linguistic, ethnic, religious, and socio-economic backgrounds is encountered by a still predominantly Anglo-Saxon, Judeo-Christian, feminine teaching population. Subject curricula and policy documents speak about inclusion of non-white cultural and historical perspectives (TDSB 2000), yet changes have been cosmetic, superficial, and sporadic (Azmi 2001). There are signs of increasing alienation, anti-Westernism, religious, and nationalist radicalization among these youth, disappointing the host societies' expectations that the second generation would be more integrated and assimilated into Canadian society (Zine ambitious, and aware of multiple perspectives, are increasingly critical of the authorities and politicians and able to resist peer and family pressures. 2008). Schools and teachers are simultaneously grappling with the emergence of multiple religious interpretations in the public arena, competing visions on schools and the purpose of education; how to celebrate religious discourses while promoting students' critical thinking, and autonomy; how to reconcile constructivist views of knowledge and social reality with divinely ordained immutable texts, authorities, and laws (Merry 2005). How can schools be expected to celebrate diverse cultures when these cultures may possess problematic elements such as racism, sexism, and social inequalities? Is the role of schools to affirm and reflect society and its cultures as they exist, or to transform these into better, pluralistic, and just ones?

The Role of Teachers in Educating Muslim Students: Claims, Misunderstandings, and Responses’ P. 28

The teachers’ voices corroborate instances of teacher racism (Alladin 1996; Zine 2001). They also say that while teachers are becoming increasingly aware of their and the school’s racism and phobias (not just toward Muslims), and while these teachers also fight against racism where possible, there is a need for deeper and wider digging into forms of personal, structural, and cultural racisms. Not just teachers and the Western society, but their students, and their students’ communities also have racist elements. In the context of pluralist education, it is important that the racism of minority as well as of majority groups is addressed fair-mindedly. Otherwise, the fight against racism may only reproduce and perpetuate new forms of racism. Teachers who are largely ethno- and Euro-centric and with Judeo-Christian background, ignore or denigrate the historic and contemporary contributions of Muslims to science, architecture, culture, geography, navigation, literature, and history.

Within the scholarship community, there is a debate regarding curriculum representation of Muslim history, culture, religion, and contributions (Abu El-Hajj 2006; Abukhattala 2004; Azmi 2001; CIE 1995; Moore 2006; Panjwani 2005; Sewal 2003; Zine 2001). Muslim leaders of various inclinations have also
emphasized this: radical and anti-western Islamists employ this charge to urge Muslims to boycott secular society and leave public schools in favor of Islamic schooling. Moderates, negotiators, and multiculturalists see this as a matter of ignorance and suggest the enrichment and pluralization of the public school curricula as the solution.

**Non-Muslim Teachers are Not Fit to Teach Muslim Students P. 31**

This is a conservative Islamist perspective that is based on the assumption that Muslims should avoid or reduce their relations with non-Muslims to a minimum. This position selectively uses anti-racist and anti-colonial critics, colonial history of Christian missionary activity and cultural anthropologists‘ assertions that outsiders are not emotionally, socially, academically, and even psychologically qualified to talk to those whom they study or educate, and that insiders care about and fight for their own better (Henry 1996). It is a suspicion based on history, mistrust, and political agenda. Accusations may be made that non-Muslim or ‘not-proper Muslim’ teachers were secularizing and corrupting, or converting Muslim children, if they expressed alternative Islamic or non-Islamic perspectives (for critique Milligan 2005, pp.161–163; for examples, Niyozov1995).

[P. 32] Earlier Ghuman (1994) and Sarroub (2005) have illustrated that there are Muslim students who do not want to have ethnic minority teachers because their coreligionist teachers over-discipline them, misinform their parents on their behavior, or control them in the name of culture and religion. Like the majority of their classmates most Muslim students do not isolate themselves; they confer and confess their personal concerns to their non-Muslim teachers and peers.

[P. 33] The assumption that Muslim teachers are in a better position to teach Muslim students, their history, and culture appears unfounded. The right question may be less about who teaches whom, but more how does one teach, to what end, with what ethics and interest? The above examples show that teaching is more than an authoritarian

[P. 34] There are many Muslim teachers in the public school system. These teachers serve as bridges between cultures, helping their colleagues understand the nuances of the students‘ backgrounds, their deeper needs, and allay parents‘ misconceptions about public schools and western societies (Collet 2007; Kassam2007). Further, by virtue of living in an increasingly pluralistic society, public school board policies have become more responsive to the practices of Islam.

**Discussion of Findings: Implications for Research, Policy and Practice of Education and Pluralism**

[P. 35] According to Wheeler (2003) and Panjwani (2005), the recent shifts in discussions of religion and education such as uncritical celebration of differences, and political correctness, often blur the more serious discussions on the actual aims of education and do not help students to develop analytical skills and engage in open-minded discussion, do not expose students to more than one view, do not address critical intra-communal issues of education access and quality, gender and social discrimination, and do not enable students to reflect upon the existential and social questions of the day. Despite all the critique, today more than ever before, Western teachers, educators, and the general population are aware not only of Islam and its major tenets, but also of its internal diversity, complexities, and of Muslims‘ relations with non-Muslims globally.
As educators, we also need to know that debates around Muslim education are connected not only to concerns for justice, opportunity, and recognition, but also to conflicting worldviews and power relations. Our experiences of Muslim education suggest that the voices of teachers, researchers, religious clerics, and organized groups must be equally and thoroughly engaged with in terms of their origin, purpose, and implications for particular Muslim students, Muslim communities, and global humanity; that schools are places where all students freely engage in critical analysis of self and society, historically and today. Fundamental education questions need to be asked such as, what is the purpose of education, what is the role of the teacher, how can we prepare our students for the twenty-first century, where identities are no longer fixed, but evolving, multiple, and hybridized (Kassam 2003; Wheeler 2003).

The disregard for and distrust of teachers (especially in public schools) and the ignoring of their perspectives, leads to misunderstanding of the complexity of their work and working conditions, and the de-professionalization of the teacher’s image in society. Teachers think and work through a broader pragmatic perspective than any particular parent, and religious/cultural/social group (Hargreaves 2003). They work to support the needs and hopes of all students as their human rights (Parker-Jenkins et al. 2005). Any community’s demands on teachers require an acknowledgement of the impact on them of the emotional, intellectual, political, and physical intensification of their work.

Commendably, no teacher in our study rejected the idea of including Muslims’ cultures and histories in the curriculum; none ignored racism, Islamophobia, cultural insensitivity, and ignorance. They went further, acknowledging that these are not confined to Muslim students only (Amin et al. 2006; McLaughlin et al. 2005). All teachers questioned what information would be appropriate, accurate, and common to all Muslims. In some cases, they simply needed help finding the right resources and strategies. Others saw deeper issues beyond the politics of recognition, culture, identity, and representation: what is Islamic about the values in question? Whose power and benefits do these critical voices serve? Is it education’s role to confirm the students within their heritage, culture, and religion as fixed entities? Whose Islam and which Muslim are we talking about in our debate about Muslim education? Is there anything distinctive about Muslims that makes their needs different from their non-Muslim peers? Is there a danger of singling out Muslims and making them look strange and peculiar? Are the differences so deep that we are doomed not to communicate properly? Why can’t we talk about issues of discrimination and injustice in Muslims’ history and society?

Teacher preparation in a time of multiple perspectives, knowledge explosion, and increasing uncertainty, requires teachers to learn more than to teach, requires them to pose difficult questions for everyone rather than play it safe, to examine critically their own beliefs and practices before enabling their students to do so. Without the developments of such understandings of their professional role and identity teachers will not relinquish their position in the classroom as source of authoritative knowledge.

Teacher education in pluralist societies requires cultures, religions, and histories to be included as starting points, as materials for scrutiny and analysis not as sacred and untouchable entities (Kassam 2007). Pluralism is a creative construction of the new, not a mechanical collection of differences as exotic materials. Pluralism starts by acknowledging complexity and imperfection within oneself; by being open to other perspectives with humility, rather than by claiming religious, moral, or civilizational superiority. The provision of curricula and textbook materials on religions should not provide idealized and perfect realities and images; or avoid religious community’s social and historical
problems (Banks 2006; Kassam 2003). Within this context Muslim education (whether in public or Islamic schools) as a concept needs to be engaged with seriously, openly, and fairly, using global and comparative frameworks (Case 1999). Comparative and global perspectives should be brought in so as to reveal the particular commonalities between Muslims and non-Muslims and redraw the line of allegiance from religious and parochial to fundamental global issues such as social injustice, ecology, and peace (Abou El Fadl 2005; Banks 2006; Jackson 2002; Wheeler 2003).

SELECTED REFERENCES FOR THIS ARTICLE


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The Purpose of an Islamic School
and the Role of an Islamic School Teacher
Fawzia Gilani-Williams

In order to come to some agreement regarding the purpose of an Islamic school, it may be beneficial to firstly elicit a definition of Islamic education. Educators generally maintain:

The purpose of Islamic education is not to cram the pupil's head with facts but to prepare them for a life of purity and sincerity. This total commitment to character-building based on the ideals of Islamic ethics is the highest goal of Islamic education. (Al-Attas, 1979, p. 104)

The emphasis can then be said to be on a value system. What is important is that the Muslim child be exposed to an education that predominantly teaches values such as obedience, care, forgiveness, respect and truthfulness etc. According to Sharif, Islamic education is "the device for helping an individual to full stature", (1976, p. 45). This, he elaborates involves "the assimilation of Divine attributes" leading to a life of "unity, power, freedom, truth, beauty, goodness, love, and justice" (ibid). A more comprehensive definition of Islamic education was composed at the First World Conference on Muslim Education where participants were of the following view:

Education should aim at the balanced growth of the total personality of man through the training of man’s spirit, intellect, his rational self, feelings and bodily senses. Education should cater therefore for the growth of man in all its aspects: spiritual, intellectual, imaginative, physical, scientific, linguistic, both individually and collectively and motivate all aspects towards goodness and the attainment of perfection. The ultimate aim of Muslim education lies in the realization of complete submission to Allah on the level of the individual, the community and humanity at large. (Ashraf, 1985, p. 4)

It would follow then that the aim of an Islamic school is to provide an environment which allows the student to realize these ideals and gain an education that enhances his spiritual, intellectual, imaginative, physical, scientific and linguistic growth. Using the above definition as an informative guide, one would expect an Islamic school then, to have facilities and a programme of learning that allows a pupil to develop his/her sense of spirituality and build a positive relationship with God which becomes manifest in doing righteous deeds.

According to Ismail (Ismail, 1997, p. 36) there are "four basic patterns of knowledge. Although they are not inclusive, they are the most important patterns needed for producing
effective, creative and successful teachers:
   a. Causal Knowledge
   b. Normative Knowledge
   c. Experiential Knowledge
   d. General Knowledge

In addition to this, Ismail also gives four skill components, each of these having four sub-components (Ibid, pp. 36-7). These are said to represent the very basic talents, qualifications and characteristics needed to develop a successful and effective teacher. They are:
   a. Knowledge of the subject matter
   b. Wealth in internalized values and beliefs
   c. Ability of transferring knowledge
   d. Generating student’s cooperation and confidence

Essentially, the call is for a Muslim teacher to have moral values and professional knowledge and to be able to actualize these in daily life routines. They must be honest and sincere, and cultivate faith in absolute values such as justice, mercy, truth, charity, love and righteousness, all of which are enshrined in the names of God, (Ismail, 1997, p. 45). They must be familiar with classroom management, curriculum management, records management, to use a variety of teaching strategies and an understanding of learning modes. They must have an awareness of each pupil’s background and motivate students raising their self-esteem. They are also effective in home-school liaison and have a reciprocal relationship with the administrative body.

In order to attain this in the Muslim student, the teacher is charged with competency. This essentially requires the teacher employed, to be proficient, effective and skilled in primarily the teaching of values and secondly in the specific field that he is being asked to teach. Teachers must have sufficient experience and training in the subject and be aware of development in that field. Along with this they must also be able to deliver the subject taking into account the different ability groups in the class and understanding the varied strategies of delivering the material. An understanding of a pupil’s learning style is also essential. A pupil must be given an environment that is positive for his or her personal development. By creating an atmosphere of approval the teacher sets the scene for success.

Other aspects of an Islamic school education include the provision of opportunities in physical education, languages, science, creativity and reasoning. However, all of these are delivered in such a way that there is no dichotomy between religion and so called secular knowledge:

An essential prerequisite is that religious and secular subjects should be made an indivisible whole. The compartmentalization of religious and secular education, based on a factitious division of life into spiritual and temporal, is not sanctioned by Islam. (Rauf, 1988, p. 63)

A Muslim teacher must therefore be one who follows this philosophy and tries to correlate
the Islamic perspective with academic subjects that they teach.

The role of an Islamic school teacher can be best understood by firstly considering what the essential constituents of a competent Muslim teacher are. The Islamic Society of North America delivered a workshop on the qualities of an effective Muslim teacher. One of the accompanying handouts was entitled: ‘What a good Muslim teacher is all about’. The personal characteristics of a ‘good Muslim teacher’ as described in the ISNA handout were:

Love for children; love for the profession of education; humility without weakness; health and vitality of the body; psychological health and emotional balance; neatness, cleanliness and good appearance; eloquence and good pronunciation; intelligence and deep understanding; understanding students and their needs; strong command of the subject; broad and deep reading and knowledge; punctuality and respect for time; co-operation with the school system and policies; being courteous with students and fellow teachers; socialization with people and no isolation; knowledge and practice of Islam; to stay away from questionable sayings or deeds, even if it is lawful to do so; and sincerity. (ISNA handout, 1994)

This description is one that ISNA has proposed as its criteria for the hiring of Muslim teachers. The description calls for an adult who possesses an affinity for children. One who enjoys the rigors and challenges of teaching. Appearance, mannerisms and intellect are factors that are seen to contribute to what a ‘good Muslim teacher‘ is. In addition to this, a teacher is asked to have the following ‘professional characteristics’:

Class control; respect for the student‘s personality; involving the student in discussions and corrections; involving students in school activities; recognizing and dealing with individual differences; gradual reforming of student‘s behavior depending on the situation; linking the lesson to lively practical applications; using fun and appropriate laughter; using the lecture style appropriately with the following considerations... using questions with the considerations to the following...(ISNA handout, 1994)

Baloch describes an Islamic teacher as one who educates a child ‘according to his level of maturity’. Such a teacher nurtures the child to have ‘faith in the One’ God, leading to the development of ‘a spirit of inquiry‘ in order to procure an understanding of the universe and its operations. The pupil is then to ‘use his knowledge, skills, and understanding to improve himself and the society’, (Al-Afendi&Baloch, 1980, p. 165).

The purpose of an Islamic school and the role of an Islamic school teacher can also be presented by drawing on the early models of Islamic education and the teachers who were called upon to dispense knowledge to students:

...because of the inseparable bond between ‘Islam‘ and ‘education‘, the teacher in a Muslim
society has to be a ‘committed’ teacher, and consequently ‘accountable’ to the society... a teacher's harsh treatment of a child was quick to attract attention and the great educators like Ghazzali ... and IbnMiskwayh...advocated the use of rewards, recognition, and recreation (play) by the teacher to motivate learning, rather than any form of punishment. IbnKhaladun explained how physical punishment was psychologically harmful and distorted the normal growth and development of the child. (Al-Afendi&Baloch, 1980, p. 169)

A number of points are raised in this extract. Firstly, a teacher in a Muslim society is answerable to the people. His or her actions and words are the target of scrutiny. Moreover, he or she must be a dependable and responsible person whose role does not end with the bell but continues even after school, implying that a teacher's professional duty is one that extends to society. He or she must not be seen to engage in any questionable activities.

There is also a point made that a teacher should not be severe and resort to punishing the child but use strategies involving positive reinforcement and also appreciate the value of play as a means of learning and providing the student with a motivating learning environment.

Shami raises the point that Muslim teachers who are trained in colleges and other professional institutions based on models from the West are not equipped to deal effectively with delivering an Islamic education to a Muslim child. This, he says is because such an institution does not cater for the spiritual development of the child. He calls for a teacher who is ‘responsible for the development of the soul ... the mind and body’, (Baloch&Afendi, 1980, p. 155). The implication may then be that teachers who are trained at the latter institutions should be given opportunities for Islamic development that will allow them to cater for the ‘mind and body‘ of the student.

In one of his addresses on the topic of a new education system, Mawdudione said:

If you teach history, geography, physics, chemistry, biology, zoology, astronomy, economics, political science and other social sciences without any reference to Allah ... a student will be unable to synthesize the conflicting ideologies into a unifying whole. Because of this intellectual polarization, his religious faith gradually weakens. Under the circumstances, he cannot remain totally committed to religion, however strong his faith may be. (Rauf, 1988, p. 64)

This can be used to further highlight the necessity for a Muslim teacher to put subjects in the context of Islam. If subjects are not Islamized, the indication is that the resulting pupil, through not viewing God to be the author and controller, assigns the latter to something other than God. He will therefore suffer a weakness in faith. Mawdudi also believes that students should consolidate their knowledge in Qur’anic Studies and thereafter ‘be offered a course in comparative religion so that they can assess for themselves how mankind went astray‘.
(Rauf, 1988, p. 67)

There is also the point that ‘the most important quality of a Muslim teacher is not what he knows but what he is’, (Baloch & Affendi, 1980, p. 157). The emphasis is placed on the character of the teacher. The teachers must be exposed to exemplary behaviour on which to fashion themselves. Presumably this would come from the teacher training institutions in the first instance and then the leadership body within a school.

It is also important for an Islamic school, especially those that exist in non-Muslim countries to provide students with an understanding of their role and obligations not only to the Muslims who reside around them but also towards the non-Muslims. It is important that Islamic schools exude through their students the same neighbourliness towards the non-Muslim that Muhammad (sws) practiced and taught.

Hashim also agrees that the Muslim teacher is not just a professional worker but is also a mu’addib who concerns himself with instilling adab, (manners) in their students:

A teacher in the Islamic tradition is also a guide to leading pupils to the righteous path. Consequently, the excellence of a teacher in Islam is not only measured by his or her faith, beliefs, character and conducts. This notion of a teacher in Islam is a very important consideration in the preparation of teachers for an Islamic school system. (Hashim, 1997, p. 58)

The purpose of an Islamic school is essentially to create an environment that reflects an Islamic ideology. It is warm, embracing, encouraging and its decor redirects its inhabitants towards God remembrance and good actions. The role of an Islamic school teacher is to then produce a wholesome child who carries out his obligations as set out by the precepts of Islam. The teacher’s directive is to educate a child by giving him or her the mannerisms and the etiquette that will serve the child and the community: To ultimately make the child understand the purpose of his life and to provide that child with knowledge that will equip him/her to pursue both worldly gains and most importantly after-life gains. Such a child does not feel coerced, stifled or imprisoned but feels motivated, free and eager.

References
READING NUMBER 10

Guide for Non-Muslims Working in Islamic Schools

There are several cultural issues that a non-Muslim entering an Islamic school environment may encounter. The purpose of this guide is to educate non-Muslims about such things in order to set "guests" in the Muslim school at ease. Some of these issues may stem from religious beliefs, while others may be purely cultural.

1. **Multiculturalism** – Americans are used to the terms “diversity” and “multiculturalism” but they may not be completely prepared for the variety of ethnic backgrounds and nationalities in attendance at Muslim schools. Students in Muslim schools may come from the Middle East, North Africa, South Asia, Southeast Asia, and other places. Their families speak a variety of languages and dialects. Ties with their home countries are usually still intact and families feel quite strong about the importance of keeping the heritage and culture alive in their children. Of course, there are American Muslim families as well, and many households may even be multicultural.

2. **Religious observations** – Islam is considered by Muslims to be more than just a religion, but rather, a way of life. In fact, teaching this way of life to Muslim youth is one of the purposes of establishing Islamic schools. At least one, if not two of the 5 daily prayers are scheduled into the school day. During the month of fasting known as Ramadan, the school schedule may be altered to accommodate the increased religious observances made during that month. Religious classes are usually taken by all students throughout the year. Arabic is usually taken as a second language since Muslims believe that God’s word has been recorded for humanity in Arabic in a book called the Qur'an. Students usually strive to memorize this book, and the book itself is treated carefully with the utmost respect.

3. **Religious terms & phrases** – Muslims often employ religious terminology into their speech as well. For example:
   - **Greeting**: Muslims may greet one another with “AsalaamuAlaikum ” and “Walaikum Salaam” which mean “May the peace of Islam be upon you”. This greeting is usually not extended to non-Muslims, due to the religious implications of the meaning. Instead, casual American greetings would be used.
-*Exclamation:* “Subhan Allah” meaning “Glory to God” or “Allahu Akbar” meaning “God is Great” 
-*Praise:* “Alhamdulillah” meaning “Praise to God” 
-*And another common phrase:* “Insha’Allah” meaning “if God wills” which is usually said anytime something is planned for the future. 

4. Islam in the curriculum – While the subjects non-Muslims may be hired to teach are so-called “secular” subjects, the belief that Islam is a way of life means that religion permeates even the secular subject matter. For this reason a Muslim teacher would try to integrate an Islamic approach into each course. For non-Muslim teachers, a Muslim teacher’s assistant may be provided to bring this perspective to the class and to help make the non-Muslim teacher aware of areas where the subject may become controversial or inappropriate in an Islamic school. For example, while the concept of evolution may be included in the curriculum, an approach that accommodates the Muslim belief in God as The Creator must be incorporated. 

5. Gender Relations – Muslims hold conservative views regarding relations between the sexes. The reason for this is to safeguard the family and to build respect for people based on their personal qualities rather than physical attraction. In general, casual mixing between unrelated males and females is forbidden in Islam. However, interactions that take place for a particular reason (such as professional meetings or parent conferences) are allowed with certain safeguards in place:

- No physical contact should be made, including handshaking or other casual touching. 
- Eye contact may be sporadic. This should not be taken as a sign of shiftiness. Rather, both Muslim males and females have been commanded to lower their gaze in the presence of non-relatives of the opposite gender out of respect for one another. 
- Meetings should not be completely private. A meeting could be held with a third party present or the door could be kept open. 

Other ramifications of gender relations in Islam may also extend to the classroom. For example, dating and boy/girl relationships are not allowed between the students. Students may be seated separately according to gender, and in some case separate classes may even be established. Non-Muslim teachers involved in personal non-marital relationships should not discuss them with students, nor should the possibility of exploring such relationships be posed to students. If a Muslim student asks questions of such nature, they should be referred to their Islamic studies teacher for an appropriate answer. 

6. Physical appearance and Attire – In light of the previous point about gender relations, Islam requires that modest dress be employed in the presence of non-relatives of the opposite sex. Some aspects of this modesty are specified for each gender. Both genders must wear non-revealing clothing that is loose, non-formfitting, and not see-through. For the woman, such clothing should cover all of her person except her face and hands. Some Muslim women opt to include their face and hands as well. Perfume, make-up, jewelry, and
other means of external beautification are reserved for the privacy of the home and are not appropriate in public places such as the school. Muslim men often grow beards to imitate the Prophets. Since the teacher in the Muslim school is expected to set an example for students, most schools require their staff to abide by these standards while on the job, regardless of their personal habits outside of the school. This usually applies not only to non-Muslims, but to Muslims who may not personally observe these conditions, though policies may vary from school to school.

7. **Dietary considerations** – Muslims do not eat pork or pork-based products. Such meat is considered to be an impurity and unfit for consumption. Some Muslim families also may not eat other meat that has not been slaughtered in a “halaal” manner.

8. **Holidays and celebrations** – Muslims only celebrate the holidays specified in Islam which are called “Eid”. The first of these is the Eid of breaking the fast which is celebrated when Ramadan ends. The second is celebrated during the season of the “hajj” or Muslim pilgrimage. It is a commemoration of when Prophet Abraham was commanded to slaughter his son Ishmael and the ram was miraculously put in his place. These holidays should be scheduled on the school calendar. Other non-Islamic holidays such as Halloween, Thanksgiving, Christmas, Valentines, Easter, and Birthdays are not to be celebrated in the school. Classroom parties that have nothing to do with any holidays may be held in accordance with school policies.

9. **Islamic Art** – Muslims have been forbidden from sculpting or drawing animals and people or displaying such imagery. Some may even object to having their picture taken for this reason. However, for specific needs, such as identification or education, such images may be used in the school. Musical instruments are also not generally an approved form of art in an Islamic school.

**Conclusion**: It is hoped that this list could serve as a useful introduction to common scenarios one may encounter in an Islamic school. This list is not comprehensive, and must be accompanied in the school by a Muslim assistant or mentor who can help the non-Muslim make the cultural adjustments needed to function effectively in such an environment. It is also recommended that one may learn more about the basic beliefs and practices of Muslims by looking into classes or programs available at the school or Islamic center which may be available for the non-Muslim pu
### ACTIVITY NUMBER 4 [Reflections based on readings 5-10] ©July 2010 L.G. Stambler

<table>
<thead>
<tr>
<th>Significant concepts in readings 5-10 about………</th>
<th>What did you find out about……… that was new to you?</th>
<th>What do you think will be easy for you to implement about…..? Why?</th>
<th>What do you think will be difficult for you to implement about…..? Why?</th>
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<tr>
<td>The Historical context about Islam</td>
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<td>The role of non-Muslim teachers who work with Muslim students, and teachers</td>
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<td>The purpose of the Muslim school</td>
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<tr>
<td>Other items of your own choosing</td>
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A Sample Letter: To your child's Non-Muslim teacher

The following is a sample letter that can be written to your Child's Non-Muslim TEACHER OR PRINCIPAL to create an awareness of Ramadhaan at the school level. This gives Muslims the opportunity to educate Non-Muslims on Fasting, Ramadhaan etc. This is a very useful avenue for Dawah and education. The contents can be edited to suit different situations and needs.

SAMPLE LETTER TO TEACHER
Monday October 22, 2002
Dear Mr. Staten:
Greetings of Peace. We are the parents of Ameen Thawban, who is a grade five student in your class. We would like to bring to your attention the upcoming Islamic month of Ramadan, its implications for Ameen and what you can do as his homeroom teacher.

Given the current climate of fear, grief and intolerance in the wake of the events of September 11, 2001, we hope that you will seriously consider our request not just for the sake of Ameen, but also that of the other children in the class who are probably still confused about various elements of this tragedy.

Ramadan is the ninth month of the lunar Islamic calendar. This year, it is expected to begin on November 6, depending on when the new moon, which indicates the beginning of a new lunar month, is sighted.

Muslims who have reached puberty, are required to fast during this month. The fasting entails abstaining from food, drink and sex between dawn and sunset each day during the month of Ramadan, which lasts 29 or 30 days.

Although Ameen is not yet at an age where he is required to fast, he looks forward to Ramadan every year. Last year he fasted the entire month of Ramadan without it negatively affecting his health or his marks! We would like to encourage Ameen’s participation in Ramadan again this year to cultivate his spiritual growth as a Muslim. We hope that you will support us in this
decision, in the interests of Ameen, other Muslim children like him in your class, as well as
tolerance and openness to diversity as part of the children’s learning experience.

We have enclosed a sheet from the Council on Islamic Education (see enclosed sheet
called Ramadaan explained) which can give you more information. This sheet also provides
some excellent ideas of activities teachers can use in class to increase awareness and
understanding of Ramadan. We would also encourage having Ameen and other Muslim
students do presentations explaining Ramadan for the benefit of the class.

We would like to meet with you to discuss and seek your advice on further issues surrounding
religious celebrations and holidays, so that students of other religious backgrounds can not
only grow academically in your class but spiritually as well.

If you can kindly contact us so that we may set up a meeting this week or next week, it would
be greatly appreciated. You may call us at home at (123) 555-0000 in the evenings or Mr.
Thawban’s office during the day at (123) 444-0000.

We look forward to hearing from you. Thank you for your time and attention.
Sincerely,
Mr and Mrs. AffanThawaban.

see also: Ramadaan Explained (to Non-muslim Teachers )
Source: soundvision
Courtesy: www.everymuslim.com

ACTIVITY NUMBER 5 [based on reading numbers 5-10 and 13-14]

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1. Read this sample letter that you might receive from the parents of one of your
   Muslim students.
2. List all of the information that you think that you will have to know in order
to respond to your student’s parents.
3. Research the information that you need to know.
4. Organize, compose, and write a plan for how you would answer your
   student’s parents in writing.
5. Write an outline of talking points for a face to face meeting with your
   students’ parents using the 3Rs of Skilled Dialogue. See glossary of terms.
6. SEE POWER POINT COMPILLED BY L.G.STAMBLER, Ph.D. ENTITLED “Islam” in this collection
   of readings and activities to assist you with finding information and additional
   resources.

A Muslim is a follower of the religion of Islam. There are over 1.4 billion Muslims worldwide, divided among three major groups: Sunni, Shīʿī and Khariji. The word Muslim means one who submits and implies complete submission to the will of God (Allah). Adherent of the religion founded by Prophet Mohammed in the year 610.

- Muslim New Year
- Ramadan
- Day of Ashura
- Laylat al-Qadr
- Isra and Mi'raj
- Mid-Sha'ban

Muslim New Year

The Muslim New Year occurs on Muharram, the first day of the first month. This day is remembered as the day of Muhammad. Shi’a and Sunni Muslims do not celebrate the New Year. On this day many people give and receive gifts. The date of Muharram varies because the solar calendar is 11 to 12 days longer than the Islamic lunar calendar.

Ramadan

Ramadan is the ninth month for the calendar of Islam. The main part of Ramadan involves fasting during the day. During the day, eating, drinking and having sex is prohibited. Fasting is supposed to bring you closer towards God and away from worldly things.

There are many exceptions for people who do not have to fast during Ramadan, including children who have not gone through puberty, pregnant or menstruating women, the elderly, diabetics or other people for whom it would be dangerous if they fasted. If the person’s illness is not for a prolonged period of time, they have to make up the days of fasting on Ramadan they missed before the next one. If the person’s illness is long-term or permanent, they should give food to a poor person for every day they miss. If a person has sex between sunrise and sunset during Ramadan, they have to fast for 60 more days.

The final Friday during Ramadan is called Jumu‘ah-tul-Wida.

Day of Ashura

Ashura is in the month Muharram on the tenth day. It represents the Remembrance of Muharram. Muslim’s recognize Ashura as when Noah’s ark came to rest after the great flood.
Some Shi’a Muslims go to Karbala in Iraq to what is called Mashhad al-Husayn. They go there on Ashura to visit the tomb of Husayn to mourn his death.

In the tradition of Sunni, Muhammad fasted during Ashura in Mecca. When Muhammad observed the Jewish people fasting during Yom Kippur, he then made it mandatory for all Muslims to fast.

Since the Sunni and Shi’a schism, there has been much violence between these two groups during the holiday. For example in 2004, the pilgrimage to Karbala made by the Shi’a was bombed, and people were killed and injured.

**Laylat al-Qadr**

Laylat al-Qadr celebrates the time when Muhammad first saw the whole Qur’an. Since the true date is very unclear, it is recommended to celebrate all the possible nights of the holiday. Because of this night’s importance, Muslims try harder to do good deeds and give more worship to God.

For those who can, they spend the final 10 days of Ramadan in a mosque. They pray, read and recite the Qur’an, and remember God.

**Isra and Mi’raj**

This holiday is about the journeys of Muhammad. Isra is what Muslims refer to as the night Muhammad came to Jerusalem from Mecca.

This event was followed by Mi’raj, when Muhammad went into heaven. This is described as when Gabriel gave him Buraq, a horse with wings. Muhammad then led some prophets into prayer and then flew off to heaven. When Muhammad went to heaven, he met God, or Allah. Here, Allah told him to pray 50 times a day with all Muslims. Moses convinced Muhammad to tell Allah to make the number smaller, because they would never be able to pray 50 times a day. Allah agreed for them to pray five times every day.

**Mid-Sha’ban**

In the month of Sha’ban on the 15th day, Sha’ban is celebrated. The Shi’a recognize this day as Muhammad al-Mahdi’s birthday.

Sunnis worship this day as the time when Allah assigns specific destinies that will come to all people within the year. The significance of this event is to remember what Muhammad did in Mid-Sha’ban: He prayed for those who passed away at night. Today, Muslims honor Muhammad by praying at night and fasting in the day. The sacred text of Muslims, called the Qur’an, is recited. People feed the needy or pray for them in order to gain the acceptance and gratitude of those who have passed away. To celebrate, Muslims set off fireworks, cook and eat sweets.
Goat and Lamb Holidays

Dr. & Mrs. Robert D. Herr
Nix Besser Farm

In the coming months, goat and lamb will be featured on the holiday menus for many people. It is important to keep track of these holidays so goat and lamb producers can take advantage of these special markets.

In addition to the usual celebrations for Christians centering around the Christmas and Easter holidays, there is a significant Muslim population now in the U.S., estimated at more than 14 million currently, and these celebrate some other less familiar holidays.

During the holy month of Ramadan, Muslims do not eat or drink from sunrise to sunset for approximately 29 days. This holiday is in celebration of Mohammed receiving the first of the Koran’s revelations from Allah and occurs when the “White Thread Becomes Distinct From the Black Thread,” a poetic description of the coming of a new moon. Based on the lunar calendar, this holiday moves backwards 11 or 12 days each Julian calendar year.

During this period of abstinence, after fasting from dawn to dusk, the fast is broken with a drink of water and three dates followed by a light meal. After 29 days, the fast is broken with the first sighting of the next new moon. And this is the id al Fir or the Festival of the Breaking of the Fast. During the period there are three joyous days of celebration when Muslims will enjoy an abundance of the most festive foods including lambs and goats.

In reviewing your culling program, older goats and sheep often command exceptionally high prices during this period and it is certainly the time to clean out your older thinner animals.

Most desired lambs are between 60 and 80 pounds live weight. The most desired goat is usually a young animal weighing between 50 and 70 pounds. Either animal is usually acceptable and male animals are
preferred. It is also important that the animals be “without blemish.”

A second significant Muslim holiday is Id al Adha or the Festival of the Sacrifice. This is a celebration marking the end of the “Hajj” or the annual pilgrimage to the Holy City of Mecca which all Muslims are expected to make at least once in their lifetime. After public prayers, a sheep or goat is sacrificed to signify the Prophet Abraham’s obedience to God as evidenced by his readiness to sacrifice his son. The sacrificed meat is to be shared with relatives or given to the poor. Again, a male animal without blemish is required.

It is not possible, however, to just check your calendar and see when these holidays occur. The Muslim calendar is lunar and based on the sightings of the new moon. It contains 354 days, approximately 11.25 days short of the solar year. Ramadan occurs during the ninth month of each Islamic year. These holidays move completely around the western or Julian calendar, which most westerners observe. This moves each holiday about 11 or 12 days each year. In addition, there is always much controversy each year as to who the most reliable witnesses are when reporting a new moon.

Thus, there is always some confusion as to exactly when the holidays will absolutely occur. Sometimes the sightings are as much as two days off and occasionally Muslims have had to return to fasting for a day or two after they thought Ramadan was over.

Animals for use during these holidays are generally purchased and shipped about 7 to 10 days prior to the holiday. Considering that there are more than 14 million Muslims residing in the U.S. who observe these holy days, there is a significant marketing opportunity for lambs and goats, not only during these special days, but throughout the whole year.

Two other days of importance in the Islamic calendar are Nawlid, celebrated in honor of Mohammed’s birthday, and Ashore, a remembrance of the Martyrdom of Mohammed’s grandsons. For additional or future dates, producers may contact Dar’adh-Dhikr Mosque, 4312 Rosedale Avenue, Bethesda, MD 20814.

The term “Halal” is the religious term used to describe food that is “lawful to eat” according to the laws of Islam. Halal slaughter is very similar to kosher (Jewish) slaughter. By USDA standards both are considered religious or ritual slaughter and are exempt from USDA’s humane slaughter laws. This is not because they are inhumane since Halal slaughter requires that an animal be humanely treated on the way to slaughter. During the killing process, the animal’s head is turned toward Mecca and a prayer is spoken. A very sharp knife is used and the carcass is completely bled out. In addition, there must be no
contact with any pork. In Halal slaughterhouses, pork is never killed with the same instrument or in the same areas as lamb, goat or beef. In fact, a truly Halal slaughter house never kills any pork at all.

The Muslim population consumes approximately 75% of the goat meat consumed in the U.S., so an astute producer will try to learn a little more about it to meet its demands and needs. Other significant holiday periods include the Eastern Orthodox or Greek Easter, which follows the Western Easter, usually by a week. But, in some years they can be separated by almost one month. Certain Hispanic groups have significant celebrations early in January and many ethnic groups celebrate many of the same holidays that are on the official U.S. calendars... Memorial Day, Labor Day, Mother’s Day, Father’s Day, etc.

If there are groups of other ethnics in your marketing areas, knowing their special days and rituals can help you meet their needs as well as your own to market your animals in a most profitable way. It is important to note, however, that most of these markets are quite price conscious and will go to a lesser priced species of animal of good quality rather than pay for an over priced lamb or goat. On the other hand, given the choice, most can easily select the best lambs or goats for their needs quickly and most definitely choose the top quality animals on foot.

[The per capita consumption of sheep meat (lamb and mutton) in the United States is less than one pound per person. Americans (or immigrants) of Northern European descent traditionally do not consume much lamb; however, lamb holds a significant meaning in the observances of many religions and is a dietary staple in many countries. In the U.S., the largest consumers of lamb are Middle Easterners, Greeks, and Hispanics. Population demographics and immigration patterns favor an increase in demand for lamb and goat.

Most lamb is consumed on the East and West Coasts and in major metropolitan areas; however, ethnic markets can be developed anywhere where ethnic populations exist (e.g. college towns, rural areas where foreign labor is utilized). The demand for sheep and lambs increases prior to various religious observances. The type of lamb (age, weight, sex, condition, etc.) and manner in which it is to be slaughtered (Halal, Kosher) depends upon the ethnic/religious group and the holiday.]

by Susan Schoenian Sheep and Goat Specialist
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University of Maryland Cooperative Extension
sschoen@umd.edu
http://www.sheepandgoat.com

There are many sources for accurate holiday dates, usually a religious bookstore has several sources available. In addition, there are probably many internet sources though I do not have web sites available. This can help you in planning for your future marketing programs as well as your breeding or feeding
programs in the production of sheep and goats.

**Holiday Calendar for Marketing Sheep and Goats**

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<thead>
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<th>Event</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tr>
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<tr>
<td>Epiphany</td>
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<td>January 6</td>
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<tr>
<td>EidulAdha Festival of Sacrifice</td>
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<td>Oct. 15</td>
<td>Oct. 4</td>
<td>Sept. 23</td>
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<tr>
<td>Islamic New Year</td>
<td>--------</td>
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<td>Nov. 4</td>
<td>Oct. 25</td>
<td>Oct. 14</td>
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<tr>
<td>Christian Easter</td>
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<td>March 31</td>
<td>April 20</td>
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<tr>
<td>Orthodox Easter</td>
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<td>April 15</td>
<td>May 5</td>
<td>April 20</td>
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<td>Passover/Pesach</td>
<td>April 19-26</td>
<td>April 7-14</td>
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<td>April 15-22</td>
<td>April 4-11</td>
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<tr>
<td>Mawlid al Nabi Birth of the Prophet</td>
<td>March 20</td>
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<td>Jan. 3 and Dec. 23</td>
</tr>
<tr>
<td>Ramadan Begins Month of Fasting</td>
<td>August 1</td>
<td>July 20</td>
<td>July 9</td>
<td>June 28</td>
<td>June 18</td>
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<tr>
<td>Rosh Hashanah Jewish New Year</td>
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<td>Nov. 28</td>
<td>Nov. 28</td>
<td>Nov. 26</td>
</tr>
<tr>
<td>Eid al Fitr Ramadan Ends</td>
<td>August 31</td>
<td>August 19</td>
<td>August 8</td>
<td>July 29</td>
<td>July 18</td>
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<td>Chanukkah</td>
<td>Dec. 21-28</td>
<td>Dec. 9-16</td>
<td>Nov. 28-Dec 5</td>
<td>Dec. 17-24</td>
<td>Dec. 7-14</td>
</tr>
</tbody>
</table>
READING NUMBER 15

http://islamicpost.wordpress.com/

SCHOOL APPROACHES: DESIGNING A CURRICULUM FOR MUSLIM STUDENTS

August 16, 2008, 12:23 am
Filed under: August Volume 1 - 2008, Education, Magazine/ Culture | Tags: Islamic curriculum, Islamic school, Muslim homeschool, Muslim teacher

Tips for New Educators:
Preparing a Standard School Curriculum

- Research and plan properly.

By ZahidahFaruq, Islamic Post Staff Writer

“Seek knowledge from the cradle to the grave.” This maxim is a tradition of the Holy Last Messenger Muhammad, may the peace and blessings of Allah be upon him and his family. It applies to men and women, boys and girls. “If the actions of a teacher are contrary to what he preaches, it does not help toward guidance, but it is like poison. A teacher is like a stamp to clay and a student is the clay. If the stamp has no character, there is no impression on the clay,” wrote Hazrat Imam Ghazzali, may Allah have mercy upon him, said in his famous book IyhaUlumiddin under the section on knowledge.

What is curriculum development? The term curriculum is used in different ways by parents, the education community and the business world. A standard definition of curriculum is defined as what is taught, its scope, and sequence. Instruction covers how, where and by whom the curriculum is taught. Education philosophies, attitudes, values and appreciations may be informal or hidden aspects of a curriculum. Most curricula are sequential, meaning they build on the previous lessons and subjects. The development of a standard curriculum is a lengthy task normally done by an entire curriculum team.

Simplified version.
A home school curriculum can be simplified, however. The key to every curriculum is for the educator to know what the student is expected to know—
what the student should be able to do— at each grade level and in each subject. The simplest way is to break down reliable textbooks into unit studies, and form the broken down form into a curriculum. (Continues below…)

A seasoned educator may omit textbooks entirely, or use them only as resource books, adding a variety of sources such as the internet, libraries, museums, and field trips to places like farms, zoos and observatories, to develop their curriculum.

Islamic Cultural View
For Islamic schools, or home schools, an Islamic view is the best to establish. This curriculum; and uses Islamic cultural resources, books, and videos, as the backbone to all lessons, in all content areas. This is similar to the approach in parochial schools, and gives a firm grounding in understanding of Islamic heritage.

Standard K-12 curriculums are broken into various categories such as primary, elementary, intermediate, and high school. Each category is broken into content areas; these are detailed below.

Standard Primary Level
The standard primary level curriculum concentrates on language development, phonics, sight words, phonemic awareness, spelling rules, reading fluency and comprehension; beginning mathematics, introduction to science and social studies; introduction to the Arabic language, teaching the stories from Holy
Qur'an, stories about the life of the Holy Last Messenger, Muhammad, peace be upon him, known as seerah, and stories of other Holy Messengers (Joseph, Noah, Moses and Jesus, among others, peace be upon them all) and Islamic etiquette, among other things.

Standard Elementary Level
The standard elementary school curriculum concentrates on subjects such as: Quranic studies, memorization or hifz; the Islamic belief system, termed aqidah; the life story of the Holy Last Messenger, peace be upon him, which is known as seerah; Islamic history and law; calligraphy, Arabic reading and writing; mathematics, science, social studies, and English language arts with emphasis on writing development.

Intermediary Level
The Intermediate level continues to concentrate on the same subjects, but at a more technical level: Quranic studies and commentary, hifz of longer ahaadith, which are the traditions of the Holy Last Messenger Muhammad (peace be upon him) as well as Holy Qur’an; more detailed classes in aqidah, seerah, Islamic law and history; calligraphy, and Arabic reading and writing. Then there is pre-algebra and algebra, literature analysis, life science, physical and earth science; history (global and American), and English language arts with an emphasis on writing skills.

At this level students begin to choose electives.

High School Level
At the High school level, all of the core subjects are still taught. However the curriculum becomes specialized and technical. Advanced science, math and English are taught for a year at a time. Islamic law, science of ahaadith, in depth study of Holy Quranic commentary and commentary of ahaadith are introduced. Electives are now a part of high school credit-earning. Advanced courses prepare the student for entrance into college, trade school or employment.

Possible Resources
The sources given below are just a sampling of some of the options available for curriculum development or enhancement.
School District Curriculums
Curriculums developed by local school districts are aligned with the state’s educational standards and tied to federal education mandates and high stakes testing. Student competence is tested at various grade levels. If you are a parent or community member, you are able to access these curriculums or curriculum maps from your local school district free of charge.

Online Virtual Schools
Virtual schools refer to online schools that offer student services and courses that are conducted through Internet technology. Some virtual schools offer a full K-12 curriculum. The virtual school may use different types of media in the implementation of the curriculum. DVD’s, video segments, animation and graphics are usually infused throughout the lessons. A teacher or tutor may be assigned to monitor the student’s progress, intervening when he, or she, needs help understanding a lesson.

Correspondence Curriculums.
Many correspondence curriculums span the grades K-12, and cover the core curriculum areas and/or electives in the higher grades. Textbooks, workbooks and other teaching aids are included with some of the more expensive systems. These curriculums normally have the lessons scripted out, month by month, for the entire year. The process is simple; the educator reads the material, and follows the script. Student progress is tracked by way of tests and quizzes.

A Final Word.
Remember, you do not have to reinvent the wheel. The internet, the library, and your local community all offer a wide array of materials and resources for educators, home school parents and students. Take the time to do the research and properly plan. Your curriculum, and the result it produces, will be enhanced tenfold.
ACTIVITY NUMBER 6

COMPARE THE CURRICULUM FRAMEWORKS OR THE COMMON CORE OF LEARNING OF THE CONNECTICUT STATE DEPARTMENT OF EDUCATION

and

THE CONTENT OF THE READING ON DESIGNING A CURRICULUM FOR MUSLIM STUDENTS


SIMILARITIES BETWEEN THE TWO MODELS
ALTER THE CONTENTS OF THIS TEACHER MANUAL INTO A WCSU FORMATTED LESSON PLAN FOR A MIDDLE SCHOOL OR A SENIOR HIGH SCHOOL CLASS SESSION. SEE ATTACHED LESSON PLAN FORM.

http://www.pbs.org/wgbh/pages/frontline/teach/muslims/activities.html

Before watching the film, help students think about what they may already know, as well as questions they may have about Islam or Muslims.

You may want to hand out the glossary to students and review the terms "Muslim," "Arab," and "Islam" with them prior to watching the film.

Explain to students that the film shows Muslims in six countries -- Egypt, Iran, Malaysia, Nigeria, Turkey, and the United States -- and that you will be asking them to think about some specific issues while viewing. Put the following questions on the board and ask students to think about these issues as they watch the film.

1. What Muslim beliefs and practices do you observe in the film?

2. What roles do you see women playing in the film?

3. What are the connections between the legal system and Islam in each of the
countries? What are the differences?

4. Are there conflicts you observe in the film between globalization and the Muslim cultures you see portrayed?

5. In the section on Muslims in the United States, how do the people portrayed in the film view their roles as Muslims within a non-Muslim country?

After viewing, discuss students' responses to the questions.

Pre-Viewing Activity: Stereotypes and Myths about Islam

Description

Prior to viewing, students will write down what they know about Muslims and/or Islam. While viewing, they will look for information that confirms or contradicts what they know. After viewing, students will discuss their findings.

Instructions

Ask students to make three columns on a sheet of paper. The first column is for "Beliefs about Muslims prior to viewing." The second column is for "Contradictions or confirmations." The third column is a place for comments or questions to bring up for discussion after viewing the film.

1. Ask students to list what they know about Islam or Muslims in the first column on their sheet of paper. Typically, students will list a mixture of stereotypes and facts, so it will be important for teachers to be able to differentiate between the two. If students are quiet or in younger grades, teachers can prompt them by asking them if they know any famous Muslims. Often students will suggest people like Malcolm X or Muhammad Ali. Ask students how they know that those people are Muslim. This often gets them talking about stereotypes that they were aware of, but were not identifying as Muslim stereotypes. You can also stimulate discussion by asking students if they know what the major religions of the world are and what some of the differences are between them? This question will likely get students talking about Muslim women covering themselves, or Islam and violence.

2. Tell students that as they view the film, they should notice and write down in the second column whether any of the information they have written down in their first column is confirmed or contradicted. Tell them to be as specific as possible. For example, students typically list something about women not having rights. In the film, there are several examples of women working outside of the home.

3. Tell students that while viewing the film, they should write down in the third
column any unfamiliar vocabulary, issues or questions that come up for them. You could also hand out the glossary ahead of time to help them identify or circle words they do not know.

4. After viewing, stimulate a discussion by asking students to share what they learned, what comments and questions they have, and what stereotypes were confirmed or contradicted. Discuss with students where some of their stereotypes might originate. For example, how have they seen Muslims portrayed on television, movies, commercials, magazines, and newspapers?

Internet Resources

The following Internet sites provide easily accessible information about Islam. You can also give students the following Web site addresses to use in doing a research activity to follow up their viewing and discussion of the film.

- Islamic Information Center, www.Islaminfo.com
- Islamic Institute, www.islamicinstitute.org
- University of California Muslim Student Association, www.USC.edu/dept/MSA
- Islam Online, www.islamonline.net (explicitly by Sunni Muslims)
- Muslim Journal, www.muslimjournal.com

Teachers who would like to invite religious leaders or scholars into the classroom can also find contact information on the above-mentioned sites, as well the following Web site: http://www.ing.org/about_us.htm

Islamic Networks Group (ING) is a nonprofit, educational organization based in San Francisco that delivers presentations relating to Islam and the Muslim world with the goal of eliminating stereotyping through education.

For a list of countries with significant Muslim populations, visit the Web site of the Organization of the Islamic Conference to the United Nations: http://www.oic-un.org/about/members.htm

News and Politics

The following Web sites are good resources for news and information about the politics of American Muslims. These are also good sources for better understanding the global politics involving Muslims and Muslim countries.
• American Muslim Council (AMC), www.amconline.org
• Council on American Islamic Relations (CAIR), www.cair-net.org
• American Muslims for Global Peace and Justice, www.globalpeaceandjustice.org

Pre- or Post-Viewing Activity: Media Analysis

Description

Students will compare coverage of Islam or Muslim related news stories, such as Ramadan, in a U.S. and Islamic newspaper.

Instructions

1. Have students locate a news story from an Islamic news source, centered on Islam and/or Muslims in another country. Coverage of Ramadan is a good topic to focus on for this exercise. Students can find their news story online or bring a newspaper or magazine to class. See the listing below of sample newspaper Web sites.

2. Have students locate coverage of the same news story in a major United States newspaper such as The New York Times.

3. What do students notice about the way in which the event or story is told? What is the same? What is different? What is included and excluded?

4. Discuss the following questions: Do you see bias in each of the news stories? Are events covered in non-U.S. newspapers that are also covered in U.S. papers?

Examples of Online newspapers (in English)

• Arabia.com, www.Arabia.com (Arab News)
• Tehran Times, www.Tehrantimes.com (Iran)
• El Ahram, www.ahram.org.eg/weekly (Egypt)
• Chicago Tribune, www.chicagotribune.com

Alternative

Assign students to analyze their social studies or history textbooks looking for the
following: What does your book say about Islam? Does your textbook include contributions from Muslim-dominant countries as a part of world history? Is Islam mentioned in countries other than the Middle East, including the United States? How would you characterize the information your textbook tells you about Islam? (Note: This alternative is particularly useful for schools that do not have Internet access and/or access to international newspapers)

**Post-Viewing Discussion Questions**

Here are some questions designed to get students talking after the film:

- What did you notice about the relationship between Islam and the law in the different countries in the film?
- What are three things you learned about Islam from the film?
- What did you learn about the influence of globalization on Muslims who do not live in the United States?
- Name some of the tensions the film identifies between "the West" and Muslims

**Post-Viewing Activity: Gender Issues in Islam**

Students will be asked to compare and contrast the roles of men and women with regard to various topics in the six countries featured in the film.

1. Divide students into five topic groups: Paid labor, family, education, marriage, and activism. Alternatively, there can be six groups, one group for each country, and they can compare the roles for each of these categories.

2. Each group should discuss what they saw in the film about each topic or country, and prepare a brief oral report to present to the class. For each of the countries featured in the film (Egypt, Iran, Malaysia, Nigeria, Turkey, United States) they should review the roles that Muslim men and women play with regard to each of these topics.

3. After each group has presented their report to the large group, discuss the similarities and differences across countries, the differences and similarities between men and women, and how these roles differ from other religions they may know about. You can also discuss any conflicts they see between the culture of the country and Muslim practices they observed in the film.

Note: The film does not cover all of these areas for each country. You can assign students to research the 'blank spaces' for this exercise.
ACTIVITY NUMBER 7 [LESSON PLAN BASED ON PBS TEACHER’S MANUAL]

Student Teacher ________________________ Grade Level ______ Date of lesson _____________
Institution _____________________________ Length of lesson ______________

Content Standards: Identify one or two primary local, state or national curricular standards this lesson is designed to help students attain. How will the learning tasks lead students to attain the identified standards?

Learner Background: Describe the students’ prior knowledge or skill related to the learning objective(s) and the content of this lesson, using data from pre-assessment as appropriate. How did the students’ previous performance in this content area or skill impact your planning for this lesson?

Student Learning Objective(s): Identify specific and measurable learning objectives for this lesson. COGNITIVE, AFFECTIVE, SKILL DOMAINS; CONDITION OF LEARNING, OBSERVABLE BEHAVIORS, MEASURABLE PROFICIENCY

Assessment: How will you ask students to demonstrate mastery of the student learning objective(s)? Attach a copy of any assessment materials you will use, along with assessment criteria. PRE AND POST ASSESSMENTS

Materials/Resources: List the materials you will use in each learning activity including any technological resources.

Learning Activities:
Identify the instructional grouping (whole class, small groups, pairs, individuals) you will use in each lesson segment and approximate time frames for each.

Initiation: Briefly describe how you will initiate the lesson. (Set expectations for learning; articulate to learners what they will be doing and learning in this lesson, how they will demonstrate learning, and why this is important)

Lesson Development: Describe how you will develop the lesson, what you will do to model or guide practice, and the learning activities students will be engaged in order to gain the key knowledge and skills identified in the student learning objective(s). INCLUDE ELEMENTS WITH CONCEPT STATEMENTS; WHAT THE TEACHER IS DOING; WHAT THE STUDENTS ARE DOING; DISCIPLINE CONTENT
**Closure:** Briefly describe how you will close the lesson and help students understand the purpose of the lesson. (Interact with learners to elicit evidence of student understanding of purpose(s) for learning and mastery of objectives)

**Individuals Needing Differentiated Instruction:** Describe 1 to 3 students with learning differences. These students may be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners.

*Note: Differentiated instruction may not be necessary in every lesson. However, over the course of the student teaching placement, it is expected that each student teacher will demonstrate the ability to differentiate instruction in order to meet the needs of students with learning differences.*

<table>
<thead>
<tr>
<th>Which students do you anticipate may struggle with the content/learning objectives of this lesson?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Which students will need opportunities for enrichment/higher level of challenge?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student name</td>
</tr>
</tbody>
</table>

**Notes from the pre-conference with your supervisor and/or cooperating teacher**

1. How will you know if your teaching objectives have been met?

2. What concepts or essential questions do you want your students to be able to answer during the lesson?

3. How do your materials/resources align with your teaching objectives?

4. How do your assessments align with your objective?
READING NUMBER 17

And

ACTIVITY NUMBER 8

[based on reading the following WebQuest and creating your own WebQuest on any aspect about Islam that is related to your secondary education major discipline]SEE END OF THIS SAMPLE

CMES WebQuests

How History Shaped Literature and How Literature Changed History: Serbs and the Battle of Kosovo

Tuning in to Turning Points

http://www.cmes.arizona.edu/outreach/wq_battleofkosovo.php

K-12 Outreach>CMES Lesson Plans>Webquest Portal> Battle of Kosovo

How History Shaped Literature and How Literature Changed History: Serbs and the Battle of Kosovo

Introduction | Task | Process | Evaluation | Conclusion | Teacher's Section | PDF

This 2-period lesson (with homework) explores the way in which history can inspire literature and literature can change the course of history.

Author: Lisa Adeli, Ph.D.
Introduction

Did you know that literature based on a medieval battle could help start a world war on June 28, 1914? could shape a dramatic break in diplomatic relations on June 28, 1948? could inspire events in June 28, 1989 that led 10 years later to genocide and the US/NATO bombing of a country? Well, according to the Serbs, that's exactly what happened - and why June 28 is a portentous date in their history!

So what's up with this date, and why is it so important in the history of the Yugoslav area? And what does poetry have to do with history and history have to do with poetry? Answering these questions is more than just an intellectual exercise for you; it may make or break your career.

You work for an intelligence agency that advises your country's leaders about important social/political ideas and trends in southeastern Europe. (You will find out later in what country and what year you are working.) June 28 is fast approaching, and you must report to your superiors about what is happening in the Balkans and what problems could arise on that day. Remember that not only your job, but your country's well-being AND the lives of millions of people hang in the balance.

Task

Day 1:

As a class, you will read and discuss a few of the legends of Kosovo. You will learn about what the stories mean to Serbian history and how they shaped the course of that history.

Day 2:

You and a partner will research a topic in Serbian history that is related to June 28. You will write a one-page report on the day's possible significance using the template that you are given. According to your teacher's instructions, you will either print out 3 copies of your paper (one for the teacher to grade; two for the class file to be shared with your classmates), OR if your teacher has created a blog, you will post it there.

Homework:

You must read at least one other student's work (either on the blog or by taking a copy of a paper from the file) and write a thoughtful response to it.
Process

Day 1:

Three Kosovo poems are provided for you in Document 1. It is a very readable translation not only from Serbian into English but from poetry into prose. As a class, read aloud and discuss the first poem ("The Fall of Serbia") and one or both of the following poems. Questions for discussion and answers to those questions (including more information that the teacher can share with students) are provided in Document 2.

**Homework:** Students should work in groups of two. (Whether students choose their partner or are assigned one is up to the teacher.) Half of the groups in each class should be assigned to read the background reading on the Sarajevo assassination of 1914; the other half should read the background reading on the 1999 Kosovo crisis. The background readings are also found in Attachment 2. (Note: Both members of a pair should read the same background reading.)

Day 2:

- Students should work with their partners, preferably with access to a library and a computer lab.
- Each pair chooses a scenario from the list. (Only one pair per class should sign up for any one scenario.)
- Each pair is given a task sheet. The list of scenarios, suggestions of websites, and task sheets are all in Document 3.
- The pair then researches the topic. They should divide up the work so that the group as a whole consults at least 3 different sources. (They may decide, for example, that both of them read a general overview and then each consult a different specific source.)
- Together, the pair does the writing assignment on the task sheet according to instructions.
- They then either post it onto the class blog OR make 3 copies to hand in (one copy for the teacher to grade, the other two to go into a file for their classmates to read.

**Homework (a few days later):**

- Each student individually reads a report by one of his/her classmates. Note: The student should choose a report that is a different scenario but from the same background reading that he/she read.)
- Each student then crafts a thoughtful, one-paragraph response, either posting it to the blog or handing it in according to the teacher's instructions.
### Relevant Documents:
- **Document 1:** Heroes of Serbia
- **Document 2:** Discussion Questions
- **Document 3:** Possible Scenarios

### Evaluation

<table>
<thead>
<tr>
<th>Category &amp; Score</th>
<th>Quality of research about the historical event - Part 1 of the guide sheet.</th>
<th>Analysis of the event and its potential impact on a particular country - Part II of the guide sheet.</th>
<th>Clarity of writing demonstrated in the report.</th>
<th>Written response to someone else's report.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning 1</td>
<td>One or two sentences in length. Demonstrates little understanding of the topic. Lacking in substance (generalities without specific information).</td>
<td>One or two sentences in length. Demonstrates little analysis of the topic. Lacking in substance (generalities without specific information). Little or no sense of audience (according to the students' scenario/role).</td>
<td>Writing is very difficult to understand. Use of simple sentences or confused style. Use of inappropriate vocabulary. Containing frequent grammatical or spelling errors.</td>
<td>One or two sentences in length. Demonstrates little understanding of the report. Comments lack in substance or reference to the specific topic.</td>
</tr>
<tr>
<td>Developing 2</td>
<td>One or two sentences of substantive comments OR a full paragraph of generalities. Some confusion about the topic.</td>
<td>One or two sentences of substantive comments OR a full paragraph of generalities. Some confusion about the topic or errors in information. Some problem writing to the scenario/role.</td>
<td>Writing is a bit awkward because of errors in sentence structure and vocabulary. Some grammatical and spelling errors.</td>
<td>One or two sentences of substantive comments OR full paragraph of generalities. Comments have some substance but not much.</td>
</tr>
<tr>
<td>Very Good 3</td>
<td>A full paragraph. Generally reflects knowledge of the topic but with a significant error or lacking specific references.</td>
<td>A full paragraph. Generally reflects knowledge of the topic but with a significant error or lacking specific references.</td>
<td>Writing is generally clear but containing a few errors in grammar, structure, or vocabulary.</td>
<td>A full paragraph. Generally reflects knowledge of the topic but with a significant error or lacking specific references.</td>
</tr>
<tr>
<td>Exemplary 4</td>
<td>A full paragraph or more. Excellent knowledge of the topic with specific examples to support the main assertions. Analytical.</td>
<td>A full paragraph or more. Excellent knowledge of the topic with specific examples to support the main assertions. Analytical. Convincing writing in accordance with the role they are playing.</td>
<td>Writing style that is fluid and easy to follow. Varied, complex sentence structure. Appropriate vocabulary. No major grammatical or spelling errors.</td>
<td>A full paragraph or more. Excellent knowledge of the topic with specific examples to support the main assertions. Analytical.</td>
</tr>
<tr>
<td>Score</td>
<td>30%</td>
<td>30%</td>
<td>10%</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Total Score:** %100
Conclusion

This lesson has shown how history influenced Serbian literature and how that literature, in turn, changed the course of history. But does this extreme example have any relevance to us?

Yes, it does. Even though the Serbian case is unusually vivid, it illustrates an important part of human culture. The fact is that even here, even now, our stories (oral, written, film) draw from our sense of history to shape who we are and what we believe about ourselves and about the rest of the world.

Teacher's Section

Focus:

This webquest was designed for high school World History, English, or Social Studies/English block classes. The lesson requires 2 days of in-class work and 1-2 evenings of homework.

Required Preparation:

It is best if students have some knowledge of the geography of southeastern Europe and the history of the Ottoman Empire. However, you can easily teach the lesson without the students having much prior information.

Targeted Skills - Based on Arizona State Standards:

Grade 10 Reading:

- Concept 2: Historical and Cultural Aspects of Literature. PO 1: Describe the historical and cultural aspects found in cross-cultural works of literature.

Grade 10 Writing:

- most concepts for persuasive writing

High School Social Studies: World History Strand:

- Concept 1: Research Skills for History. PO 5 - Evaluate primary and secondary sources. PO 7 - Compare present events with past events.
Concept 3: The World in Transition. PO 3 - Compare the development of empires. (The Ottoman Empire is specifically cited.) PO 4 - Describe the interaction of European and Asian civilizations from the 12th to the 16th centuries.

Concept 8: World At War. PO 1 - Examine the causes of World War I. (Subsequent points include specific references to Balkan nationalism.)

High School Social Studies: Geography Strand:

- Concept 2: Places and Regions. PO 4 - Analyze the differing political, religious, economic, demographic, and historical ways of viewing places and regions.

Student Requirements during the Project:

- access to a computer

Teacher Requirements during the Project:

- a handout for every student of "the Fall of Serbia" and EITHER "The Death of the Yugovichi's Mother" OR "The Maiden of Kossovo"
- an overhead projector OR computer with power point and projector OR a large map of showing the medieval Balkan states just before the Ottoman invasion

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ACTIVITY NUMBER 8

NOTE: USE ANY OF THESE THREE WEBSITES TO CREATE YOUR OWN WebQuest AFTER READING/STUDYING THE SAMPLE ABOVE. [Lgs]

- Generator - 1,2,3 Your Webquest for Free - Aula Siglo XXI 1, 2, 3 Your WebQuest For Free.... Press the MAKE THE WEBQUEST button to create the WebQuest in this window. Save the page by selecting File/Save as. ...Introduction - Task - Process - Resources www.aula21.net/Wqfacil/webeng.htm - Cached - Similar

- Creating WebQuests Resources to create a WebQuest.... Cost: Free. Must be installed on your own server. Sample project: La Catedral de Madrid ...

- ZunalWebQuest Maker Jul 17, 2010 ...ZunalWebQuest Maker - FREEThe easiest way to create a WebQuest with more than 54.5 thousand users. ZunalWebQuest Maker is a web-based ...

READING NUMBER 18

QUESTIONS TO THINK ABOUT BEFORE AND AFTER READING THIS ARTICLE:

1. WHAT DID YOU KNOW BEFORE YOU READ THIS PIECE?
2. WHAT DID YOU LEARN FROM THIS PIECE?
3. WHAT DO YOU STILL WANT TO KNOW AFTER READING?

http://classweb.gmu.edu/cip/g/gc/gc-c014.htm

A Cultural Inquiry into the Education of Muslim Students in America

SomayyahNahidian

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It all started when I was a child — a Muslim child growing up in the middle to high-class suburb of McLean, Virginia. I slowly began noticing that I was different from everyone else and what went on in my house was very different from what went on in my neighbor’s house. Religion has always been an important part of my family’s life. In fact, it was in the fourth grade where I had to decide just how much it would be a part of mine. According to Islam, girls from the age of nine should begin covering their hair from men, other than relatives. I remember telling my closest friends a few weeks before my ninth birthday that I would begin wearing a scarf to school. I guess I was trying to prepare them and I needed to know that I would still be accepted by them. Of course, being the good friends that they were, they saw no big deal in it. But I was always concerned about the rest of the school and the reactions of the other kids. At that time, in the ’70’s, there weren’t a whole lot of Muslims in the area and I certainly didn’t know anyone my age, even in our small community, who would have been going through what I was. Now it is very common to see Muslim children in public schools and girls wearing scarves or other types of hair coverings. Nonetheless, I was faced with a tough decision. My parents never forced anything on me. My father taught me about Islam and told me why we do certain things, but always said the decision was mine. I knew my parents would love and support me whatever I decided to do, but I also knew that my father would be so proud of me if I decided to follow the way of Islam, especially in a society that often ridiculed it. At that time, pleasing my father and making him proud was all I knew. I do remember asking my mom the day before my ninth birthday if I could wear a wig instead of a scarf! I actually already knew the answer and when she
laughed and said, "The purpose of covering your hair is to keep your beauty for only certain men to see," I felt empowered by the fact that I would have something special about me that not everyone could see. She compared me to a gift that you wrap neatly to give to a friend and surprise her. She said I was so special that I needed to be covered from the eyes of men and kept safe for only the man I marry and those in my family.

My decision was made! I would do my best to please my parents (and God) because it made sense to me. I went to school from November 1st, 1977 on, covering my hair. I was asked a lot of questions, some friendly, some not. I was laughed at, stared at, and the topic of many whispering conversations as I walked through the school hallways and cafeteria. But my confidence was never shaken and I never regretted my decision.

I went to Iran for my seventh grade school year and came back to the U.S. the next year to attend a newly established Muslim school in Washington, DC. Of course, I had no problem "fitting-in" in Iran and now for the first time in the U.S., I was among other girls my age who were also Muslim!! I graduated from that Muslim school and went on to the University of Maryland to receive a Bachelor of Science degree in elementary education and have returned to that same school to teach. I have been teaching there for ten years. My students find it interesting that some of their teachers were once my teachers and are now my colleagues.

I feel as though we have all been put on this earth for a purpose. We all have interests and talents in different areas and I have always asked myself what can I do for the Muslim community I am a part of. I enjoy teaching and hope to instill a sense of confidence in my students that it is okay to be Muslim in a society that has a severe misunderstanding of what Islam and Muslims are. Hence, my puzzlement.

Puzzlement

The puzzlement I have as a teacher in a private, Muslim school is how can we ensure pride in our students' identity as Muslims growing up in a non-Muslim society? We have seen that simply attending a Muslim school is not enough. As much as we try to shelter our students from the un-Islamic aspects of the society we live in, we still find it creeping in via some students. Do the parents know that their children may be watching certain television shows or reading certain books or magazines that could do more harm to a Muslim child's mind than good? Is there more we, the teachers, should be doing? This has been a question I have had for a while now as I notice that
it is getting harder and harder to teach academics mixed in with Islam to students who seem to be uninterested.

Known Information

The school is located in the Washington, DC, metropolitan area and consists of both elementary and secondary grades. The first floor is where the school offices, lunchroom, kitchen, auditorium and prayer room are located. The second floor houses the pre-K through sixth grades and the third floor is where the seventh through eleventh grades are.

The school is accredited by the state. Teachers and other staff are all Muslim and they follow the county's curriculum. In addition to the core subjects of Math, Science, Social Studies and English, students are also required to take Arabic, Islamic Studies and attend the weekly Friday Congregational Prayer (only students in the fifth grade and higher attend the Friday Prayer which consists of a sermon followed by prayer). All students attend the daily prayer time from 1:40 to 2:10 pm.

To help enforce the Islamic dress code, students are required to wear uniforms. The boys‘ uniform is a dark blue shirt worn over black pants and the girls‘ uniform is a loose fitting, greenish-blue top that comes just above the knees and is also worn with black pants. The girls must wear either white or black scarves.

The school does not have an elaborate transportation system. About ninety percent of the families commute back and forth to the school to drop off and pick up their children from all over Maryland, Virginia and DC. Some parents carpool and there is one van that picks up children. So some students must get up very early to get to school on time for the 8:00 am opening.

The school has a very limited budget, running strictly on tuition payments and donations. Teachers‘ salaries are less than half what they could receive in public schools. But the strong sense of dedication and responsibility among the staff makes up for whatever monetary incentives the school lacks. Teachers think of their jobs as an investment in the "hereafter" and as a form of charity, which is highly regarded in the religion.

Monthly staff meetings are held with the entire staff and biweekly "team meetings" are held on each floor (i.e. there’s an elementary team and a junior and high school team). Minutes of these meetings are provided to all staff members so each team is familiar with what the other team discusses. Common concerns have included the
following observations made by teachers on both teams, but especially the junior and high school team:

There are some students in the school who mention wishing they could go to regular public schools. They say they don’t understand why their parents insist that they attend a Muslim school. When the entire school reports to the prayer room for the daily prayer there are always a few who try to get out of the prayer, often coming late or asking to go to the bathroom once they get there and not showing up till the prayer is over. Some students will try their hardest to get out of wearing the uniform. They claim it's lost or needs mending, etc. Students do not show much enthusiasm in their classes, including Islamic Studies and Arabic. They don’t understand the need for such classes and will do the bare minimum to get by. When parents are spoken to, some offer their support and will intervene. But there are some parents who feel that since their kids are attending a Muslim school and they are paying tuition, the school is responsible for teaching their children everything about the religion. These parents are often working long hours and do not spend a whole lot of time with their children.

On the other hand (and this is something I find interesting) whenever there is a political event, such as rallies for innocent Muslims put in jail based on "secret evidence" or demonstrations against the Israeli killings of Palestinians, the students are ready to go and show their support. They don’t question participating in those types of things and will, in fact, be very vocal about their opinions.

Cultural Questions

Using the Cultural Inquiry Process (CIP), I am wondering if there are mismatches between what is emphasized at home and what is emphasized at school (CIP Step 3.3). Are there outside influences on the students that are contributing to my puzzlement (CIP Step 3.4)? Do the students watch a lot of television? Many, actually most of the ideas and topics shown on the popular television shows, are directly opposite those emphasized in Islam. Specifically, dating, sex outside of marriage, and disrespect/sarcasm towards one’s elders, parents or others, are all very common themes in such television shows and all of them are to be avoided in Islam.

I feel many of the answers to my puzzlement lie in the fact that our students have to do something their parents never did: grow up Muslim in a non-Muslim society, and
with pride. As I look at the students, I see that either their parents migrated to the United States after growing up and getting married in their own culture (be it Pakistani, Arab, Afghan, Iranian, etc.), or if the parents are American born and raised, they converted to Islam later in life. This is true for every one of my own nine students and all of the upper level students. This is important for me to consider because it means that the parents don’t know what their children are facing and if they know, they might not know how to deal with the situation since they never had to defend their religion as children.

Therefore, I will be focusing on a couple of cultural questions from the CIP. Mainly, how might influences on students from outside school be contributing to my puzzlement (CIP Step 3.4) as well as how might individual students’ negotiations of home, peer, and school cultures be contributing to my puzzlement (CIP Step 3.5)?

Gathering Information

To begin gathering information I realized that I needed to hear from the students themselves. The questions I wanted to ask required very honest and frank responses. I didn’t want the students to feel as though they had to watch what they say. To help ensure honesty in their responses, I prepared a written questionnaire (see Appendix). I didn’t ask for any names on the questionnaires, just grade levels. I wanted to know the grade levels because I think there’s a big difference in the elementary level’s overall attitude and that of the upper level. Perhaps my concern is better explained by Hillary Clinton in her book, It Takes A Village, "However we go about it, we must recognize that the years of adolescence have traditionally been the times of greatest opportunity and greatest danger.” (Clinton, 1996) So, one day after the daily prayer, I asked the fifth graders and up to remain for a moment. Once everyone else was dismissed I presented my questionnaire to the students telling them that I needed their help for a paper I was writing. Luckily, I have a pretty good relationship with the students, even the upper level kids were once my students and they will stop by every once in a while to say hello. So almost every single student in the prayer room that day agreed to fill out my questionnaire. I even had to run to the office to make more copies. I began receiving completed questionnaires that afternoon and for the next few days.

I received fifty completed questionnaires from the 80 students in grades 5 through 11. I separated the questionnaires by grade level and began going over their responses. When asked whether they felt that being Muslim was difficult, almost half said "yes" and half said "no." Some of the responses from those who said "yes"
included: "Because we get a lot of temptations from the society" and "Because there are many rules and laws. It’s very hard for kids today". A few who said no added that you should just be yourself and not worry about pleasing others and it won't be difficult. One student wrote: "If you know that your pleasing God and your taking a step in the future that will be good and if you do it for the love of God it is easy."

More female students commented that it is difficult because of the head covering and modest clothing that they have to wear. They wrote that it makes them stick out in the society and people stare. Even some of the boys confirmed that fact by saying that it’s easier for them to be Muslim because they blend in with everyone else.

I was surprised with the responses I got when asked about television watching. Only five students said they didn’t watch television. The rest mentioned shows like: Simpsons, Gary and Mike, Recess, Moesha, MAD TV, Friends, music videos, cartoons and MTV. I believe these TV shows are examples of outside influences and often the worst type. As reported by Mark Crispin Miller, the author of Boxed In: The Culture of TV, "If you watch Saturday morning kids‘ TV, you can see it in programming that is unrelievedly frantic, hyped up, hysterical, in its own way quite violent and pervasively commercial. It’s all about selling, and this, I think, is the primary reason why there is something of a cultural crisis involving children" (Miller, 2001). Shows intended for teenagers often lack parents and other adults or has adults that don’t matter. The kids in many of the shows mentioned have "adultified kids". Perhaps it is a reflection of today’s society where in many households both parents are working and children are left on their own for huge amounts of times. Muslim families are no exception. Yet in Islam, respect for parents and elders in general is very important. Our parents are our guiding lights through life and should be treated in respectful manners at all times. The children in our school don’t spend a lot of time with their parents. Responses on the questionnaire ranged from five minutes to four hours, with an average of one hour being the actual amount of time spent with parents each night — not on the computer or in another room, but actually with their parents. Considering how much reassurance and guidance Muslim children need in this society to maintain their beliefs, I feel this is not enough time. As Lang (1997) has said:

In an environment where their religion is greatly feared, where of all of the great world religions theirs is the most despised, where its rituals and practices are the most demanding, where its constraints seem to go against the larger society’s trends and lifestyles — in such an environment, we should not at all be surprised if a significant fraction of children born to Muslim parents leave aside the faith they inherited. (p.5)
Most of the students responded that they learn more about their religion at school in Islamic Studies classes but agree that such learning should come from a combination of both the school and home. Some said that they learn the basics at school but see it put into action and practice at home. One of the keys to raising Muslim children in this society is exposure and lots of it. Not just at school, but in the home and by participating in and visiting local mosques. "Churches, synagogues, mosques, and other religious institutions not only give children a grounding in spiritual matters but offer them experience in leadership and service roles where they can learn valuable social skills" (Clinton, 1996, p.173).

As I hypothesized earlier, all but two of the questionnaires came back stating that either both parents of the student grew up in another country, or both grew up in America but not as Muslims or one parent grew up in another country as Muslim while the other is an American convert to Islam. This, I believe, is where the problem lies and where any interventions should begin.

Children who come from religious Muslim families are caught between very different worlds: that of their home and that of the larger society. They may be Muslims, but their experience is very different from their parents. Unlike their mothers and fathers, they are not immigrants, converts, or children of the Civil Rights struggle. Their situation is much more ambiguous. Their causes, goals, and identities are not defined so clearly. Unlike immigrants, America is the only culture they really know. Unlike converts, Islam was chosen for them as a religion. They may face discrimination and prejudice, but it is very different from what African-Americans faced in the past. The way they think about, discuss, and explore issues is identifiably American. Their religion does influence their morals and ethics, but these are also influenced by the mores of American society. (Lang, 1997, p.222)

And to make matters worse, the parents are not aware of these differences; or if they are aware, they don’t know how to handle the situation. Muslim parents can help their children discover what the message of Islam is and help them compare its values to that of the society and decide for themselves which is the better way of life. But it will take patience and courage because that discovery might not be a smooth and steady climb.

In the words of the students themselves: "I have it much harder than my parents because they were non-Muslim back in the day"; "If you like go to the mall you see
people wearing shorts. My parents were not Muslim they don't know how hard it is; "I have it harder because the U.S. shows a lot of bad things on TV than when my parents were children"; "Actually my parents do understand what I am faced with. They try to make life easier for me by bringing me to a Muslim school so other kids won't make fun of me"; and "My mother who converted understands but my father who is Pakistani has the idea that everything that happens has to happen like it does in Pakistan and has no idea what I'm going through." There were also a few who commented that their parents are understanding.

I am reminded of Phelan, Davidson and Yu's *Students' Multiple Worlds* model that identifies six descriptions of students' worlds and their perceptions of borders (Jacob, 1999). When asked to choose which description best describes them (see question 17 in Appendix), the majority of students chose the "different worlds/border crossings managed" pattern, with about the same number of students choosing the "congruent worlds/smooth transitions" pattern. My interpretation of these data is that it seems that our students are aware that there's a difference between their worlds and that of the rest of society, yet they are able to manage living in both. This is promising. We want the students to be aware of "what's out there" because it can't be avoided in totality. We do want our students to feel normal and natural in their own society, which includes continuing to practice their Islamic beliefs.

**Interventions**

The focus of my interventions needs to be three-fold. First, I need to change my own beliefs and perceptions of our students. I never expected to get such a response from the students in the first place. Like I said, I had to get additional copies of the questionnaire because I didn't think the students cared enough to respond. I was also very impressed with the answers they gave to my questions. A lot of them were well thought out and students were often running out of space to write. This is a message I need to send to my colleagues, as well: don't underestimate these students! If asked in the right manner, they will respond quite eloquently. We should treat them as the young adults they are and maybe even stop worrying so much. As long as the students have a strong foundation in understanding their religion, they will most likely do fine. We need to listen to them and give them time to express their thoughts and concerns in the classrooms, assuring them that they are safe in doing so. We need for them to feel comfortable questioning the rules and guidelines of Islam and how they relate to their lives. We should be ready to catch our students being good as often as we are catching them doing wrong. Letting a student know how much we
liked what they did right is a better motivator than getting after them for what they did wrong.

Second, we must come up with a counter attack for the outside influences to which our children are exposed. This is one area that teachers cannot tackle alone. My belief is the biggest outside influence is television. With the parents help, we need to come up with an alternative pastime or at least keep it under a minimum and well supervised. Students need to learn to be their own policemen and monitor their own behaviors. If they must absolutely watch television, then they should understand that they cannot expose others to anything inappropriate. This goes back to strengthening their foundation. Enjoining the good and forbidding the evil is a pillar in Islam that our students need to practice.

Finally, we need to help our students view the borders they may encounter as learning experiences rather than as obstacles in their lives. Again, parental involvement will be needed to help reduce the borders our students face. "Children who truly grasp that they have a choice are more likely to make a responsible one. Most influential of all is the optimism and awareness that comes from knowing their parents are interested in and involved in their lives" (Clinton, 1996, p. 166).

When I was reading over the completed questionnaires, I kept thinking how some parents and teachers would love to read what I was reading. When students feel unthreatened to speak their minds, a whole lot can be accomplished. My interventions center around one goal: communication. Parents need to be informed of their children's feelings. Teachers need to be informed of their students' feelings. I presented my findings to one of my colleagues and she agreed that I should share the information I have gathered to the teachers and parents. I asked for a few moments to speak during the next staff meeting and during the next parent/teacher meeting, which are held on a monthly basis. I feel more "at home" speaking among my colleagues, so I chose to do that first, as a practice run for facing the parents.

My colleagues were very impressed with the information I shared with them and we decided to allow more time for our students to simply share what's on their minds before the beginning of each class. It is important that we are mindful of the different personalities among our students and how some will find it easy to be Muslim in America while others have a more difficult time with it. I mentioned our Barnga activity and how some of us were more adamant about our points of view while others gave up and went with the flow.
We also agreed that all teachers, not just Arabic and Islamic Studies teachers, should include Islam in their lessons more often. If students can see how Islam is part of all aspects of their lives then hopefully they will feel more of a connection to it. We designated a shelf in the teachers’ lounge for books that we may each have in our possessions that will help us achieve that goal. Most of these are books that include stories of the prophets’ lives and the contributions to science, math and literature made by Muslims throughout history - things that our students will not find in their textbooks, but would make them proud of their ancestors and heritage.

Next came what I thought would be the toughest group to reach — the parents. Monthly parent/teacher meetings are held on the third Sunday of each month. I was given 15 minutes to present my findings. After doing so I suggested that parents be mindful of what their children watch on television. I went on giving them a feel for what their children might be experiencing growing up in America as young, very impressionable Muslims. Some of the experiences I shared were personal ones I remembered from my childhood, while others I read word for word from the questionnaires I was given. The room was very silent while I spoke to the approximately thirty parents who were present. At the end of the meeting, I was approached by several parents who thanked me for my presentation. They expressed their concern for the children as well, and said we need such reminders from time to time.

Monitoring the Interventions

My only strategy for monitoring the success or failure of the above mentioned interventions was to check on occasion with my colleagues to see if they noticed any changes in students’ attitudes. I waited until the next staff meeting and raised that question. While progress seemed slow, I was happy that there was some progress. We all agreed that emphasis should be placed on the younger students — our elementary students. Preparing a strong foundation seems to be the best insurance we have in guaranteeing proud young Muslim adults. It is at that age that children still find it important to please their parents and teachers. Trying to fit in is not an issue. They were the ones who gave all positive answers on my questionnaire saying they don’t want to attend public schools, they enjoy their Arabic and Islamic Studies classes and they do not find being Muslim a difficult task. We need to strengthen that confidence to help buffer what these same kids will face in a few years as young adults. Our collection of books in the teachers’ lounge to help each other integrate Islam into our lessons is growing. I expected some difficulty for teachers to change their teaching strategies in such a short time. Most agree that next year would be a
good time to make more substantial changes in the way things are done for the benefit of our students.

I was also unable to monitor how the parents are doing with their children. My goal was to inform, it is out of my league to enforce anything. But knowing the dedicated and concerned colleagues of mine, I don't doubt that they will continue to do their best to instill pride in our students. Whether or not my interventions are successful will be seen over the next several years.

Conclusion

Even though my focus has been on what we, Muslims are doing wrong or what we can do better for our children/students, what really needs to happen is the current public perception of Islam as a religion alien to America needs to change in order for our children to grow up with less difficulty. If and when Islam becomes an acknowledged and contributing part of American culture, some Muslim children will no longer feel the need to distance themselves from Islam or downplay its impact on their lives. Some borders will disappear and the difficulties our students face will begin to fade. I guess I am really speaking to the western media that has tarnished Islam’s image in the eyes of the public.

In the meantime, and in case such changes never come about, we are forced to accept the fact that this generation of Muslims in America are faced with a difficult task. They must seek to harmonize their Americanness and their religion, striving to be good Muslims while being good citizens as well. Some may see that as impossible. I see it as a challenge.

References


ACTIVITY NUMBER 9 [see previous reading as a model]

Cultural Inquiry Process Steps: Overview

http://classweb.gmu.edu/cip/g/gs/gs-top.htm

This page introduces you to the Cultural Inquiry Process (CIP). The page titled, "Cultural Inquiry Process Steps: Conducting Your Own CIP Study," helps you understand how to use the Guidebook section of this Web site to support conducting your own CIP study.

As you read these pages, you may want to use the links provided to read the items they describe. If you do follow a link, please remember to return to these introductory pages and finish reading both of them before starting your own CIP study.

Cultural Inquiry Process (CIP) steps

The Cultural Inquiry Process (CIP) has seven basic steps:

1. Select as your focus one or more students and identify your puzzlement(s) about the student(s).

In this step you consider possible foci for your study and select one as the focus of your CIP study. (See the following note for a discussion of using the CIP with puzzlements not related to students.)

2. Summarize what is already known about the focus individual(s) and the context.

In this step you collect and summarize easily available information about your focus student(s) as a first step in increasing your understanding about your puzzlement.

3. Consider alternative cultural influences and select one or more of them to explore.

In this step you carefully consider possible cultural influences on your puzzlement by reading all the CIP pages under Step 3 with your puzzlement in mind. After considering the various cultural influences presented in Step 3, you decide on one or
more cultural influences to examine in your study. The influence(s) you select become the basis for your research question(s).

4. Gather and analyze relevant information as needed.

In this step you collect and analyze information to examine whether and how the cultural influence(s) you selected in Step 3 are related to your puzzlement. After analyzing the information you collected, you decide what cultural influences seem to be relevant to understanding your puzzlement. These influences provide the basis for your work in Step 5.

5. Develop and implement intervention(s) as needed.

In this step you design and implement intervention(s) based on the information you collected and analyzed in Step 4 and the decision you made about cultural influences.

6. Monitor the process and results of intervention(s).

In this step you again collect and analyze information. This time the focus is on monitoring the process and results of your intervention(s) to see what effects your intervention(s) are having in relation to your puzzlement.

7. Write a report of your CIP study.

In this step you write your report of your CIP study, describing what you did, what you found, your reflections on what you found, and what you think are the implications of your study for educational practice and future research.

As the summary of Step 7 and the CIP logo suggest, the end of the CIP takes you back to the beginning, with new understandings, but possibly also with new puzzlements. Thus, the CIP can provide the structure for an ongoing process of inquiry focused on improving your teaching (or other educational) practice.

Moving through the CIP steps

In general, you will proceed through the CIP steps one step at a time. However, you may find that you need to cycle back through one or more steps as you conduct your study, creating more of a "spiral" process. For example, if at the end of Step 4 you
decide (on the basis of the information that you have collected and analyzed) that the cultural influence(s) you selected in Step 3 are not appropriate, you might reread the pages of Step 3 in light of your data to identify a more appropriate cultural influence. A visual diagram of the CIP presents an overview of the process of moving through the seven CIP steps. (The diagram is in PDF format and will open in a new window.)

With this basic overview in mind, you may find it helpful to read some CIP studies that other educators have conducted. These provide a wide range of examples showing how educators have used the CIP to improve the educational experiences of students. If you decide to read some CIP studies at this point, return here afterward to finish this page.

Complete your introduction to the Cultural Inquiry Process by reading "Cultural Inquiry Process Steps: Conducting Your Own CIP Study."

**How to Cite the CIP Web Site**

To cite a page from the CIP Web site, identify the URL of the page itself (not the frameset). Because the site uses frames, the URL displayed in your browser will be the URL of the frameset, not the pages displayed. To identify the URL for the specific page, open the frame in a new window (typically, right click on the desired frame and select "Open Frame in New Window").

We recommend the following generic citation format:

Author/editor. (Year). Title (edition), [Type of medium]. Producer (optional). Available Protocol (if applicable): Site/Path/File [Access date].

**Examples**

To cite the entire CIP Web site (accessed December 30, 2004):


To cite this page (accessed December 30, 2004):


To cite a CIP study (accessed December 30, 2004):

APPENDIX A: ISLAM a PPT compiled by Leah G. Stambler, Ph.D.

Pre-Test Your Knowledge of Islam

- What are the pillars of Islam? What does the word "Islam" mean? Who are the prophets and the angels? Take this quiz and see how much you know about the religion of the world's 1.3 billion Muslims.
- Click on the above link in this slide.
- Please answer all questions before moving forward to the end of the quiz.
- Save your score.
Islam

Arabic: al-islām
"the submission to God" is a monotheistic faith, one of the Abrahamic religions, and the world's second-largest religion.

Islamic Symbols

“The star and crescent is the best-known symbol used to represent Islam. It features prominently on the flags of many countries in the Islamic world, notably Turkey and Pakistan. Surprisingly, the symbol is not Muslim in origin. Rather, it was a polytheistic icon adopted during the spread of Islam, and its use today is sometimes controversial in the Muslim world.”

“It is important to keep in mind that Islam has few traditional symbols, and the crescent moon and star are not ones that are recognized as traditional symbols by Muslims. The symbol is due to cultural diffusion and the spread of Islam to the Ottoman Turks who ruled a large area and also put the crescent moon and star symbol on their flag. It has since become associated with Islam”.

http://www.religionfacts.com/islam/symbols.htm
The crescent and star are said to be Islamic symbols, but flag historians’ citations state that they were the insignia of the Ottoman empire, not of Islam as a whole.

http://www.religionfacts.com/islam/symbols.htm

Table 2.1
Countries with Largest Muslim Populations

<table>
<thead>
<tr>
<th>No</th>
<th>Country</th>
<th>Number of Muslims</th>
<th>Continent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indonesia</td>
<td>181,014,040</td>
<td>Asia</td>
</tr>
<tr>
<td>2</td>
<td>Pakistan</td>
<td>130,976,937</td>
<td>Asia</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>121,186,924</td>
<td>Asia</td>
</tr>
<tr>
<td>4</td>
<td>Bangladesh</td>
<td>112,629,659</td>
<td>Asia</td>
</tr>
<tr>
<td>5</td>
<td>Turkey</td>
<td>64,274,388</td>
<td>Europe</td>
</tr>
<tr>
<td>6</td>
<td>Iran</td>
<td>60,660,152</td>
<td>Asia</td>
</tr>
<tr>
<td>7</td>
<td>Egypt</td>
<td>58,062,710</td>
<td>Africa</td>
</tr>
<tr>
<td>8</td>
<td>Nigeria</td>
<td>45,593,204</td>
<td>Africa</td>
</tr>
<tr>
<td>9</td>
<td>Algeria</td>
<td>35,599,204</td>
<td>Africa</td>
</tr>
<tr>
<td>10</td>
<td>Morocco</td>
<td>28,739,971</td>
<td>Africa</td>
</tr>
<tr>
<td>11</td>
<td>Afghanistan</td>
<td>26,703,553</td>
<td>Asia</td>
</tr>
<tr>
<td>12</td>
<td>Sudan</td>
<td>25,384,240</td>
<td>Africa</td>
</tr>
<tr>
<td>13</td>
<td>Iraq</td>
<td>22,398,720</td>
<td>Asia</td>
</tr>
<tr>
<td>14</td>
<td>Saudi Arabia</td>
<td>21,983,262</td>
<td>Asia</td>
</tr>
</tbody>
</table>
Major Muslim Countries of the World
(% of population)
ROLE OF AN ISLAMIC STATE AND DUTIES OF CITIZENS

http://islamislife.org www.understanding-Islam.org

- “Restoring and clarifying the rules of punishment in Shariah.”
- “Separating the Islam-based knowledge from other types of knowledge (philosophy, mysticism, etc.)”
- “Making understanding of Islam easier and more straightforward (but not simplistic)”
- “Concept of Itmam Al-Hujjah (as described above) and its implications for the present day.”

Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy

HOW DOES GLOBAL RELIGIOUS ADHERENCE COMPARE, 2007-2009?

Ethnicity of Muslims

- African-American: 30%
- Arab: 25%
- South-Central Asian: 33%
- Southeast Asian: 2%
- European: 2%
- Other: 5%
- African: 3%

Ethnicity of Muslims in America:

http://www.nvcc.edu/home/lshulman/Religions/Islam/index.html

Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy

The Qur’an, the Sunnah and the Hadith

http://islamislife.org

• The Qur’an and the Sunnah hold a pivotal place as the source of understanding of religion.
  – They do not abrogate each other.
  – They cannot be overruled by Hadith.
  – They contain the entire religion.

• Hadith can
  – explain these sources or
  – provide the best example set by the Holy Prophet (pbuh)
  – not abrogate or contradict the basic body of religion
  – not add to the content of religion
  – explain the Holy Qur’an and the Sunnah, and
  – dictate sense and reason.

The Islamic Worldview

To Al-Faruqi and Al-Faruqi (1986), “The Islamic worldview is based mainly on Tawhid (the Unity of God) as a general view of reality, of truth, of the world, of space and time, of human history” (p. 74). Rashid (1990) suggests that the Islamic worldview consists of “(a) Inmate goodness of human beings, (b) Moral absolutism, (c) Unitary concept of Creator, (d) Brotherhood based on faith, (e) Women as mothers of civilization, (f) Domination of the earth is for Allah (God), and (g) Unity of knowledge” (p. 19).
“The Qur’an is the basis of all Islamic understanding”

http://www.islamislife.org

CONCEPTS FROM THE QUR’AN

http://islamislife.org

• Purpose of Religion
  – “The purpose of our lives is to please God; which leads us to Paradise”
  – “Successful is he who has cleansed himself.” (87:14).

• The Concept of Guidance
  – “Human beings have not been created blind and ignorant”
  – “Have we not shown him the two ways [that he could understand the good and the evil]? (90:10).

• Source of Religion
  – “The Prophet or messenger of God is the solitary source of the religion”

• Authority of the Qur’an
  – “The Qur’an is the fountainhead of religious authority.”
  – “And to you (O Prophet pbuh), we have revealed a Book with the truth confirming what the previous scriptures (say about it) and it stands as Guardian over them……… (5:48)
THE SUNNA AND ISLAMIC LAW

“The Quran also tells us to obey the Prophet Muhammad (Surah an-Nisa verse 59), to take what he allows and refrain from what he prohibits (Surah al-Hashr verse 7), to follow his judgments (Surah an-Nisa verse 65), and to abide by his decisions (Surah al-Ahzab verse 36).”

“It also tells us that some of its verses are ambiguous in meaning (Surah Ali Imran verse 7), and that the Prophet Muhammad will explain the meaning of the revelation (Surah an-Nahl verse 44). All of this is the domain of the Sunna.”

“The Sunna records what the Prophet Muhammad said, did, and silently allowed. It shows us how he put the Quran into action. It tells us what he commanded, allowed, prohibited, judged, and decided. And it informs us how he explained the Quran.”

“The Sunna is an important and necessary source of Islamic law.”


Six Basic Beliefs Shared By All Muslims:

“Belief in God, the one and only one worthy of all worship. God is described in Sura al-Ikhlas, (chapter 112)

Belief in all the Prophets and Messengers (sent by God).

Belief in the Books sent by God.

Belief in the Angels.

Belief in the Day of Judgment (Qiyamah) and in the Resurrection.

Belief in Destiny (Fate) (Qadaa and Qadar in Arabic). (Note that this does not mean one is predetermined to act or live a certain life. God has given the free will to do and make decisions.)

www.baydenocuu.org/Islam.htm
In some verses of the Quran, God almighty swears by the Quran itself:

**Chapter 36, Verses 2-4:**
I swear by the Quran full of wisdom, most surely you are one of the messengers, on a right way.

**Chapter 38, Verses 1-2:**
I swear by the Quran, full of admonition, nay! those who disbelieve are in self-exaltation and opposition.

**Quran, Chapter 43, Verses 2-3:**
I swear by the book that makes things clear, surely we have made it an arabic quran that you may understand.

**Quran, Chapter 44, Verses 2-3:**
I swear by the book that makes manifest (the truth), surely we revealed it on a blessed night surely we are ever warning.

---

**Quranic Verses about Hijab**


"O you Children of Adam! We have bestowed on you raiment to cover your shame as well as to be an adornment to you. But the raiment of righteousness, that is the best. Such are among the Signs of Allah, that they may receive admonition." (Quran 7:26)
Quranic Verses about Hijab continued

"And say to the believing women that they should lower their gaze and guard their modesty; that they should not display their beauty and ornaments except what must ordinarily appear thereof; that they should draw their veils over their bosoms and not display their beauty except to their husbands, their fathers, their husbands’ fathers, their sons, their husbands’ sons, their brothers, or their brothers’ sons or their sisters’ sons, or their women or the servants whom their right hands possess, or male servants free of physical needs, or small children who have no sense of the shame of sex, and that they should not strike their feet in order to draw attention to their hidden ornaments. And O you Believers, turn you all together towards Allah, that you may attain Bliss." (Quran 24:31).

"A Muslim woman wears hijab for the simple reason that God has commanded it in the Quran and Sunna."

"O Prophet, tell your wives and your daughters and the women of the believers to draw their cloaks close round them (when they go abroad). That will be better, so that they may be recognised and not annoyed. Allah is ever Forgiving, Merciful." (Quran 33:59)
HOW TO WRAP
Hijab

http://www.2hijab.com/how-to-wrap-hijab-01.asp

http://www.ezsoftech.com/akram/hijab.asp

Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy

We.Love.Hijab


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THERE ARE 5 BASIC TENETS OF ISLAM

www.baydenocuu.org/Islam.htm

"Shahadah": The Testimony that there is none worthy of worship except God and that Muhammad is his messenger.

"Salah": Establishing of the five daily Prayers (salah).

"Zakat": The Giving of Zakaah (charity), which is one fortieth (2.5%) of the net worth of savings kept for more than a year, with few exemptions, for every Muslim whose wealth exceeds the nisab, and 10% or 20% of the produce from agriculture. This money or produce is distributed among the Muslim poor.

"Ramadhan": Fasting from dawn to dusk in the month of Ramadan (sawm).

"Hajj": The Pilgrimage (Hajj) to Mecca during the month of Dhul Hijjah, which is compulsory once in a lifetime for one who has the ability to do it.

Tenets of Islam

While faith in God, the Qur’an, and the Prophet Muhammad unite Muslims in their common belief, the five pillars of Islam provide a unity of practice in the midst of rich diversity. The five pillars are the common denominator, the five essential obligatory practices that all Muslims must follow (Esposito, 1995). They are (a) shahadah (the profession of faith), (b) salat (prayer), (c) zakat (almsgiving), (d) sawm (fasting), and (e) hajj (pilgrimage). To understand the significance as well as the influence of each of these tenets on the lives of Muslims, I provide the following more detailed information.

QUOTE FROM AHMED NIZAR KOBEISY’S TEXT

Kobeisy p. 22

http://www.euro-islam.info/country-profiles/united-states/
QUOTE FROM AHMED NIZAR KOBEISY’S TEXT

Shahadah (Profession of Faith)

For Muslims, a declaration of faith identifies the belief that there is no god but God and that Muhammad is the last Messenger (Al-Faruqi, 1994). By uttering this declaration, one becomes a follower of Islam (Farah, 1994). It also makes Muslims aware that only God has supreme power and that it is their duty to emulate the exemplary life of the Prophet Muhammad (Al-Faruqi, 1986; Alatech, 1996; Farah, 1994). Shahadah is the first few spoken words a newborn baby hears and the last a dying person would speak (Farah, 1994). It, therefore, acts as a source of identity. It also helps bind Muslims in the community of faith (survival) and at the same time helps overcome barriers of race, ethnicity, national origin, language, or culture (Ahtareb, 1996; Haddad & Lummiss, 1987).

Kobeisy p. 22

“Whoever works righteousness, whether male or female, while he (or she) is a true believer, verily to him we will give a good life, and we shall pay them certainly a reward in proportion to the best of what they used to do.”

Quran 16:97

Shahadah

http://www.islamislife.org
The Muslim creed in English:
lā ilāhā illā-Ilāhu; muhammadur-rasūlu-Ilāhi

www.baydenocuu.org/Islam.htm

There is no deity except Allah and Muhammad is the Messenger of Allah.
http://www.wordiq.com/definition/Shahadah

“Honest recitation of the shahādah once, in Arabic, in front of two Muslim witnesses, is all that is required for a person to become a Muslim.”
http://www.wordiq.com/definition/Shahadah

www.icnacanada.org/.../prophetmuhammadarabic.jpg
www.pakvisions.com/forum/islam-l-ummat-e-musl..
QUOTE FROM AHMED NIZAR KOBEISY’S TEXT
Kobeisy p. 22-3

Salat (Prayer)

Salat is the second pillar of Islam and the supreme act of worship in Islam (Al-Faruqi, 1984). Many Muslims disagree with the translation of the Salat into prayer. Al-Faruqi (1984) states, “It is mistakenly referred to as "prayer." The latter is an act of adoration or worship possible in any shape, form, language or condition... Per contra, Salat may be performed only at certain times, in a prescribed way, under certain conditions” (p. 142).

Salat in the Arabic language means “connection.” The sole purpose of salat in Islam is to connect Muslim worshipers with their Lord. There are five daily prescribed prayers: at dawn, at midday, in the afternoon, after sunset, and at night. These prayers are short and require bowing and prostration. It is common to see devout Muslims praying additional voluntary prayers. Muslims may pray anywhere provided that the place is clean and that there are no distractions, preferably in congregation, facing Mecca. They are required to worship as a community on Fridays at midday and on two major holidays. The Qur’an describes the benefit of prayer as “restraints from shameful and evil deeds” (Qur’an 29:45, trans. Ali, p. 1164). Altareb (1996) states, “If Muslims dutifully practice Salat, then they can not stray too far off God’s path, for they will have to face God during dawn, midday, afternoon, after sunset, and night” (p. 32).

The performance of salat, therefore, allows Muslims to be mindful of the right behavior in the midst of worldly activities. It also provides the strength and support to individuals that help them deal with difficult situations and challenges of life.
The Right Way To Pray

• 1-Intention
• 2- Takbeer
• 3- Opening Supplications
• 4- Recitation of Suratul Fatiha
• 5-Recitation after Suratul Fatiha
• 6- Bowing (Rukoo’)
• 7- Straightening up from Rukoo’:

• 8- Prostration (The sujud)
• 9- Rising from Sajdah
• 10- The second Sajdah
• 11- The Second Rak'a
• 12- The First Tashahud
• 13- The Second Tashahud
• 14- The Salution (Tasleem)
Leah G. Stambler, Ph.D.

based on Counseling American Muslims by Ahmed Nizar Kobeisy

www.afghanpix.com/15.html


www.mirror.co.uk/.../
QUOTE FROM AHMED NIZAR KOBEISY’S TEXT

Kobeisy p. 23

Zakat (Charity)

The third pillar of Islam is also referred to as “almagiving,” “poor tax,” or “poor-tax” and literally means the purification of one’s own self from greed and miserliness while purifying one’s own wealth through giving to the poor. It also serves as an “expiration” or “purification” of what the Muslim retains of material possessions (Ghazal, 1994). By giving to the poor of one’s own honest earnings, seeking no return or reciprocity, the Muslim is doing both an act of worship and an act of community. This pillar helps the rich show their compassion and, at the same time, rid the poor of ill feelings against those who are well off. According to Sachedina (1997), “In a number of poor Muslim countries this beneficence provided by wealthy individuals has underwritten badly needed social services for those who can not afford them” (p. 33).

The institution of niqah gives the person, giving or receiving, a sense of worth and value, thus connecting with and belonging to the community.

Zakat: A Symbol of Islamic Social Justice


Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy
ZAKAT continued


• “Zakat is the 3rd pillar of Islam and is the determined share of wealth prescribed by Allah S.W.T. to be distributed to the 8 categories entitled to receive it. Zakat as translated from Arabic means growth, multiplicity, fertility, cleansing, full of baraqah. It is an ibadah in terms of wealth. A symbol of Islamic social justice, Zakat cleanses your soul, purifies and grows your wealth while eradicating poverty.”

Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy

QUOTE FROM AHMED NIZAR KOBEISY’S TEXT

Fasting means abstinence from food, drinks, and sensual pleasures, particularly sexual intercourse, from dawn until sunset during the month of Ramadan, which is the ninth month of the Islamic lunar calendar. In the month of Ramadan, the Prophet Muhammad received his first revelation of the Qur’an. Since the lunar calendar is some ten days shorter than the solar year, the fasting and all Muslim festivals occur in different seasons. Fasting is prescribed only for every healthy, adult Muslim. Exempted from fasting are children, the sick, and those for whom fasting may constitute physical or mental harm, such as travelers as well as hard laborers. Esposito (1995) writes, “The primary emphasis is not so much on self mor-

Kobeisy p. 23

Muslims are also encouraged to be more charitable during Ramadan, a practice that brings an influx of beggars to Jakarta at this time of year.


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www.submission.org/YES/child2.htm
QUOTE FROM AHMED NIZAR KOBEISY’S TEXT  continued

tification as such but rather on spiritual self-discipline, reflection, and the performance of good works” (p. 246). The end of Ramadan is marked by a great festival, Eid Ul-Fitr, after which life returns to normal. Eid Ul-Fitr is one of the two greatest religious holidays in Islam. Family members, relatives, and friends join to feast and exchange gifts in a celebration that lasts in many cultures for three days (Esposito, 1995).

In addition to strengthening one’s relationship with God, disciplining one’s soul, and preparing the person for possible future hardships, fasting also makes the rich empathize with those who are less fortunate and feel for a month what they always go through. Fasting in community and celebrating the end of fast also in community along with all Muslims of the world help bring Muslims into a unity both religiously and socially.

Fasting makes people aware of their abilities and discipline, thus giving them a sense of confidence to make other changes in life as they become necessary.  
   Kobeisy p. 22

Leah G. Stambler, Ph.D.

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www.whatiseid.com/ramadan.html

Muslims in Indonesia performing the extra prayers held every night during Ramadan.

www.athreedayjourney.com/.../ramadan/
Those who are sick, elderly, traveling, or women who are pregnant or nursing are permitted to break their fast and make up the missed days at a later time. If they are unable to do this, they must feed a needy person for every day missed. Children are required to begin fasting from the age of puberty.

A child prepares food for the breaking of the fast in Pakistan.

www.whatiseid.com/ramadan.html

A RAMADAN POEM
THE HOLY MONTH OF RAMADAN
FOR THE MUSLIMS (SUBMITTERS) HAS BEGUN
PRAISING GOD THROUGH THE DAY,
FROM DAWN TO DUSK WE FAST AND PRAY.
WE PAY ZAKAT (CHARITY) FOR THOSE IN NEED,
TRYING OUR BEST TO DO GOOD DEEDS.
WHEN THE SUN HAS SET, AND DAY IS DONE-
I'LL BREAK THIS CHAIN, BUT ONLY ONE.
BY THE END OF RAMADAN, THIS WHOLE CHAIN WILL
BE ALL GONE!
IT'S TIME TO CELEBRATE AND SHARE IN THE FUN!!!

www.submission.org/YES/child2.htm
http://www.nancymusic.com/Ramadan.htm
“Historically, Saudi Arabia has occupied a special place in the Islamic world, for it is towards Makkah and Islam's most sacred shrine, the Ka'abah, located in the Holy Mosque there, that Muslims throughout the world turn devoutly in prayer five times a day.”

www.saudiembassy.net/.../Islam
WHAT IS THE CONTEMPORARY HAJJ?

www.usnews.com/.../photos

• Hajj rituals re-enact the stories of Ishmael, Hagar, and Abraham, as well as visits to sites central to Muhammad’s life.

• Pilgrims’ activities include
  – Circumambulating the Kaaba,
  – Walking between two nearby hills to commemorate Ishmael and Hagar’s wandering, and
  – Dipping their shawls, future burial shrouds, in the Well of Zamzam, which channels water from Mecca’s holy spring.

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WHAT IS THE ROUTE OF THE HAJJ?

SEE EXPLANATIONS THAT FOLLOW THIS SLIDE


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EXPLANATION OF THE ROUTE TAKEN BY PILGRIMS

• “1. Pilgrims perform cleansing rituals at designated stations outside Mecca. Men and women exchange their street clothes for hajj garments - stripping themselves of social distinctions and embracing their dedication to God.”

• “2. Among other rites, pilgrims circle the Kaaba, a shrine at the center of the Grand Mosque - built by Abraham and his son - seven times counterclockwise in a procession called the Tawaf. It symbolizes placing God's House at the center of their lives.”

• “3. On the first official day of the hajj, pilgrims take a three-mile journey into Mina, where they spend the night in a massive tent city.”

• “4. In the morning, pilgrims continue east to the Plain of Arafat, where Muslims believe Adam and Eve were reunited after leaving Eden. A daylong group vigil, in which pilgrims stand in the presence of God, marks the zenith of the hajj.”

• “5. At sundown, the hajj loops back toward Mecca, halting at a patch of hills called the Muzdalifah, where pilgrims stop for the night, participate in a nightlong vigil, and collect stones for the next day.”

• “6. At dawn, pilgrims cast pebbles at the Jamraat, three stone pillars that symbolize temptation - places where Satan tried to tempt Abraham from the path of God. They first throw seven stones at the largest pillar, and then stone the other two over the course of two or three days.”

• “7. Back in Mecca, pilgrims can perform the seven turns around the Kaaba one last time before heading home. The end of the hajj is celebrated with a three-day feast.”
"Muslim pilgrims have a meal in the plain of Arafat outside Mecca, Saudi Arabia on December 6, 2008. More than two million Muslims head to the holy city of Mecca, Saudi Arabia, to make the annual Hajj pilgrimage. All fit and financially able Muslims are expected to perform the Hajj at least once in their life. “(UPI Photo/Mohammad Kheirkhah).

"New safety measures were added to the Hajj, aimed at preventing stampedes that have killed hundreds in previous years."

"The pilgrims are marking the re-enactment of the trials of Abraham."

www.upi.com/...

Three men sitting down dressed in Ihram

Aerial view of Mecca lit up at night

WHAT IS THE HAJJ? continued

Makka ① (arrival and aqiqah)
Mecca ② (circling the Kaaba)
Mina (encampment)
Muzdalifah ⑤
Fajr of Mina
Plan of Mina
Plan of Arafah


Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy
The Enduring Call of Islam’s Holiest City
Mecca, Saudi Arabia
By Sara Dabney Tisdale
Posted November 16, 2007

www.usnews.com/.../photos/

Muslims circle the Kaaba during the hajj pilgrimage.
(Kazuyoshi Nomachi/Corbis)

MALCOLM X AT THE KA’ABA
http://roiword.wordpress.com/2008/12/06/malcolm-x-and-the-power-of-the-hajj

“Carrying my sandals, I followed the Mutawad.
Then I saw The Ka’ba, a huge black stone house in the middle of the Great Mosque. It was being circumambulated by thousands upon thousands of praying pilgrims, both sexes, and every size, shape, color, and race in the world. I knew the prayer to be uttered when the pilgrim’s eyes first perceive the Ka’ba. Translated, it is “O God, You are peace, and peace derives from You. So greet us, O Lord, with peace.” Upon entering the Mosque, the pilgrim should try to kiss the Ka’ba is possible, but if the crowds prevent him getting that close, he touches it, and if the crowds prevent that, he raises his hands and cries out “Takbir!” (“God is Great”) I could not get within yards. “Takbir!”.
HISTORICAL CONTEXT OF THE HAJJ

www.usnews.com/.../photos/

• “The birthplace of the prophet Muhammad, Mecca is the destination for some 3 million Muslims who each year undertake the pilgrimage known as the hajj. Beyond Mecca’s iconic imagery—tens of thousands of white-robed pilgrims swirling around the sacred Kaaba, a cubical shrine covered in thick black silk hand-embroidered with Koranic verses in golden thread—lies a spiritual power deeply rooted in the city’s history.”

• “While Mecca today is the holiest city to Muslims, it was an oasis town and major crossroads on Arab trade routes long before Muhammad’s birth in the year 570. Governed by merchants, it witnessed constant blood feuding among nomadic, kinship-based tribes that roamed the surrounding desert. Yet Mecca was also a thriving religious center full of shrines, says F. E. Peters, author of The Hajj: The Muslim Pilgrimage to Mecca and the Holy Places. ‘How far back it goes, we don’t know.’ ”

HISTORICAL CONTEXT OF THE HAJJ continued

www.usnews.com/.../photos/

• “But for a month every year, desert clans declared a moratorium on fighting and embarked on a pilgrimage, descending on Mecca to trade and worship at the shrines of 360 polytheistic idols. The city’s religious focal point was a hollow stone temple, the Kaaba, surrounded by effigies but devoted to the powerful pre-Islamic god Allah (which in Arabic means ‘the god’).”

• “After Muhammad rose to power, he swept the idols from around the Kaaba and dedicated its space, and the hajj, to Allah, now God, the only recognized deity for Islam’s monotheistic believers. The hajj is the once-in-a-lifetime obligation of all Muslims. The journey serves to remind them of their mortality, to foster spiritual unity, and to commemorate Islam’s beginnings.”
HISTORICAL CONTEXT OF THE HAJJ continued

• “Those beginnings lie in the ancient story of Abraham and his first son, Ishmael. … and his mother, Hagar, [who] wandered the desert in exile, searching for water.”

• “Eventually, God commanded a spring to appear, saving the two from death. According to Islamic tradition, Abraham later visited the spot and erected a temple to serve as God’s house on Earth: the Kaaba. Today, the Kaaba stands empty, save for lamps to illuminate its interior.”

• ***NOTE: Reportedly, Ishmael was disruptive in the camp because of his “mocking” ways.

THE GREAT MOSQUE AND KA’ABA

• “Surrounding the well and the Kaaba is the Great Mosque, now an air-conditioned supercomplex. Yet Mecca’s ancient spiritual power endures, manifest in the Kaaba—rebuilt at various points because of flooding, political strife, and the wearing of time.”

• “At one corner of the Kaaba is the revered Black Stone, said to be from God (some say it is a meteorite). Pilgrims able to get close pause to touch or kiss it. It exists in pieces, supposedly darkened by contact with millions of sinners.”

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Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy
THE GREAT MOSQUE AND KA'ABA

http://islamislife.org

"Masjid al-Haram, the Sacred Mosque. The Ka'bah at the center is the ancient house of worship built by Prophet Abraham (peace be upon him)"

Leah G. Stambler, Ph.D. based on Counseling American Muslims by Ahmed Nizar Kobeisy

Post-Test Your Knowledge of Islam


- What are the pillars of Islam? What does the word "Islam" mean? Who are the prophets and the angels? Take this quiz and see how much you know about the religion of the world's 1.3 billion Muslims.
- Click on the above link in this slide.
- Please answer all questions before moving forward to the end of the quiz.
- Compare your pre- and post-test scores.
WHAT HAVE YOU LEARNED?

1.

2.

3.

4.

5.

CREATE 10 QUESTIONS TO ASK SOMEBODY ELSE

1

2

3

4

5

6

7

8

9

10
Quranic Study Classes
Young Enlightened Submitters

• Click on the class you want to read
• YES-1, God, our creatorYES-
• 2, Fasting RamadanYES-
• 3 Satan, the DevilYES-
• 4 Praising GodYES-
• 5 One ReligionYES-
• 6 The HeiferYES-
• 7 Kinds of PeopleYES-
• 8 Noah’s ArkYES-
• 9 AngelsYES-
• 10 The SleepersYES-
• 11 The ParentsYES-
• 12 My 1st dozenYES-
• 13 Friday PrayerYES-
• 14 AdamYES-
• 15 Creation/EvolutionYES
• 16 The BeeYES-
• 17 Jonah and the WhaleYES-
• 18 The Prophet JobYES-
• 19 5 Pillars

Children Activities for the Month of Ramadan
http://www.submission.org/YES/child2.html

• Mosque Craft Mobile
• Ramadan Calendar Chain
• Charity Decorated Jar
• Ramadan Lantern (Fanoos)
• Simple Night sky and moon Project
• Sunset View of the sky and Horizon
• Submission Song, The Five Pillars
REFERENCES


• www.zawaj.com/…/
• http://www.euro-islam.info/country-profiles/united-states/
• www.mirror.co.uk/…/
• www.falsemessiahs.com/…/islam/beliefs.htm
• www.baydenocuu.org/Islam.htm
• www.pakvisions.com/forum/islam-l-ummat-e-musl…
• www.afghanpix.com/15.html

REFERENCES continued

• www.saudiembassy.net/…/Islam/
• http://islamislife.org/
• www.submission.org/YES/child2.htm
• www.whatiseid.com/ramadan.html
• www.athreedayjourney.com/…/ramadan/
• islamgreatreligion.wordpress.com/…/
• www.usnews.com/…/photos/
• www.parsquran.com/eng/articles/swear.htm
Online academic sources

- *Encyclopedia of Islam (Brill) Online Demo Page*
- *Encyclopedia of Islam (Overview of World Religions)*
- *Resources for Studying Islam* (Department of Islamic Studies, University of Georgia)

Directories

- Islam in *Western Europe, the United Kingdom*, and *South Asia* (Martin Riexinger, University of Freiburg)
- *Dmoz.org Open Directory Project: Islam* (a list of links with information about Islam)
- *Dmoz.org Open Directory Project: Contra Islam* (a list of links critical of Islam)
APPENDIX B: SUGGESTED LINKS FOR ADDITIONAL REFERENCES

http://www.cmes.arizona.edu/outreach/resourcelists_Grades6-8SocialStudies.php

http://www.arizona.edu/

CENTER FOR MIDDLE EAST STUDIES

Lending Library > Resource Lists > Grades 6-8 Social Studies

Resource List: Grades 6-8 Social Studies

Jump to: Lesson Plans & Other Resources | Books | Multimedia | Download PDF

Denotes a MEOC Award Winner

Lesson Plans & Other Resources:

"Arabs in America Unit"
This Lesson plan is from “The Arab World” series. Slides, information, and suggestion for projects to help students learn more about the Arab-American community in the United States.

Archaeology: Digging Deeper to Learn About the Past
By Judith Cochran
A (published) middle school unit of study.

Country Themed Culture Kits
Each kit comes with artifacts and activities for teaching about a specific country.
Cyprus and Turkey: Conflict Resolution Curriculum
A lesson – on CD – developed by a middle school teacher on a CMES-sponsored Teach Cyprus program. Includes a simulation for students, who work to resolve some of the issues surrounding the Greek-Turkish conflict over Cyprus.

“Introduction (to the Arab World)”
This Lesson plan is from “The Arab World” series. Slides, lessons, artifacts (including headgear) to teach about the Arabs and their culture.

The Islamic Year
By Noorah Al-Gailani and Chris Smith
A book of activities, crafts, and recipes that a teacher can do with children to help them understand the meaning behind Muslim holidays and traditions.

“A Moroccan Specialty: Pigeon Pie, Camel Rides, and Mosques: A Virtual Tour of Morocco’s Landscape and Culture”
By Jeannine Kuropatkin and Cheryl Wiens.
A 2-day middle school lesson – on CD – developed by teachers after a CMES-sponsored trip to Morocco. It’s wonderfully detailed with pictures, worksheets and activities for students and detailed explanations for teachers.

“Music and Dance Unit”
This Lesson plan is from “The Arab World” series. Slides, pictures, cassette, and explanations of Arab music and instruments. The unit itself is designed for a higher level (maybe high school), but it can be easily adapted for a Middle School classroom.
North Africa: Morocco
Stencil set of Moroccan designs with a map and explanations of Moroccan culture.

Persepolis Recreated
An amazing photo/picture book and DVD set that recreates the ancient Persian city of Persepolis, one of the greatest cities of the ancient world until it was burned by Alexander the Great. It would give students a feel for the glories of an ancient civilization while countering some of the negative (and totally false) images in the movie “The 300” of the Persians as barbaric and subhuman.

Fun with Hieroglyphs
By Catharine Roehrig
Art kit put out by the Metropolitan Museum of Art. It is a set of alphabet stamps for the Egyptian hieroglyphic alphabet with a book of explanations.

Silk Road Encounters
Teachers’ guide, sourcebook, CD of lesson plans and other materials to help your students explore the Silk Road.

“Storytelling and Games Unit”
This Lesson plan is from “The Arab World” series. Slides and game cards teach about and give the rules for Arab games.
“Virtual Field Trip to Turkey”
By Kate Mahady.
A presentation (on CD) that explores Turkey. This can be used by individual students or as a presentation for the whole class (with instructions for teachers provided).

Books:

**Festivals of Egypt**
By Jailan Abbas
A description of the different holidays celebrated in Egypt.

**Suleyman and the Ottoman Empire**
By John Addison
A brief overview of the subject along with a series of short, primary source documents.

**Children of War: Voices of Iraqi Refugees**
By Deborah Ellis
This book provides an opportunity for students to read interviews with Iraqi refugee children and see how the war has affected their lives.

**Afghanistan: The Land**
By ErinnBanting
Photos and descriptions of Afghanistan.
The Illustrated Encyclopedia of Arabia
By Mary Beardwood

This detailed encyclopedia entry focuses on the geography, cultures, and, especially, the flora and fauna of the Arabian Peninsula. With many photographs, charts, maps, figures, asides, this exhaustive and beautifully illustrated text will answer every question you never knew that you had about Arabia on subjects from pearling to fossils, migratory birds to the many uses of the date palm. The sheer breadth of information will eliminate the narrow geographic and social stereotypes so many students have about the Middle East.

Lebanon A-Z: A Middle Eastern Mosaic
By Marijean Boueri, Jill Boutros, and Joanne Sayad

An introduction to Lebanon’s history and culture seen through the eyes of an eleven-year-old boy and his friends.

Egypt and the Middle East
By Daniel De Bruycker and Maximilien Dauber

Beautifully illustrated with cartoons and photographs and easy to reference (question and answer format), this book would be easy for students to use in learning about the basic history of the Middle East.

Muhammad
By Demi

A beautifully illustrated book on the beliefs of the Muslim religion for late elementary and middle school children.
Muhammad and the Arab Empire
By John Duckworth
A brief overview of the subject along with a series of short, primary source documents.

Great Muslim Philosophers and Scientists in the Middle Ages
A series of six books, each on a different medieval Muslim scholar.

Tales from Ancient Egypt
By George Hart

Celebrate Ramadan and Eid Al-Fitr with Praying Fasting, and Charity (National Geographic, “Holidays Around the World” series)
By Deborah Heiligman
Although it is at a low reading level, this book is even interesting to adults due to its great pictures and clear explanations. (It is National Geographic book, so the photography is amazing!)

Holy Cities: Jerusalem and Holy Cities: Mecca
Maps, photos, and descriptions of each of these two religious centers.
Celebrating Ramadan
By Diane Hoyt-Goldsmith
Bright color photographs help tell the story of a 4th grade Muslim boy living in New Jersey as he celebrates Ramadan.

Understanding Islam and the Muslims
By Islamic Affairs Department of the Embassy of Saudi Arabia
An introduction to Islam in a brief booklet with bright photographs.

The Iranian Revolution
By Brendan January
This book is part of the Pivotal Moments That Changed the World series, focusing on the Iranian revolution of 1979. Instead of succumbing to the "clash of civilizations" argument, it delves into the deeper causes of the Iranian revolution, and brings the story forward to describe how the forces that triggered the revolution continue to play out in the troubled relationship between the United States and Iran today. This book is a welcome entry to the corpus of research literature for younger people.

Iraq
By Dale Lightfoot

The Apprentice's Masterpiece: A Story of Medieval Spain
By Melanie Little
A young adult novel set in 14th-century Spain, tells the story of a family with a secret at a time when the Inquisition brings intolerance and torture. Written in elegant free verse this is a
dramatic story set in a troubling time.

Mosque
By David Macaulay
If you liked his books/films about the building of a medieval cathedral or fortress, you’ll like this one about the construction of a 16th century Ottoman mosque.

Inside Story: A 16th Century Mosque
By Fiona MacDonald and Mark Bergin
Detailed illustrations and clear explanations make this a terrific resource book with information about the building, religious background, and history surrounding the construction of a mosque.

Extraordinary Women from the Muslim World
By Natalie Maydell and Sep Riahi
This book introduces readers to 13 Muslim women in history who have lived extraordinary lives and influenced their communities in a positive way, often overcoming extreme hardship and inaccurate stereotypes that have been placed on the role of women in Islam. In addition to showing the impact these women have had throughout the years, Extraordinary Women from the Muslim World seeks to make a difference in the lives of Islamic women today, inspiring them to fervently pursue their goals. All proceeds from the special edition hardback series will be donated to Islamic Relief to benefit the women and children of Sudan.

The Arabs in the Golden Age
By Mokhtar Moktefi and Veronique Ageorges
Nicely illustrated, easy-to-reference account of Arab history.
Islam
By Sue Penney

From the “Introducing Religions” series, this gives an overview of the Muslim faith.

The Grand Mosque of Paris: A Story of How Muslims Rescued Jews During the Holocaust
By Karen Gray Ruelle and Deborah DurlandDeSaix

When the Nazis occupied Paris, no Jew was safe from arrest and deportation. Few Parisians were willing to risk their own lives to help. Yet during that perilous time, many Jews found refuge in an unlikely place—the sprawling complex of the Grand Mosque of Paris. Not just a place of worship but a community center, this hive of activity was an ideal temporary hiding place for escaped prisoners of war and Jews of all ages, especially children. Beautifully illustrated and thoroughly researched.

Historical Atlas of Islam
By Malise Ruthven and AzimNanji

Traveling Man: The Journey of Ibn Battuta, 1325-1354
By James Rumford

The true story of the travels of 14th century Arab explorer Ibn Battuta. Beautifully illustrated.
Foods of Iran
By Barbara Sheen
Beautiful photographs and clear prose show a lot about Iranian culture through a description of the food. There are recipes, cultural descriptions, and details about how the food is grown and sold.

The Travels of Benjamin of Tudela
By Uri Shulevits
A fictionalized account of a Spanish Jew, who explored the Middle East and North Africa in the twelfth century (a century before Marco Polo). It’s nicely illustrated and in the form of short stories, a book you could read aloud to the class.

Mesopotamia
By Jane Shuter
A beautifully illustrated, well organized short book about Mesopotamia from the “Excavating the Past” series.

Islamic Design: A Genius for Geometry
By Daud Sutton
Focusing on Islamic geometric patterns, simple and complex, man-made and in nature, this book offers unique insight into Islamic culture.

Travellers and Explorers
An illustrated book that gives an overview of notable explorers from the Middle East.
Seven Wonders of the Ancient Middle East
By Michael Woods and Mary B. Woods
A nicely illustrated book about the ancient Middle East. It provides history of the societies of the time.

The Tomb of King Tutankhamen: Unearthing Ancient Worlds
By Michael Woods and Mary B. Woods
Nicely illustrated and contains great photographs, this book gives a lot of history about King Tutankhamen as well as ancient Egypt in general.

Multimedia:

VHS format. 50 min. each - 4 videotapes.

Various Discovery Channel specials.
DVD format. 60 minutes each.

Families of Egypt
Explores the family lives of two Egyptian children.
DVD format. 30 min.
I Will Not Be Sad in This World (2001).
"Portrait of a 94-year-old Armenian woman’s life from the genocide through her childhood in a Lebanese orphanage through her life in America."
56 min. VHS and DVD formats available.

Inside Mecca
"A National Geographic special about the Muslim pilgrimage and its rituals."
60 minutes.

Islam: A Pictorial Essay in Four Parts
"Four sections include: “The Doctrine,” “The Life of the Prophet and the Faith,” “The History and Culture,” “The Arts and Sciences.”"
VHS format. 90 min.

Secrets of Lost Empires: Pyramid (2007)
"Nova special"
VHS format. 60 min.

A Team for Peace
"About a group of preadolescent soccer players, half of them Palestinian, half of them Israeli, who are put together to play on an all-star team to compete in an international youth soccer tournament."
DVD format. 45 min.
Young Voices from the Arab World: The Lives and Times of Five Teenagers (1998)

About everyday life in Arab society told through the eyes of five young people from Jordan, Lebanon, Egypt, Kuwait, and Morocco. (Note: A teachers’guide/resource book comes with it.)

VHS format. 30 minutes.


http://www.cmes.arizona.edu/outreach/lessonplans.php

CMES Lesson Plans

The following lesson plans were developed by master teachers and by CMES Outreach staff with the intent of giving area teachers a easy access point to Middle Eastern content material. All lesson plans are available for free download. Feedback on the classroom application of the materials is always appreciated.

Lesson Plan Quick Index By Grade Level

NEW CMES WebQuest Portal

Elementary Level

Children's Life in Armenia

Author(s): Lisa Adeli
Subject: Modern Armenia

Day in the Life of an Iranian Child
Author(s): Shauna Little
Subject: Modern Iran

Iranian New Year
Author(s): Shauna Little
Subject: Persian New Year

Librarian of Basra
Author(s): Shari Lossou-Lossavi
Subject: The Value of Literacy, Books, and Libraries, Modern Iraq

Nasreddin Hodja: Turkish and Middle Eastern Folklore Philosopher
Author(s): Joyce Daigle
Subject: Folk Tales, Ottoman Empire

Night of the Moon
Author(s): Laura Provencher
Subject: The Muslim Holiday Ramadan

Ramadan
Author(s): Lisa Adeli
Subject: The Muslim Holiday Ramadan

Read Aloud Literature
Author(s): Vicki Waxman
Subject: History, Culture

The Blind Man and The Elephant
Author(s): Laura Provencher
Subject: Perspectives, Folk Tale

Tiles For The Sultan
Author(s): Gili Sherman
Subject: Art
Middle/High School Level

A - F

**Agriculture and Food of Cyprus**
Author(s): Denise Reilly
Subject: Global Studies, Culture, Crop Production

**All About Cyprus Powerpoint Presentation**
Author(s): Lori Hare
Subject: Geography, Conflict Resolution, Modern Issues, Politics

**American Government Problem Based Learning: Create a Government for Iraq**
Author(s): David Rubin
Subject: Politics, Government, Conflict Resolution

**A Moroccan Specialty**
Author(s): Jeannine Kuropatkin and Cheryl Wiens
Subject: Modern Morocco

**Armenia in A Time of Change**
Author(s): Lisa Adeli
Subject: Modern Armenia, History

**Compare and Contrast the Empires**
Author(s): Brian Croone
Subject: Comparative Analysis of Ottoman Empire, Rome, and China

**Conflict Resolution**
Author(s): Callie Ward
Subject: Conflict Resolution, Geography, World History

**Conflict Resolution Mini Unit**
Author: Jennifer Turner
Subject: Conflict Resolution, Geography, World History, Current Events

**Cultural Diffusion: The Impact of the Middle East on the Balkans**
Author(s): Lisa Adeli
Subject: Middle Eastern Cultural, Religious, and Linguistic Influences in
Southeastern Europe

**Florentine and Ottoman Women of the 14th – 16th Centuries: A Comparative Curriculum Unit**
Author(s): Louise Forsyth
Subject: Status of Women, Ottoman Empire, Renaissance Florence

**Footprints Across Cyprus: A Virtual Fieldtrip of Cyprus' Landscape and Culture**
Author: Diane Godfrey
Subject: History, Modern Cyprus

**G - M Geography of Great Empires**
Author(s): Barbara S. Williams
Subject: Comparative Analysis of the Holy Roman and Ottoman Empires

**How History Shaped Literature and How Literature Changed History: Serbs and the Battle of Kosovo (Webquest)**
Author: Lisa Adeli, Ph.D.
Subject: Literature, Ottoman Empire and the Balkans

**In Search of Aphrodite’s Rock**
Author(s): Heather Kiser
Subject: Historic Cyprus, Geography, Literature, Legends, Mythology

**Introduction to Islam**
Author(s): Lisa Adeli
Subject: Muslim Beliefs, Culture

**Iranian Hostage Crisis**
Author(s): Julie Nedved
Subject: Politics, History, Modern Iran, Revolution

**Iran, Iraq - What’s the Difference**
Author(s): Lisa Adeli
Subject: Modern Iraq, Modern Iran, Culture

**Medieval Travels**
Author(s): Matt Lyons
Subject: History, Trade, Economy

Middle East Related Lesson Plan
Author(s): HortensiaCota
Subject: History and Geography

Mosaics of Cyprus
Author(s): Greg Burch
Subject: Art, History, Culture, Computer Skills

Mosque Design
Author(s): Jessica Silverman
Subject: Ottoman Empire, Mosque, Islam, Architecture

Muslims and the Holocaust
Author(s): Lisa Adeli
Subject: Holocaust, History

N - T
Ottoman Empire Unit
Author(s): Stacy Hercules
Subject: Ottoman Empire, History, Modern Turkey, Balkans

Ottoman Geography Lessons: “What’s in a Name?,” “Eye of the Beholder,” and “People and Places”
Author(s): Brenda Bonine
Subject: Modern Turkey, Modern Balkan States, History, Geography, Ethnicity

Ottoman Lyric Poetry
Author(s): Danita Dodson
Subject: World Literature, Poetry, English

Ottoman Travel Brochure
Author(s): Jeff Mann
Subject: Ottoman Empire, Ethnicity, Literature, History
Peace and Perspective Through Poetry
Author(s): Tina Anima
Subject: Palestinian - Israeli Conflict, Literature, Conflict Resolution

Ratios and Proportions in Turkey
Author(s): Martha Mallinger-Rubin
Subject: Mathematics, Conversion, Turkey

Reality Check: You Won’t See These Muslims on TV
Author(s): Benjamin Breault
Subject: Modern Issues, Culture, Religion, History

Teach Ottoman Empire
Author(s): Abbey McNair
Subject: Ottoman Empire, History, Culture

The Importance of Cyprus During the Crusades
Author(s): Jeremy Church
Subject: World History, Culture, Theology

The Ottoman Empire
Author(s): Lisa Adeli
Subject: Ottoman Empire, History, Social Structures

The Ottoman Empire News Broadcast
Author(s): Mary Lynne Fillmon
Subject: Ottoman Empire, History, Media, Journalism

Tuning in to Turning Points
Author(s): Lisa Adeli
Subject: Modern Middle East, History, Politics

Turkey
Author(s): Michelle Molnar
Subject: Turkish Culture and Geography
Turkey: Bridge Between East and West
Author(s): Carol Barnes and Barbara Martin
Subject: Geography, Culture

Turkey Joining the European Union
Author(s): Sigma Colon
Subject: Turkey and EU Relations, Politics, Conflict Resolution

Turkey Trip
Author(s): Chris Walden-Jones
Subject: Turkey, World History, Cultures of the Middle East, Math, Computer Skills

U - Z
United We Stand...Case Study: Cyprus
Author(s): Lori Hare
Subject: Greek-Turkish Cypriot Conflict, History, Politics, Conflict Resolution

Water in the Desert
Author(s): Jennifer Jenkin
Subject: Comparative Analysis of the Flooding of Rainbow Bridge and the Filling of the Dead Sea, History, Politics, Government, Environment

Virtual Field Trip to Turkey
Author(s): Kate Mahady
Subject: Modern Turkey, Ottoman Empire, History, Art, Culture

Elementary Level

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Children's Life in Armenia
Author(s): Lisa Adeli
Grades: 3 (can be adapted for other grades)
Students will learn about children’s lives in Vanadzor, Armenia, and will compare/contrast life in Armenia with life in the U.S. Students will conclude by writing a friendly letter to a child in Armenia.
Overview

Armenia Presentation

Presentation Notes

Day in the Life of an Iranian Child
Author(s): Shauna Little
Grades: 1-3
A lesson plan featuring a children’s story (illustrated by powerpoint pictures) and a series of learning centers with follow-up activities.

- Class Powerpoint Presentation
- Teacher Instructions
- Powerpoint Script
- Learning Center 1: Middle East Outline Map
- Learning Center 1: Student Instructions
- Learning Center 2: Student Instructions
- Learning Center 4: Persian Writing

Iranian New Year
Author(s): Lisa Adeli
Grades: K-5
A lesson on Iran’s biggest holiday (No Ruz), a holiday that lasts for weeks but centers around New Year’s Day, the first day of spring (Mar. 21).

- Class Powerpoint Presentation
- Teacher Instructions and Notes

The Librarian of Basra
Author(s): Shari Lossou-Lossavi
Grade: 4 (The lesson is written for fourth grade, but could definitely be modified/changed for the upper grade levels.)
A Reading Lesson that integrates Social Studies and Character Education. This lesson also has Geography, Writing, Science, and Math extension activities.

- [Lesson Plan](#)

Nasreddin Hodja: Turkish and Middle Eastern Folklore Philosopher

Author(s): Joyce Daigle

Grades: 3

This lesson introduces Nasreddin Hodja, the Turkish and Middle Eastern Folk Philosopher. It can be used in conjunction with other folk stories from around the world. Students already should have a working knowledge of folk tales, fables, as well as tall tales. Many stories can and should be shared with students about Hodja. Two of the Hodja tales have in turn been written into a reader’s theater script to help students work on their fluency.

- [Lesson](#)
- [Powerpoint](#)
- [Speech Script](#)
- [Hodja Borrows a Pot](#)

Night of the Moon

Author(s): Laura Provencher

Grades: K-5

This is a multi-disciplinary lesson based on the book “Night of the Moon,” which involves reading, social studies (learning about the Muslim celebration of Ramadan), science (phases of the moon), and Language Arts (homophones, homonyms).

- [Lesson](#)
- [Read-A-Loud](#)
- [Exploring Phases of the Moon](#)
- [Homophones & Homonyms](#)
Ramadan
Author(s): Lisa Adeli
Grades: 1-5
A lesson about the religion of Islam and the best-known Muslim holiday.

- Class Powerpoint Presentation
- Overview for Teachers
- Notes on Pictures
- Fact Sheet: Ramadan
- Supplementary Activities

Read Aloud Literature
Author(s): Vicki Waxman
Grades: K-5
A series of lesson plans designed to introduce primary school children to the history and culture of the Middle East.

- Lesson Plans for Various Grades

The Blind Man and The Elephant
Author(s): Laura Provencher
Grades: K-2
This lesson encourages students to see “the rest of the picture” in a situation. In making the situations relevant to K-2 (actually, all) students it creates a foundation serving as a launching pad for students to explore multiculturalism within a community, whether that be in a school, neighborhood, town, or national or global setting (particularly for older students). It serves as a basis for following lessons examining particular cultures and is intended to assist students in seeking other perspectives in assessing situations. Ultimately this provides a tool for avoiding conflict stemming from misunderstanding and even misinterpreting events.

- Lesson
Tiles For The Sultan
Author(s): Gili Sherman
Grades: 4-5
Students will learn about the history of Iznik tile for Turkey and make their own Iznik style pottery.

- Lesson

Secondary Level

A - F | Return to the top

Agriculture and Food of Cyprus
Author(s): Denise Reilly
Grades: High School
High school students will learn about the crop and livestock production of Cyprus and the effects of agriculture on the lives of the people in Cyprus in writing with 85% accuracy. This lesson will teach students how agriculture affects what people eat, and the students will try new and unique foods central to the culture of the Cypriots.

- Lesson Plan

All About CyprusPowerpoint Presentation
Author(s): Lori Hare
Grades: Middle School
A comprehensive Powerpoint presentation all about Cyprus. It goes into multiple aspects of Cypriot society with photos from Cyprus.

- All About CyprusPowerpoint

American Government Problem Based Learning: Create a Government for Iraq
Author(s): David Rubin
Grades: High School

This lesson plan focuses on the complicated government structure of post-war Iraq. Students get the chance to create a government for the country and must consider multiple religious and cultural factors while doing so.

- Lesson Plan

A Moroccan Specialty: Pigeon Pie, Camel Rides, and Mosques – A Virtual Tour of Morocco’s Landscape and Culture
Author(s): Jeannine Kuropatkin and Cheryl Wiens
Grades: Middle School

A lesson plan on Moroccan geography and culture with all kinds of materials: from PowerPoint photos and slides to worksheets and evaluations.

- Class PowerPoint Presentation
- Audio Files: Call to Prayer, Djemaa, Marhabat, Danse Atlas, Aid Zitoun
- Teacher: Map Answer Key
- Teacher: Slide Show Notes Key - p1, p2, p3, and p4
- Teacher: Regions Handout Key
- Teacher: Postcard 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
- Student: Middle East Map
- Student: Slide Show Notes - p1, p2, p3, and p4
- Student: Writing Assignment
- Student: Regions Handout

Armenia in A Time of Change
Author(s): Lisa Adeli
Grades: High School

The purpose of this lesson is to help students examine the development of a small country in a time of transition, in this case the breakup of the Soviet Union, which coincided with a national disaster and a war.

- Overview and Directions
- Fact Sheet 1
Compare and Contrast the Empires
Author(s): Brian Croone
Grades: High School
Students will compare and contrast the great empires of The Ottoman Empire, Rome, and China learning similarities and differences between the empires.

- Lesson Plan

Conflict Resolution
Author(s): Callie Ward
Grades: Middle School
Students will learn about conflict resolution by examining the conflict over the island of Cyprus.

- Lesson Plan

Conflict Resolution Mini Unit
Author(s): Jennifer Turner
Grades: High School
Students will learn about conflict resolution by examining the conflict over the island of Cyprus.

- Lesson Plan
Cultural Diffusion: The Impact of the Middle East on the Balkans
Author(s): Lisa Adeli
Grades: High School
A lesson with PowerPoint pictures and maps about Middle Eastern cultural, religious, and linguistic influences in southeastern Europe.

- Class Powerpoint Presentation
- Teacher Instructions and Script
- Bibliography

Florentine and Ottoman Women of the 14th – 16th Centuries: A Comparative Curriculum Unit
Author(s): Louise Forsyth
Grades: Middle School
This lesson uses short primary documents to challenge students’ assumptions about the status of women in the Ottoman Empire and Renaissance Florence.

- Lesson

Footprints Across Cyprus: A Virtual Fieldtrip of Cyprus' Landscape and Culture
Author: Diane Godfrey
Grades: Middle School
Students will gain an understanding of the regions of Cyprus, as well as the human and physical characteristics of Cyprus through an interactive PowerPoint slide show. Students will become familiar with the historical event referred to as the Grand Tours which helped influence western interest in the Mediterranean region, including Cyprus. Students will create a series of six postcards describing the physical and cultural aspects of Cyprus. The postcards will be used for a “postcard book” project.

- Lesson Overview
- Cyprus Slideshow
- Cyprus Slideshow
- Cyprus Rain Image
G - M | Return to the top

Geography of Great Empires
Author(s): Barbara S. Williams
Grades: High School
*The lesson provides a way to lead students to understand a comparison of Holy Roman Empire and the Ottoman Empire and to understand their interconnections.*

In Search of Aphrodite’s Rock
Author(s): Heather Kiser
Grades: High School
*An innovative geography lesson using literary cues from Cypriot legends and mythology.*
• **Cyrus Map Key**

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**Introduction to Islam**  
Author(s): Lisa Adeli  
Grades: Middle School/High School  
*Introduction to Muslim beliefs and cultures. A PowerPoint presentation with pictures and maps, notes for teachers - and a lot of myth-busting*

• **Class Powerpoint Presentation**  
• **Teacher Instructions**  
• **Powerpoint Notes**  
• **Bibliography**

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**Iranian Hostage Crisis**  
Author(s): Julie Nedved  
Grades: Middle School  
*Students will describe the events of the presidency of Jimmy Carter (e.g. the Iran Hostage Crisis).*

• **Lesson Overview**  
• **Case Assignment**  
• **Group Roles and Responsibilities Form**  
• **Iran Hostage Crisis Research**  
• **Iran Notes**  
• **Iran Research**  
• **Powerpoint Presentation**  
• **Presentation Rubric**  
• **Research Rubric**

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**Iran, Iraq - What's the Difference?**
Both Iran and Iraq are in the news these days, and students have trouble telling them apart. This lesson is an introduction to two very different cultures in the Middle East.

- **Overview**
- **Main Powerpoint Presentation**
- **Presentation Notes**
- **Song #1**
- **Song #1 Slides**
- **Song #2**
- **Song #2 Slides**

**Medieval Travels**
Author(s): Matt Lyons
Grade: High School
This lesson allows students to analyze historic documents and determine the feasibility of establishing a trade relationship with different cultures.

- **Lesson**

**Middle East Related Lesson Plan**
Author(s): HortensiaCota
Grade: Middle-High School
This lesson helps students to learn about the geography and the history of the Middle East using maps, a worksheet covering the five themes of geography and news and current event articles.

- **Lesson**

**Mosaics of Cyprus**
Author(s): Greg Burch  
Grades: High School  
*Students will create their own mosaic designs through the use of Microsoft Paint. They will also learn about the history and culture of Cyprus and Cypriot artwork.*

- **Lesson**
- **Powerpoint**
- **Tile Template**
- **Tile Template 2**
- **Tile Template 3**

**Mosque Design**  
Author(s): Jessica Silverman  
Grades: Middle School  
*The purpose of this project is to expose students to the main interior architectural and decorative features of a typical Ottoman mosque, as well as to explore how the main beliefs and practices of Islam are reflected in mosque decoration and architecture.*

- **Lesson**

**Muslims and the Holocaust**  
Author(s): Lisa Adeli  
Grades: High School  
*An examination of the Muslim responses to the Holocaust.*

- **Lesson Overview**
- **Photo Presentation**
- **Further Readings**

**Ottoman Empire Unit**
Author(s): Stacy Hercules
Grades: High School
Students will learn the basic history and culture of the Ottoman Empire. They will analyze and understand the connection between history and modern events and culture, specifically how the history of the Ottoman Empire has an impact and influence on modern events and culture in Turkey and the Balkans.

- Lesson Plan
- Powerpoint 1
- Powerpoint 2
- Notes for Powerpoint

Ottoman Geography Lessons: “What’s in a Name?,” “Eye of the Beholder,” and “People and Places”
Author(s): Brenda Bonine
Grades: High School
The first part directs students to analyze the reason for name changes in Turkey and the Balkans. The second uses pictures to get students to evaluate a place using the principals of geography. The third gets students to look at ethnic groups.

- Lessons Overview and Instructions
- Picture 1
- Picture 2
- Picture 3
- Picture 4

Ottoman Lyric Poetry
Author(s): Danita Dodson
Grades: High School
This lesson introduces students to poetry of the Ottoman Empire. It allows students to learn about how Ottoman poetry was written and performed, symbolism and themes.

Lesson Plan
Ottoman Travel Brochure
Author(s): Jeff Mann
Grades: Middle/High School
Following a series of lectures on the Ottoman Empire, the learner will demonstrate an understanding of the cultures of different regions within the Ottoman Empire by writing and illustrating a six-panel travel brochure that is historically accurate.

- Overview
- Powerpoint 1
- Powerpoint 2
- Powerpoint 3
- Powerpoint 4
- Powerpoint 5
- Powerpoint 6

Peace and Perspective Through Poetry
Author(s): Tina Anima
Grades: Middle School
Through this lesson, students will learn to use their pens and their minds to wage peace. They will take on the personas of Palestinians and Israelis, and let their poems walk them through the streets of Jerusalem. They will create poetry that will let readers taste the flavors of the Middle East, feel the raw emotion and pulse of an ancient people, and discover their unflinching wisdom about war, peace, and hope.

- Lesson
- Rubric

Ratios and Proportions in Turkey
Author(s): Martha Mallinger-Rubin
Grades: 9
Students will learn about Turkey while utilizing mathematic skills.
Reality Check: You Won't See These Muslims on T.v.
Author(s): Benjamin Breault
Grades: Middle/High School
A very informative lesson which helps students identify their own biases regarding Islam and learn facts about the faith.

Teach Ottoman Empire
Author(s): Abbey McNair
Grades: High School
An extended, comprehensive lesson on the Ottoman Empire, this includes several powerpoint photo presentations, a “coffee house” lesson where students play the role of different Ottoman officials meeting to discuss how to “save” the empire, and lots more.

The Importance of Cyprus During the Crusades
Author(s): Jeremy Church
Grades: High School
High school students will apply several reading, writing and history standards to the
study of Cyprus’ role during the Crusades. Students will study the geography of the Mediterranean region with an emphasis on Cyprus and its location, usage, and importance in the age of the Crusades. Students will also gain an understanding of this conflict in the Middle East with regard to religion. Resources for these lesson plans include maps, selected readings, and educational videos.

- Lesson Plan

The Ottoman Empire
Author(s): Lisa Adeli
Grades: High School
An overview of the Ottoman Empire and its unique institutions. Includes a PowerPoint presentation and a script for teachers.

- Lesson Overview and Instructions
- Class Powerpoint Presentation
- Powerpoint Script
- Bibliography

The Ottoman Empire News Broadcast
Author(s): Jennifer Turner
Grades: High School
In this lesson, students learn about the Ottoman Empire, conduct research, and then give a “news broadcast” in which they describe events/personalities.

- Lesson
- Warm Up 1
- Images of the Ottoman Empire 1
- Images of the Ottoman Empire 2
- Lesson 2
- Warm Up 2
- Broadcast Directions
- Broadcast Topics
- **Debriefing**
- **Group Critique**

**Tuning in to Turning Points**
Author(s): Lisa Adeli  
Grades: High School, adaptable for Middle School  
*Each group of students researches an event of historical significance in modern Middle Eastern history and tries to convince others why their topic is the most important.*

- **Lesson Overview and Instructions**
- **Scoring Guide**

Now a webquest lesson! Check it out [here](#).

**Turkey**
Author(s): Michelle Molnar  
Grades: Middle and High School  
*Students learn about Turkey and the neighboring region through various artifacts, pictures and cultural references.*

- **Lesson Plan**

**Turkey: Bridge Between East and West**
Author(s): Carol Barnes and Barbara Martin  
Grades: Middle School  
*Students learn about the geography and cultural aspects of Turkey.*

- **Lesson Plan**

**Turkey Joining the European Union**
Author(s): Sigma Colon  
Grades: High School
Students learn about the complex relations between Turkey and the European Union. This lesson allows students to analyze the many perspectives on the issue and decide what is best for Turkey and the EU.

- **Lesson Plan and Graphic Organizers**

**Turkey Trip**
Author(s): Chris Walden-Jones
Grades: High School, adaptable for Middle School
Students will learn various computer programs while planning a mock trip to Turkey. This will allow them to combine the knowledge of culture and world history with practical computer skills. Students will also use math skills to create a budget for the trip.

- **Turkey Trip**

**United We Stand…Case Study: Cyprus**
Author(s): Lori Hare
Grades: Middle/High School
A lesson (with PowerPoint pictures and maps) about conflict resolution, using the case study of the Greek-Turkish conflict in Cyprus.

- **Class Powerpoint Presentation**
- **Lesson: Part 1**
- **Lesson: Part 2**

**Water in the Desert**
Author(s): Jennifer Jenkin
Grades: Middle School/High School
In this lesson, students will work with a variety of instructional tools to create a comparison between the flooding of Rainbow Bridge, and the refilling of the Dead
Sea. This comparison will involve humanitarian, governmental, cultural, religious, and environmental aspects. The student will apply all these considerations in order to pose a solution to a multi-dimensional, international problem.

- Lesson Plan
- Powerpoint
- Bubble Map
- Dead Sea Webquest
- Double Bubble Map
- RAFT Writing Assignment

Virtual Field Trip to Turkey
Author(s): Kate Mahady
Grades: Middle School/High School
A PowerPoint presentation which takes young people on a trip through Turkish history, culture, and art.

- Teacher Instructions
- Virtual Field Trip Questions
- Virtual Field Trip Powerpoint Presentation
- References
- Turkey Logos

You need Adobe Acrobat Reader to view the above files.
Download it for free here

THIS ENTIRE PACKET IS A WORK IN PROGRESS FOR AN EDITED PUBLICATION OF READINGS AND ACTIVITIES TO DEVELOP CULTURAL COMPETENCE FOR UNDERGRADUATE TEACHER CANDIDATES AND PRACTITIONERS.

CONTACT L.G. STAMBLER BEFORE USAGE.

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Title:  Response to Intervention and Empowering Every Student to Succeed.

Abstract: The purpose of this workshop is to help educators empower students, who are struggling to succeed in traditional educational programs, to reach their full academic and creative potential. Participants will learn specific strategies to enhance their current curriculums via Response to Intervention (RTI). Participants will learn the differences between Skill, Fluency, Generalization, and Motivation Deficits as well as Escape or Avoidance techniques. They will identify the RTI “Pyramid of Interventions”. Participants will also learn how to Define Problem Behaviors in Five Quick Steps. Additionally, participants will learn how to assess and monitor progress of the interventions they utilize with students.

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RTI, educators can identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities or other disabilities. (Batsche, Castillo, Dixon, & Forde, 2008).

Many students who struggle with academic deficits do not do so in isolation. Their difficulties are revealed and discovered in the larger context of the school environment and curriculum and represent a difference between the characteristics of the student and the instructional demands of the classroom. (Foorman & Torgensen, 2001).

Educators need to learn that the problem-identification step is the most critical for matching the student to an effective intervention (Bergan, 1995). Problem identification statements need to be defined in clear and specific terms sufficient for a stranger to understand. (Howell, Hosp & Kurns, 2008).

The following recommendations are for increasing educators’ capacity to frame student skills in relation to curriculum requirements:

- Be knowledgeable of school curriculum and key student academic skills
Describe the academic problem in specific, skill-based terms

Develop a fuller description of the academic problem and provide a meaningful instructional context

Develop a hypothesis statement to explain the academic skill or performance problem

Many students are identified as at-risk with social/emotional, behavioral and learning issues who are struggling with success. Several of these students are being recommended to special education, but are falling short of eligibility requirements, thus lacking the support they need to succeed. “With appropriate early services, referral to special education may be prevented for children showing early indicators of behavioral maladjustment”. (Baker, J.A., Kamphaus, R.W., Horne, A.M., & Winsor, A.P., 2006).

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A. Title
MacIntyre’s Narratives: an Alternative Approach to Narrative Inquiry

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C. Abstract
The purpose of this study is to construct a narrative approach based on A, MacIntyre’s narrative notions that emphasizes on investigating the corresponding virtues of social roles in a certain era, a narrative approach that enables researchers or educators to inquire virtues of specific social roles in a certain era and how the virtues are “practiced” by the social roles. Three salient features of MacIntyre’s narrative notions are expounded: narrative as unity, narrative as history and narrative as the quest for intelligibility. These concepts are extended into three important features of structural analysis: genre of social role, big events in a certain era, and intelligible sequence. These concepts help teachers to clarify virtues qualified for their students based on their traditions.
9th Annual Hawaii International Conference on Education, January 4-7, 2011

Title of the Submission: College students’ lecture note-taking and academic performance

Topic Area of the Submission: Educational Psychology

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College students’ lecture note-taking and academic performance

Pin-Hwa Chen
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Abstract

Lecture note-taking is a popular learning strategy among college students. It not only takes place during class but also after class. During class, students listen to what the lecturer says and they write down notes on what they consider to be relevant information. After class, they may correct, refine and even rewrite the notes. This study aims to create predictive models of lecture note-taking during and after the class. Thirty-eight undergraduate students enrolled in a General Psychology class at a university in southern Taiwan were recruited as participants. Targeting the unit of “Memory”, participants’ notes taken during the class were collected after each lecture on this unit. After all the lectures on this unit had been completed, participants received the unit test and completed a questionnaire on how they had taken notes after the class. Meanwhile, their unit notes (the notes taken during class and revised after class) were collected. Results indicated that the predictive model of note-taking during the class could explain the variances of academic performance. “Quality of notes during the class” could predict academic performance positively. Moreover, the predictive model of note-taking after the class could explain the variances of academic performance. Both “Quality of unit notes” and “Revision of notes before next lecture” could predict academic performance positively.

Keywords: note-taking, lecture notes, academic performance
Hawai'i International Conference on Education

January 4 - 7    2011

Paper

Topic Area: General

Title: Transforming a Decile 1 School and Community in South Auckland

New Zealand

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Abstract

There is no single solution to transforming a small school in a low socioeconomic community with a twenty year history of poor performance. It requires more than simply applying normal solutions to an abnormal situation. This paper explores some of the multifaceted approaches used to improve the quality of teaching and learning and to reinvigorate a school and community that has suffered from long term poverty.

Background

Edmund Hillary is a Decile 1 full primary school in Papakura, South Auckland, New Zealand with a current roll of 160 students. The combined Maori and Pasifika student population represents 97% of the student body. The history of poor performance of the school is well known to the Ministry of Education and the Education Review Office the government department responsible for reporting publicly on the quality of education in all New Zealand schools. At a local level the public perception of the school in 2006 was such that if parents could afford a car they would opt to drive their children to any number of 'better' schools down the road. For those who couldn't afford to do this there was little option but to send their children to Edmund Hillary School. Their greatest fears were for the safety of their children rather than concerns about poor quality education. Families recount stories of children running home to alert them to fights in the school playground and in turn running to school to sort them out because school staff either couldn't or wouldn't. A Supplementary Review of the school by the Education Review Office (ERO) in 2006 identified significant shortcomings which had gone unchecked for years.

Most teachers were performing at an unacceptably low level. Many children were bored or frustrated because the work set for them was not appropriately matched to their learning needs. Because effective quality assurance measures were lacking, there was very little accountability evident in the planning, delivery and evaluation of the curriculum and in the assessment of children’s progress and achievement. (2007, p.4)

The report also noted that the board had a limited understanding of its governance role. By the end of 2006 the principal resigned and a new principal was appointed for a fixed term at the beginning of 2007. In the 2008 ERO Report it was noted that;

The present principal, staff and board of trustees had to deal with a long period of poor performance at Edmund Hillary School. The school had eighteen principals in twenty-five years and ten ERO reviews in the past
sixteen years. It had been run-down, lacked adequate teaching and learning resources and faced some major staff performance issues. Weak child management practices led to poor student behaviour that threatened the board's provision of a safe learning environment for students. (p.3)

ERO also referred to the high level commitment demonstrated by the new leadership to "reinvigorating a school that had become stalled in its development... which was part of the overall change management necessary to move the school forward after a sustained period of dysfunction." (p.4)

The solutions to addressing the dysfunction have required innovation, hard work and concerted school and community efforts. Innovation requires more than applying normal strategies to abnormal circumstances which are unlikely to be effective in the short or long term. Barth (1990: p164), suggests "that if we want to improve schools, we must risk doing things differently next September than we did them last September". The need not only to rebuild the foundations to ensure stability and sustainability but to also forge ahead with “outside the square” solutions is urgent. The task of breaking down the barriers resulting in gross educational negligence has propelled everyone, involved in the school, on an arduous yet incredible journey. It is by no means a journey for the faint hearted.

For those new into the school in 2007 the scene could be likened to being in the middle of the Pacific Ocean in a leaky waka (canoe) with one gaping hole in the centre and several smaller ones which combined were of the same magnitude. The solutions lay in exploring and defining many pathways to success as a means of motivating everyone to do their share and keep the waka afloat. Pathways that would promote;

- working together
- sharing and caring
- looking after self and each other
- mental, physical and spiritual nourishment
- a sense of achievement and satisfaction
- a positive way forward

And something that would signal not only to those in the school but also the community that the holes in the waka were being repaired and it was no longer in danger of heading to the bottom of the ocean.
Mahinga Kai Gardening

“Mahinga Kai” was the first big 'Something.' It is not rocket science but simply about providing space for people to give and receive care, love, help, support manaaki, aroha, awhina, tautoko to nourish the mind, body and spirit, the hinengaro, tinana, wairua of the individual and subsequently the family, whanau, the community hapu and therefore all people, nga iwi katoa. As well known New Zealand author and organic gardener Kay Baxter states, "gardening is the ethic which puts care of the people and care of the earth above all else." (2008,p.4)

Mahinga Kai gardening model promotes:

- A new, applied approach to capacity-building in the local community through the sharing of skills, knowledge and resources and transitioning Edmund Hillary's current participation in the “Fruit in Schools” initiative into a longer-term self-sustaining model. It fosters a community where working together to achieve a common aim is valued and nurtured based on Kaupapa Maori and incorporating the principles of partnership, participation and protection embedded in the nation's Treaty of Waitangi.
- Increased Civic Engagement through planting, harvesting and maintenance days and where members of the community are welcome to drop in for produce.
- Community Building and stronger school-community-home partnerships through whanau participation in Mahinga Kai and the various threads combining; Mahinga Kai i te Kainga (gardens in homes), are all woven together to make up the kete basket of Hauora mo ake tonu atu (everlasting health).
- Positively promotes whanau (family) health and well being and adds value to the school's current initiatives which include “Breakfast Club”, “Healthy Lunch Programme,” and the nationwide "Fruit in Schools" programme for low decile schools.
- Puts into practice the underlying concepts, strands and key competencies of the New Zealand school curriculum.
- Opportunities for the evolvement of further initiatives.

The initiative began in 2007 with digging up the school grounds for gardens and inviting students, families and community members to a Community Arbor Day planting of heritage fruit trees. From there students and staff planted massive crops of vegetables interspersed with companion planting and participated in composting, worm farming and general garden maintenance. Many varieties of vegetables were harvested throughout the season for
students to take home to share with whanau. Students and their families also participated in special whanau days to plant the subtropical garden with bananas pawpaw, passion fruit, watermelons and many other varieties of fruit. Students and teachers worked together on the project coordinated by Mariu Wetere, a staff member with special expertise and interest in driving the project.

In 2008 Mahinga Kai was then extended to include backyard gardens. Selection of families was mainly determined by students who had developed a love of gardening at school and wanted their whanau to reap the benefits of having their own gardens at home. Many students were keen to demonstrate their newly acquired skills and knowledge to their families aware that gardening had not previously been an option for them. The necessary tools and compost were provided by the school and funded through successful applications to the Manukau District Health Board under the "Let's Beat Diabetes" Programme. A total of 16 gardens were started. Now families in their second year of gardening continue to be enthusiastic and tend their own gardens with minimal or no school support.

Val Matahaere was one of the first parents to put her hand up for help in setting up a vegetable garden at home. Val was interviewed for an article published in the Listener a national magazine. She had this to say about her garden;

> It's saved me heaps of money and I don't buy veggies at the supermarket any more........... We're eating more healthy food now and not just eating and getting junk food. I go over and help at the school garden and I soak up whatever the garden lady (Mariu Wetere) does. I see what's working well at the school and my other neighbours and I try to bring it home here in my own garden. I enjoy it because it's nice and peaceful and healing and my backyard is my bit of heaven on earth. Barry (2009, p.35)

In 2009 an additional 25 backyard gardens were established bringing the total number of backyard gardeners in the local community to 45. Naomi Lees Backyard Garden Coordinator and part time teacher for students with English as a Second Language at the school worked closely with families to achieve the expected outcome of extending the number of veggie gardens in the community. The leaky swimming pool which was too costly to repair was turned into a garden nursery and became the source of plants, seedlings fertiliser and expert advice from the 'garden lady.' In 2010 the “Mahinga Kai” model was extended and replicated in three other local schools by key community partners Papakura Marae and the local Whaitiaki group who secured more funding from Manukau District Health Board through the Maori Obesity Initiative. Mahinga Kai has brought national acclaim to the school through feature articles for national publication and from television programmes developed for
national viewing. The community is at last proud to be attracting positive attention and recognition as a result of the gardening project rather than for past notoriety.

Further Pathways to Success

Transition Programme for "High Needs" Students

An evaluation report by the Education Review Office June 2010, "Including Students with High Needs" recognised that "significant proportions of schools had some or few inclusive practices" (p.32) for students with "high needs." In 2010, the number of students identified with “High Needs” enrolling at Edmund Hillary School had reached critical levels. High needs classification means students have;

- extreme learning needs and/or
- extreme behavioural needs and/or
- family circumstances demonstrate a high level of need.

The current numbers of “High Needs” students already in the school, combined with new “High Needs” students enrolling, were propelling the school towards a precarious tipping point. Therefore a much greater level of planned support was required. It was critical that we find another pathway to enable the school to adhere to the shared vision of the New Zealand Curriculum, “to foster lifelong learners who are confident and creative, connected, and actively involved.” (2007,p.8) Part of the solution would likely come from a shared commitment to a transition plan to enable new students to be integrated into school with additional support and therefore provide them with every opportunity to be successful participants in their own learning. Other considerations included provision for existing "High Needs" students in the school and working in partnership with families. The cost of not getting it right was becoming too great for the individual, for the school and ultimately for society.

Background to Transition Programme and identification of High Needs in the School

Concern over the increasing numbers of “High Needs” children at Edmund Hillary School was addressed at a staff meeting. Discussion arose on the nature of the “High Needs” prevalent amongst students and the following three categories were defined based on teachers' knowledge and experience gained through working in the school.

1. Students with High Learning Needs;
2. Students with High Behaviour Needs;

Teachers then identified criteria for each category again based on their knowledge and experience gained through working with students in the school.
Criteria for High Needs Classification

1. Students with High Learning Needs
Criteria:
For students in Years 1-2 evidence of delayed learning e.g. low alphabet knowledge; emergent/early reading strategies underdeveloped; limited experiences and delayed oral language as well as other pertinent aspects linked to poor retention; poor self management; poor concentration. Year 3 students and above were identified with high learning needs if achieving 2 years below chronological age in literacy learning.

2. Students with High Behaviour Needs
Criteria
Students who were consistently unable to maintain positive peer and teacher relationships; had poor self esteem, were verbally and physically abusive; frequently angry, uncooperative and regularly demonstrating high level stress.

3. Students with High Family Needs
Criteria
Students showing signs of neglect, had health/sight/hearing issues, were consistently without lunch and hungry, showed signs of abuse, poor hygiene, clothes unwashed for long periods, body odour, truancy and absenteeism, long term neglect and high level stress.

Identification of “High Needs” Students
Students who met the criteria as defined by teachers were identified and results for each class were shared and discussed. Moderation occurred where some teachers were challenged to include children whom they had not identified because other teachers felt they warranted inclusion based on the criteria. In all cases the classroom teacher agreed. Subsequently the data was collated and analysed.

Results
The following tables include whole school results. The entire school roll comprises; 28 Year 1 students, 17 Year 2 students, 17 Year 3 students, 27 Year 4 students, 22 Year 5 students, 27 Year 6 students, 10 Year 7 students and 7 Year 8 i.e. a total student roll of 155 at Edmund Hillary School 31 May 2010. A significant finding is that 65% of students across the school have some identified level of high need.
Figure 1 shows students with "High Learning Needs." Overall across the school there are 76 students i.e. 49% with "High Learning Needs."

Figure 2 shows students with "High Behavioural Needs." Overall across the school there are 46 students i.e. 30% with "High Behavioural Needs."
Figure 3 shows students with "High Family Needs." Overall across the school there are 61 students i.e. 40% with "High Family Needs."

NB Of these "At Risk" students 42% are from 12 families. 35% of this group are Maori and 7% are Pasifika.
Figure 4 shows students with "High Overall Needs" at Edmund Hillary School are as follows; 49% of students are identified as having "High Learning Needs," 28% of students are identified as having "High Behavioural Needs" and 39% of students are identified as having "High Family Needs".

NB Students with High Needs in all 3 Categories at Edmund Hillary School are as follows; for Year 2 students; 6% (1 student) has high needs in all three categories, for Year 3 students; 18% (3 students) have high needs in all three categories, for Year 4 students 26% (7 students) have high needs in all three categories, for Year 5 students 19% (4 students) have high needs in all three categories. For year 6 students, 11% (3 students) have high needs in all 3 categories, Year 8 43% (3 students), have high needs in all three categories.

Formulating the plan for “High Needs” Students

We have a sincere commitment to providing the best possible education for all students, hence the need to explore other ways of catering for those with “High Needs.” The number of current “High Needs” students already enrolled in the school is excessive and adding more students without a robust plan of support is not conducive to either teacher or student welfare nor quality teaching and learning programmes.

Staffing

Long term staffing issues and budgetary constraints have also had a significant impact. Last year in 2009 there was a 23% teacher retention rate. This year with current staff, six of seven classroom teachers have an average of 3 years teaching experience. Two teachers are in their first year of teaching in a New Zealand School, another two are provisionally registered teachers. Subsequently teaching staff require support too.

Currently some “High Needs” students are entering school with funding for teacher aide support. Firstly it is difficult to attract suitable teacher aides because of the limited hours of employment and the short term nature of positions offered. Secondly to expect teacher aides to fill specialist roles is unrealistic given that they are not trained teachers. Thirdly “High Needs” students cannot engage successfully for a whole day in a classroom even with teacher aide support. This approach sets them up for certain failure as we have already found.

Consequently the issue of formulating a plan required consideration of some broad objectives to ensure full and successful integration of “High Needs” students into school. The objectives were to;
- Provide specialist teaching tailored to students' learning and behaviour needs in a safe and stimulating environment
- Manage the integration process as a shared commitment between home, school and other support agencies

The plan is, in part, based on an existing strategy of working in partnership between home and school with current “High Needs” students. Three students who were close to being excluded from the school because of their extreme behaviour are now in a transitioning process. All families have supported the plans which have been tailored to suit their own child. One student after 5 weeks will be transitioned back into school full time. Another student who was returning home during interval and lunchtime is now only having part of the lunch hour at home. This group learning component with a specialist teacher has been included and is based on the success gained through another existing school programme. The high level engagement and progress of students is transforming not only their learning but not surprisingly their behaviour too.

**Transition Programme**

Prior to starting the transition programme family and student meet with the principal specialist teacher and other key staff to share information and discuss programme. Student then attends school at 8:45 for Quiet Time Meditation Training with Meditation Teacher. An assessment of learning for literacy with specialist teacher is carried out. Then following a programme of induction into the school the student is supported through the following stages of transition. The length of time taken to transition through the stages depends on the student's ability over time to integrate successfully. A time frame therefore cannot be pre-determined.

**Stage 1**
- Student attends school 8:45 for meditation training.
- 9-11; for 2 hour literacy learning with specialist and teacher aide.
- Returns home 11am

**Stage 2**
- Student attends school 8:45 for meditation training;
- 9-11; for 2 hour literacy learning with specialist and teacher aide.
- Integrated into playground with support from 11 am to 11:20 am.
- Returns home 11:20

**Stage 3**
- Student attends school 8:45 for meditation training; 9-11 for 2 hour literacy learning with specialist.
- Integrated into playground with support from 11 am to 11:20 am.
- Transitions into classroom with support for 1 hour mathematics period 11:20 to 12:30
- Returns home 12:30
Stage 4
- Student attends school 8:45 for meditation practice;
- 9-11; for 2 hour literacy learning with specialist and teacher aide.
- Integrated into playground from 11 am to 11:20 am.
- Transitions into classroom with support for 1 hour mathematics period 11:20 to 12:30
- Integrated into playground with support for half of lunch hour until 1 pm.
- Returns home 1:pm

Stage 5
- Student attends school 8:45 for meditation practice;
- 9-11; for 2 hour literacy learning with specialist.
- Integrated into playground from 11 am to 11:20 am.
- Transitions into classroom with support for 1 hour mathematics period 11:20 to 12:30
- Integrated into playground with support for full lunch hour until 1:30 pm.
- Returns home 1:30

Stages 6-8 continues with half hour additions of time until by Stage 8 the student is fully integrated into school for the entire day. Literacy support continues until the student reaches a level that will ensure continued independent success in the classroom setting.

Support for Whanau

It is one thing to address the learning and behaviour needs of students, which is the school's core business, but these efforts are in vain if we fail to ignore and absolve responsibility for addressing and supporting the needs of students' families. One successful strategy to support and engage families in student learning is the opportunity for formal discussions where parent/student and teacher together have a minimum of half an hour to discuss achievement. In the four years these discussions have been held there has been 80-90% family attendance. This demonstrates high level family and school commitment. In some instances where there are as many as five children attending school from one family this means at least two and a half hours of discussion which means the family is very well informed about how their children are achieving and how they can help them. Absolum: (2006) suggests that; "the majority of parents care about their children's education, want to support them and are prepared to work in partnership with others to do so." (p.203) This notion is well supported by the high number of families who attend the school's learning discussions.

While the value of such engagement cannot be disputed such partnerships however require knowledge and understanding and clarity around issues which are often extremely complex. For example in the Executive Summary Ministry of Education Best Evidence Syntheses by Biddulph et.al (2003) they maintain that;

Ethnicity and culture are linked to children's achievement. Overall, Pakeha and Asian children have consistently higher achievement than Māori and Pasifika children. However, this finding is confounded by socioeconomic
status (SES); the families of most Māori and Pasifika children occupy the lower levels of the SES scale (including the poverty level) and these children also make up a disproportionate number of those in low-decile schools.

This is most definitely the case at Edmund Hillary School with a decile 1 rating which is at the lowest level of the SES scale. The Ministry of Education explains decile ratings in the following way; "A school's decile indicates the extent to which it draws its students from low socioeconomic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities. Decile 10 schools are the 10% of schools with the lowest proportion of these students."

In addition to the school's decile rating there are other factors which compound the low socio economic status. The local community population is younger and there are more families. 26.5 percent of people aged 15 years and over in Papakura East have a post-school qualification, compared with 42.5 percent of people throughout the greater Auckland Region. In Papakura East, 42.3 percent of people aged 15 years and over have no formal qualifications, compared with 20.3 percent for the Auckland Region as a whole. (Statistics New Zealand (www.statistics.co.nz). Furthermore over 95% of families are in either state or private rental accommodation. Single parent families are also a significant feature as too are the numbers who rely on state benefits for financial support. As Biddulph (et.al.2003, p.34) state; "It is the quality of family ties and resources available to children and parents that are critical." In recognising this fact, the school has taken steps to improve the quality of family ties and resources through researching a range of services and giving due consideration to what may likely work.

Child Youth and Family is a service line of the Ministry of Social Development which delivers front-line social work. On an average day the department;

- receives 230 notifications of child abuse or neglect
- meets more than 100 families to talk about their situations and children's safety
- facilitates around 20 care and protection and 40 youth justice family group conferences
- houses just over 100 young people in our youth justice residences
- supports the more than 5,000 children living with caregivers or extended whānau.

Refer Child Youth and Family website www.cyf.govt.nz

It is undeniable that high level crisis intervention by the Department has an important place, however the school is attempting to reduce the number of families requiring high
crisis intervention by exploring the range of support that can be provided to families through a range of early intervention strategies.

**Strengthening Families Programme**

The school has in 2010 implemented the "Strengthening Families" model of working with families with a view to better addressing families’ needs and in the long term those of families from other schools in the local area. A staff member attended a 3 day training workshop designed to: increase participants knowledge of the Strengthening Families process; improve understanding of the roles/responsibilities of those involved in the collaborative process and enhance confidence in effectively coordinating and facilitating meetings. Effective communication and negotiation skills to positively influence others to work together in the best interests of families were other key components of the training. The knowledge gained through the training was brought back to share with school personnel.

Strengthening families is a local community based initiative using a coordinated approach to support families to access a range of services. Last year, over 1,500 families with social service providers participated in Strengthening Families. This whole-of-government service spearheaded by the Ministry of Social Development (MSD) provides early intervention to families to prevent difficult situations escalating to crisis intervention levels when circumstances are then likely to be more difficult and therefore more complex. Family and agencies work closely together in a supportive and effective way to develop an action plan based on the needs identified by the family. A specially trained and skilled Strengthening Families Coordinator liaises with the required agencies who attend the meetings alongside other support people. This practice is recommended by the Whanau Ora Taskforce convened to report and make recommendations on ways to strengthen Maori Health and Well being and to explore and make recommendations on a more coordinated and effective interagency level of support. The task force recommends some aspects of delivery will go a long way to improving service such as, "contracting practices that minimise fragmentation, target positive whanau development, encourage provider collaboration, utilise integrated data and communication systems and enable whanau needs to be addressed in a coherent and integrated manner" (2009,p.59)

The school is now capitalising on the proven local service of the Strengthening Families model in preference to coordinating the services themselves. The advantages of the Strengthening Families model for the school include;
• immediate access to a skilled facilitator and the support networks and range of services already developed by the facilitator;
• the voluntary rather than legislative aspect of participation by families;
• the school has the opportunity to participate but does not have sole responsibility for overseeing the plan of action;
• the school's confidence in knowing families are in safe hands which often has not been the case in working with many of the external agencies;
• the school and family are able to access early intervention rather than crisis intervention and have confidence that help will be forthcoming;
• family health and well being are priority;
• a culturally friendly environment is nurtured.

In addition the Strengthening Family model fits with Bowen's notion that; "communities with strong networks and high levels of trust between citizens, and between our diverse groups of citizens, tend to be safer, richer and healthier" (2009, p.11) In addition the Government's new "Whanau Ora" Initiative for Maori has direct alignment with the Strengthening Families model. There is cohesion across government agencies and improved opportunities for a sustainable whānau-wide approach to resolving issues. Families are actively involved in planning interventions and therefore are presented with choices about the types of services most suited to support them. The Whanau Ora Taskforce (2009) maintain that services to date have been;

Compromised by lack of economies of scale, fragmented sectoral approaches and an alignment with funder expectations rather than actual whanau needs. Moreover, the focus has largely been on crisis management, support and care, with relatively less emphasis on positive development and the enhancement of whanau capabilities. (p.20)

As with the Strengthening Family model, the health and well being of whanau is pivotal as it is not possible to focus solely on one family member without considering and working to support all members of the whanau.

Quick60 Literacy Programme

The school's governing board also funds two literacy specialist teachers, one for 4 days a week and one for five mornings a week to support small groups of students identified as “At Risk” in learning and behaviour. Literacy specialist Carol Goldsmith worked with
programme developer Sandra Iversen to implement the Quick60 Literacy Programme. The subsequent improved achievement and behaviour of students has had far reaching effects and produced some outstanding results. Quick60 is a small-group literacy prevention/intervention programme based on the research of Iversen and Tunmer (1993) and Iversen, Tunmer, and Chapman (2005).

   The programme design incorporates the essential learning into the books and provides comprehensive and detailed lesson plans that enable the programme to be delivered by a trained teacher or a teacher aide without further training. The non-fiction texts enable older students with limited literacy knowledge to use the books without feeling patronized.

Methodology

15 at-risk students from Years 2 – 5 were tested at the end of Term 1 2010. The tests included alphabet letter and sound knowledge, high frequency word knowledge, spelling ability, and the ability to decode pseudo words. The spelling and pseudo words test have two scoring systems. One gives the total correct. A point score is also available to show teachers how well their students are progressing towards complete accuracy. A record of oral reading was also administered to each student to determine an instructional reading level. The students were then divided into four groups and began their programmes with the specialist literacy teacher at the beginning of Term 2. At the end of Term 2, the students were again tested with the same battery of tests. They were also asked to read an unseen text from either the Ready to Read Series or the PM Series to determine their instructional reading level. Initial test scores and test scores at the end of Term 2 were collated. The number of lessons and the actual hours of instruction are also included.

Results

   The results show that with as little as 12 hours of quality instruction using appropriate materials, at-risk students can increase their literacy knowledge and use this to read increasingly more complex text. (See Appendix 1 for results)

Classroom Support Intervention

   There is an over representation of "High Needs" students at Years 4&5. These year groups who are currently in two classrooms have the highest percentages of students with "High Needs" in all three categories i.e. in learning, behaviour and family circumstances. Without some form of additional intervention the concern is that by the end of the year achievement for some of these students may not change at all. An even worse case
scenario is they may regress from the achievement levels of the previous year. Therefore as a possible solution the following intervention is now being trialled to support teachers and students in both classrooms.

The principal who is also a literacy specialist is now leading the reading programme in one of the Year 4/5 classes along with the classroom teacher and a teacher aide. The class of 24 is divided into three broad achievement groups. The lowest achievers are at three different reading levels but with the specialist teaching, these students can be expertly taught as one group. Ordinarily the teacher would be expected to manage two instructional groups a day which means students usually have instructional reading on average two or three times a week. With the current intervention every reading group now has instructional reading for an hour a day. The weekly reading planning is managed in conjunction with the classroom teacher and all three teaching personnel are assigned a reading group. The programme is structured and begins with the lead teacher discussing the learning intention for the lesson and the success criteria with the whole class as follows;

**Learning Intention:**
- To read and understand what we are reading.

**Success criteria:**
- We will be able to answer questions accurately (orally and in writing.)
- We will be able to complete cloze exercises about the story

Students then move to their reading groups to participate in planned instructional reading and related oral and written follow up exercises linked to the instructional text. Students are provided with support tailored to their needs and receive immediate oral and written feedback. The class comes back together at the end of the hour to discuss progress in relation to the success criteria and teachers provide feedback to their group.

During the first day of instruction the children were engaged, motivated and on task. The students reputed to be behaviour problems appeared to be the most engaged, most likely because they were receiving positive feedback for engagement in learning rather than the usual feedback for inappropriate behaviour. Another outcome early in the intervention is that the positive behaviour of the identified "High Needs" students has continued to be sustained outside of the reading programme. Most of all though, students are switched on to reading and writing and excited about their success and personal achievements. The overwhelming success of the intervention had such success that it was soon replicated in the other Year 4/5 class and lead by the Literacy Specialist Carol Goldsmith and ESOL teacher Naomi Lees working alongside the classroom teacher. Regular review meetings were held to discuss organisation and to share teacher made resources and activities.
Students were tested after 7 full weeks of classroom implementation. All showed gains in achievement with some showing increased gains in reading age of up to 6 months.

Reading Teacher Support

Three retired teachers Judith, June and Chris are in the second year of working voluntarily in the school. Two work one on one or with small groups of “At Risk” older students i.e. students in Years 4-8 and one works with Year 1&2 students who require additional early literacy support. They work 2 hours a day twice a week and recently have begun extension work with gifted and talented students. Again the rates of progress and therefore the achievement results for these children are outstanding with some moving up a year in reading age as detailed below in Figure 5.

Figure 5

<table>
<thead>
<tr>
<th>Teacher 1 Senior School</th>
<th>Reading Level Feb.2009</th>
<th>Reading Level Nov.2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Level</td>
<td>Student Initials</td>
<td>Initial Reading Age or Ready to Read Reading Level</td>
</tr>
<tr>
<td>Y8</td>
<td>DT</td>
<td>RA 6-7yrs</td>
</tr>
<tr>
<td>Y6</td>
<td>SK</td>
<td>Level 13/14</td>
</tr>
<tr>
<td>Y8</td>
<td>JP</td>
<td>Level 1/2</td>
</tr>
<tr>
<td>Y6</td>
<td>NG</td>
<td>Level 12/13</td>
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<table>
<thead>
<tr>
<th>Teacher 2 Middle School</th>
<th>Reading Level Feb.2009</th>
<th>Reading Level Nov.2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y4</td>
<td>RV</td>
<td>Level 6/7</td>
</tr>
<tr>
<td>Y4</td>
<td>JTV</td>
<td>Level 8/9</td>
</tr>
<tr>
<td>Y4</td>
<td>CA</td>
<td>Level 8/9</td>
</tr>
<tr>
<td>Y4</td>
<td>RM</td>
<td>Level 8/9</td>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Y2</td>
<td>JNR</td>
<td>Level 3</td>
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<tr>
<td>Y2</td>
<td>NT</td>
<td>Level 2/3</td>
</tr>
<tr>
<td>Y3</td>
<td>A</td>
<td>Level 6</td>
</tr>
<tr>
<td>Y3</td>
<td>MG</td>
<td>Level 6/7</td>
</tr>
</tbody>
</table>

Friends of the School

The interconnections between and across people provide some of the most powerful contexts for fostering and promoting teaching and learning. In the case of Edmund Hillary School the benefits of these connections known as “Friends of the School,” have provided a network of like minded people willing to put their hands up to help teachers, children and families. They see the level of under privilege and the vision of transformation and want to
contribute. The interactions between students and the many 'friends' of the school provide a rich social world for children to make sense of and provide valuable opportunities for learning through shared and often new experiences which occur out-of-school. As Alton Lee explains;

Carefully designed out-of-school learning opportunities can also be used to bring funds of family and community knowledge into the classroom. Such opportunities can have significant and sustained impacts on student knowledge, attitudes, self-esteem, independence, and confidence. (2003:p.61)

Many special people have come through the gate with their hands up to help. Only some are detailed in the following section as the list is infinite.

The Three J's

Special people known as the Three J's, Dr Jude, Jo and Jilly come weekly to take selected students on special excursions in their own time and at their own expense. They came into the school last year as a result of a professional connection between a teacher at the school and one of the group. Many children were treated to a variety of special excursions such as visits to the zoo, a trip to Snow Planet New Zealand's first and only all-year indoor snow resort which is a journey of some 50 minutes from the school. This year they have enrolled 8 senior students in the "First Tee" programme and consistently transported them across town to participate every week despite their own busy schedules. The mission statement of the programme is; "To impact the lives of young people by providing learning facilities and education programs that promote character development and life-enhancing values through the game of golf." (www.thefirstteenz.org). Nine core values of respect, sportsmanship, judgement, honesty, perseverance, courtesy, confidence, integrity and responsibility are integral to the programme. Students and the Three J's have developed deep bonds which are likely to remain forever. The love, respect and delight is there for everyone to see when the waiting students spot the Three J's cars appearing through the gate.

Breakfast Club

Angels Light Breakfast Club which is part of Papakura Christian Services Trust was initiated by local resident Bronco Fox in 2001. The service embraces four needy schools in Papakura one of which is Edmund Hillary School. Bronco began with no money or volunteers and now provides breakfast to over one thousand children across the four schools with the support of many local volunteers. The service at Edmund Hillary School started out for 3 mornings a week and was extended to 5 mornings a week when volunteers
from the local Papakura East Presbyterian Church offered to provide support for the other 2
days. So now with both organisations working together, students every school morning are
provided with a substantial breakfast of weetbix and milk, toast and milo.

The benefits from school feedback are as follows;

1. Improved behaviour in class with better concentration which in turn benefits other pupils.
2. The social benefits of sitting around a table with other children and the interaction with adult volunteers.
3. The table etiquette which is expected of the children and the requirement to take their dishes to the kitchen when finished may be the only such training some of these children may receive.

The Gate

The Gate is a vibrant multicultural church in the local area. Members of the church led by Tania and Paul Kauri and their family organise and lead a range of “After School” activities for students, provide them with a healthy afternoon tea and provide a range of resources which children would not otherwise have access to. Mentorship and support with lunchtime activities were also provided and for a term a select group of students participated in the ‘Seasons for Growth’ programme which is based on the belief that change, loss and grief are normal and valuable parts of life. It aims to produce a sense of resilience, personal growth and acceptance of change in people’s lives.

The high level commitment both in terms of personnel and resources is voluntary and from the heart. The list of support also includes donations of money to help with special projects in the school, providing resources for school celebrations, providing tuition for students to participate in performing arts and treating staff to dinner to acknowledge their hard work and commitment to the school and community.

Private Schools

Edmund Hillary School has gained much from the special relationships forged with three private schools in the wider Auckland area; namely Kings School; King’s College and St Kentigerns School. King’s College students organised after school activities twice a week for children and travelled for over an hour a day to do this. Again special bonds were formed between the Year 12&13 students from Kings and our Year 1 to Year 8 students. Recently the school formed a partnership with St Kentigerns another private school in Auckland. This began when another person came through the Edmund Hillary School gate who had links with St Kentigerns School and recognised the value to both schools of a partnership based on giving and caring for one another.
Aonui Programme

In 2008 the school was included in a Community Initiative which involved piloting a Community Constable Programme. Constable Tony Tumai, a local police officer, was appointed to work fulltime with the school and community. The initiative had a significant impact with the police, members of the community and the school working positively together to build stronger relationships.

The many projects either initiated, ongoing or in some cases completed have signalled progressive change especially in bringing home/school and police partnerships closer together and in building another level of confidence and respect between the school and community.

The Aonui programme is an extension of this initial work. Constable Tony Tumai's partner Donna is employed as a teacher aide to work with two of the "high needs" students who are being transitioned into the school. In discussions with Tony they concluded that both students and another who had severe learning difficulties would benefit from experiencing a range of learning activities outside of school. Essentially they decided that the students would benefit from trips out into the "big wide world" hence the name Aonui and the title of the programme. Tony allocates one morning a week during one of his days off work to accompany Donna and the boys on trips. They have visited many local places of interest and met many people of interest. The boys look forward to their weekly adventures with Tony and Donna and the range of activities and places they get to see outside of school.

Papakura East Presbyterian Church

In addition to supporting the school with Breakfast Club, the Presbyterian Church provides the school with significant funding towards school and community initiatives. The support has enabled the school, the church and the community to celebrate 'International Children's Day' together. This event is now looked upon as the highlight of the year for children, families and community. Support from the church has also extended to organising and funding a positive parenting night and supporting end of year functions leading up to Christmas. In 2008 some twenty needy families in the community were identified and provided with Christmas hampers. The hampers were specially made up with every family member in mind.

The three Reading Teachers who help to raise literacy achievement with 'at risk' students also belong to the Presbyterian Church congregation.
Papakura Council

The school has invaluable links with Mayor John Robertson and Deputy Mayor Peter Goldsmith. It so happened that the Mayor and the Principal, who was new to the school and to the area in 2007, reconnected after some 40 years of attending a little country school together. The principal attended a meeting in the council chambers early in 2007 and gave an account of the 'poor state of the school.' Now both the Former Mayor and Former Deputy Mayor have continued to maintain a strong interest in the development of the school and to continue to call on their networks to support as well as provide mentorship and friendship to the principal over dinner.

Not all "Friends of the School" are listed here as there are so many who have contributed and continue to contribute. Other names include Troy Heslop who has stocked the school nursery with donated veggie plants since the beginning of the gardening project, Maggie Cameron who voluntarily contributed many hours and resources to initiate and drive the 'Healthy Lunches' scheme our Business Partners KPMG who have provided financial advice to the school for over three years and donated much needed computers for every classroom.

The varied and rich contexts provided by the many 'Friends of the School' foster an environment in which cooperation, aspirations, ventures and achievements are well appreciated and highly valued by all.

Meditation

Another initiative started in 2009 has been the whole school implementation of the "Transcendental Meditation Quiet Time" programme. All teachers and support staff have the opportunity to train and practise the Transcendental Meditation technique. In addition all students practice the technique twice each day at school. Year 1 – 5 students walk either inside or outside their classroom for 5 minutes with their eyes open and meditate while students from Year 6 to Year 8 sit at their desks in the classroom close their eyes and meditate for 12 minutes. Teachers report that students are more settled in class, have increased concentration and are doing their work better. They also report that the line of children waiting outside the principal's office has significantly reduced. The children themselves say they find it easier to study and they feel calmer, happier and less pressured.

Staff refer to higher energy levels and generally improved health and well being since learning Transcendental Meditation. Everyone is offered the opportunity to train and all teaching staff have taken up the offer including new staff into the school. Up to now this programme has been funded by private donations. The Board are now seeking long term
sustainable funding to maintain Transcendental Meditation in the school and to extend the programme into the community.

Ministry of Education Support

Currently some of the students identified as “High Needs” who are enrolling in the school have some funding support from the Ministry of Education. This enables the school to employ a teacher aide to work alongside students providing some assistance with learning and behaviour in the classroom and playground.

Schooling Improvement: Papakura Achievement Initiative.

The school is part of the Ministry of Education school support initiative which aims to raise student achievement in literacy learning across 22 schools in the Papakura area. Poor student achievement in the school has been a longstanding issue. As Timperley explains, "Where achievement problems are entrenched, possibilities for improved outcomes may become apparent only over time, as teachers see evidence that students can acquire new knowledge and skills when taught differently." (2008, p.8)

Teacher professional development through the initiative is in the form of regular workshops and in class support for teachers from a literacy facilitator who observes teacher practice, provides feedback on practice and models teaching strategies tailored to the needs of students in classrooms. Achievement data is collated regularly and analysed for shifts in student achievement.

To date the shifts in achievement have been minimal with the majority of students remaining well below expectation as demonstrated in the accompanying results for the Year 4 Supplementary Test of Achievement in Reading. The results reported for this year group are similar to those for all year levels in the school. Exceptionally high teacher turnover has been a feature of the school for many years and has a significant impact on student achievement. Since the schooling improvement initiative began in 2008, there is only one teacher out of seven who has been teaching in the school for the duration. Currently the majority of teachers are in the early years of their teaching profession and most have not yet completed one year of teaching in this school. It is going to take some time to get traction and for them to reach the required level of expertise. The issue then will be ensuring a school environment in which they will want to remain. This is not easy when most other schools with higher student numbers generally enjoy a better level of resourcing.
Figure 6

Supplementary Test of Achievement in Reading (STAR) Test 1 Year 4 Students

Results
- The distribution of Year 4 students at stanines 1 & 2 (65%) is significantly higher than the normal distribution of 11%.
- 92% of boys are below average
- 80% of girls are below average
- 88% of Māori students are below average
- 87% of Pasifika students are below average
- There are no students at stanines 7, 8 & 9 i.e. above average or high

Despite the quality professional development the greatest impediment to raising student achievement in the school is recruitment and retention of quality teachers.

Social Worker in Schools and Resource Teacher Learning and Behaviour

There is also a Social Worker in Schools (SWISS) funded by the Department of Child Youth and Family and a Resource Teacher Learning and Behaviour (RTLBD) funded by the Ministry of Education. Both are attached to the school however the time constraints; (SWISS 2 days per week and RTLBD 4 hours per week) and level of high need in the school means that, despite best efforts, the work undertaken by both personnel is barely touching the surface.
Conclusion

The title of this paper "Transforming a Decile 1 School and Community in South Auckland New Zealand" is in the present tense and as such signals that the work of transformation is by no means over and in fact has some way to go before we can be assured students are receiving high quality teaching and learning. It is an indictment on the system that such levels of disadvantage in a school should be allowed to go unchecked for so long and then for Government departments such as the Ministry of Education and the Education Review Office to have the expectation that the disadvantage can be fixed by simply applying normal approaches to fixing complex issues. It takes time to transform a failing school and a community in poverty but the big issue is that there is no time. Every day it takes to move forward to normal is another day where students' rights to the best possible education are compromised.

Some of the 'pathways to success' continue to have a very positive effect in the school and in the community such as the "Mahinga Kāi" project and the student learning interventions implemented by the school. Other factors including the practice of Transcendental meditation by students and staff has had a 'calming' influence on student behaviour which previously was a major issue. The greatest benefits however come from the many 'Friends of the School,' who enter the school gate and see what we are doing and choose to participate in the process of transformation. The open door policy at Edmund Hillary School has served us well over the last four years and will continue to do so as we engage in problem solving discussions with like minded committed people and push the boundaries in the process of transforming a school well known for failure.

No one likes to be associated with failure. No one consciously chooses to fail. When we see evidence of it, those of us who are privileged, have an obligation to commit to a stance of zero tolerance otherwise we fail also. This requires knowledge, commitment and endurance but above all passion. We have a vested interest because what children do in life, how they think and how they behave will determine not only their future but ours too. The key is not just for educators but for everyone to care enough to make some kind of contribution towards improving the wellbeing of others less fortunate. The rewards as many of us have found are limitless.

Therefore as we endeavour to shift the school forward to 'normal' and then on to 'exceptional' we remember the determination and courage demonstrated by Sir Edmund Hillary when he conquered Everest in 1953 and recall a favourite quote of his; "It is not the mountain we conquer, but ourselves". Finally the motto he bestowed on the school in 1963 presents a formidable challenge to us all;

"Be Determined, Aim High."

Kia kaha Kia Rangatira
References


Baxter, K (2008) 'Design your own orchard bring permaculture design to the ground in Aotearoa' Body and Soul Publishing, New Zealand


Department of Child Youth and Family website www.cyf.govt.nz


Education Review Office Promoting Success for Maori Students June 2010 www.ero.govt.nz

Education Review Office Including Students with High Needs June 2010 www.ero.govt.nz


Statistics New Zealand Website  www.statistics.co.nz


A report to the Minister for the Community and Voluntary Sector  2009
## Appendix 1

### Figure 7

**Quick60 Tests Results**

March/April 2010 Initial Tests – June 2010 Tests

<table>
<thead>
<tr>
<th>Student</th>
<th>Alpha Name</th>
<th>Alpha Sound</th>
<th>Alpha Word</th>
<th>H/F Word</th>
<th>Spell Nos</th>
<th>Spell Points</th>
<th>Pseud No</th>
<th>Pseud Points</th>
<th>Reading Level</th>
<th>Nos of Lessons</th>
<th>Hours at 20 minutes per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – Yr4 ESOL - Samoan</td>
<td>20 26</td>
<td>12 22</td>
<td>18 23</td>
<td>32 100</td>
<td>3 13</td>
<td>42 79</td>
<td>0 23</td>
<td>0 132</td>
<td>5 14</td>
<td>32</td>
<td>10.6hrs</td>
</tr>
<tr>
<td>B – Yr4 Maori – Behavioural Issues</td>
<td>22 26</td>
<td>21 25</td>
<td>21 26</td>
<td>29 87</td>
<td>3 7</td>
<td>52 68</td>
<td>0 27</td>
<td>0 132</td>
<td>5 11</td>
<td>31</td>
<td>10.3hrs</td>
</tr>
<tr>
<td>C – Yr4 Maori - Left 20/5/10</td>
<td>25 18</td>
<td>22 26</td>
<td>2 37</td>
<td>0 0</td>
<td>3 9</td>
<td>132</td>
<td>0 132</td>
<td>3 10</td>
<td>34</td>
<td>11.3hrs</td>
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<tr>
<td>D – Yr5 Maori – Critical attendance (oldest of 8)</td>
<td>25 26</td>
<td>18 22</td>
<td>21 22</td>
<td>22 66</td>
<td>4 3</td>
<td>56 58</td>
<td>0 8</td>
<td>0 49</td>
<td>3 10</td>
<td>34</td>
<td>11.3hrs</td>
</tr>
<tr>
<td>E – Yr3 ESOL – Arrived NZ from Tokelau T3/2009</td>
<td>22 25</td>
<td>17 22</td>
<td>14 23</td>
<td>7 65</td>
<td>4 5</td>
<td>32 40</td>
<td>0 7</td>
<td>0 68</td>
<td>3 9</td>
<td>35</td>
<td>11.6hrs</td>
</tr>
<tr>
<td>F – Yr3 ESOL - 1st 2 yrs @ school in Samoan Unit</td>
<td>21 26</td>
<td>11 26</td>
<td>20 25</td>
<td>14 77</td>
<td>2 10</td>
<td>41 64</td>
<td>0 17</td>
<td>0 120</td>
<td>3 7</td>
<td>34</td>
<td>11.3hrs</td>
</tr>
<tr>
<td>G – Yr3 ESOL – Arrived NZ from Tokelau T3/2009</td>
<td>10 26</td>
<td>0 25</td>
<td>0 26</td>
<td>0 73</td>
<td>0 5</td>
<td>6 65</td>
<td>0 28</td>
<td>0 137</td>
<td>1 7</td>
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<td>12.0hrs</td>
</tr>
<tr>
<td>H – Yr3 ESOL - Tongan, No English spoken at home</td>
<td>14 25</td>
<td>8 23</td>
<td>2 26</td>
<td>5 67</td>
<td>0 2</td>
<td>0 47</td>
<td>0 5</td>
<td>0 92</td>
<td>1 4</td>
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<tr>
<td>Student</td>
<td>Year</td>
<td>Ethnicity</td>
<td>Problem</td>
<td>Absences</td>
<td>Total</td>
<td>Percentage</td>
<td>Hours</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I – Yr2 Maori – Critical attendance 1st year at school</td>
<td>13</td>
<td>26</td>
<td>11</td>
<td>24</td>
<td>8</td>
<td>25</td>
<td>5</td>
<td>72</td>
<td>0</td>
<td>13</td>
<td>3</td>
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<tr>
<td>J – Yr2 ESOL-Samoan Behaviour Issues</td>
<td>20</td>
<td>26</td>
<td>9</td>
<td>26</td>
<td>5</td>
<td>26</td>
<td>0</td>
<td>65</td>
<td>0</td>
<td>13</td>
<td>0</td>
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<tr>
<td>K – Yr2 Tongan Hearing Problems</td>
<td>8</td>
<td>26</td>
<td>2</td>
<td>26</td>
<td>0</td>
<td>24</td>
<td>0</td>
<td>29</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>L – Yr2 Maori – Critical attendance</td>
<td>14</td>
<td>8</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
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<tr>
<td>M – Yr2 Maori – Critical attendance (3rd oldest of 8)</td>
<td>5</td>
<td>23</td>
<td>0</td>
<td>16</td>
<td>0</td>
<td>21</td>
<td>0</td>
<td>31</td>
<td>0</td>
<td>2</td>
<td>0</td>
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<tr>
<td>N – Yr3 Maori – Critical attendance. (2nd oldest of 8) Joined group late - 26/5/10</td>
<td>12</td>
<td>24</td>
<td>5</td>
<td>24</td>
<td>6</td>
<td>24</td>
<td>1</td>
<td>45</td>
<td>0</td>
<td>6</td>
<td>2</td>
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<tr>
<td>O – Yr3 Maori - Transient Left 25/4/10</td>
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<td>1</td>
<td>3</td>
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A. Title
Establish Community Learning Network for Senior Citizens: a Perspective of Resource Integration

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C. Abstract
As the population of elder increases, the government and private institutions have responded to the elder's needs to hold many learning activities accordingly. However, this causes the phenomenon of repeating to use and waste community resource. The aim of this article is to reexamine the community resource with resource integration. First, describe the status quo of Taiwan community elder education. Second, the researcher briefly explores the origin and context of resource integration. Third, using an integration view to discover and analyze the community resources with six categories: human, material, financial, organizational, cultural, and natural sources. To conclude, strategies for establishing community learning network for senior citizens are presented.
An Analysis of Graduate Student Retention and Attrition Efforts at Selected Historically Black Colleges and Universities in the Southern Region of the United States

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Abstract

The purpose of this study was to identify persistence factors that influenced African American doctoral students’ completion at selected historically Black colleges and universities (HBCUs) in the Southern region of the United States. The conceptual framework for this study includes an integration of theoretical constructs from four widely utilized and tested theories of undergraduate student persistence guided by the theoretical framework of student motivation, student choice, and student persistence. Data were collected utilizing a Likert scale survey, the Doctoral Student Persistence Survey which assessed the perceptions of doctoral students as to factors which promote persistence and those perceived barriers for student success.

Key Words: retention, attrition, graduate, historically Black college and university
An Analysis of Graduate Student Retention and Attrition Efforts at Selected Historically Black Colleges and Universities in the Southern Region of the United States

Introduction

Research universities in the United States are internationally known as the foremost institutions in graduate education. With this reputation, research institutions have recruited students of all nationalities, ethnic groups, and religions for their student population. However, in the United States, graduate schools have been less successful in recruiting the minority population which includes: Hispanics, African Americans, Asians, and Native Americans. In fact, the proportion of minority students in higher education declines as one moves from baccalaureate to master’s to doctoral degree programs, and at each level the percentage is well below the percentage of these individuals in the U.S. population (American Council on Education, 2003). Simultaneously, the nation's minority population is steadily rising and now makes up 35 percent of the United States, illustrating a trend that could make minorities the new American majority by 2050.

New Census Bureau data estimates that minorities added more than 2 percent in 2009 increasing to 107.2 million people, due to Hispanic births and more Americans describing themselves as multiracial. During this time, the White population remained flat, making up roughly 199.9 million, or 65 percent, of the country. Just ten years ago, Whites comprised 69 percent of the total population and minorities 31 percent. Currently four states – Hawaii, New Mexico, California and Texas – as well as the District of Columbia have minority populations that exceed 50 percent (Census Bureau, 2010). Such demographic changes in the nation will be reflected in the graduate student population.
In the last decade, African Americans have made advances in doctoral degrees (National Science Foundation [NSF], 2007). From 1996 to 2006, the number of African American doctoral recipients increased 27%. In that same period, the total number of Ph.D.s conferred by all United States universities increased by 8%. In the last twenty years, the number of African Americans who received doctorates in science and engineering has more than doubled (National Science Board, 2008). While graduate schools have made great efforts to increase graduate enrollment and degree success for African American students, HBCUs have led the increase in the number of African American doctoral degree holders.

Another factor fueling this increase was affirmative action programs created by colleges and universities during the late 1960s and 1970s, largely to comply with Title VI of the Civil Rights Act of 1964, which prohibits several types of discrimination in student recruitment, admissions, and financial aid (Ervin & Davenport, 2007). This growth was aided by the Supreme Court’s decision in Regents of the University of California v. Bakke (438 U.S. 265, 1978), which allowed race to be a determinant in the admission to graduate schools. Preferential race-based programs were developed partly in response to the demands to improve the graduation rates of minority students at Traditionally White Institutions (TWIs).

The perceptions of barriers and strategies for the recruitment and retention of diverse graduate student population of college and university administrators and others who are responsible for recruitment and retention of the graduate student population are critical players for creating changes in higher education during the 21st century. Therefore, the purpose of this study was to identify persistence factors that influenced African American doctoral students’ completion at selected historically Black colleges and universities (HBCUs) in the Southern region of the United States. The conceptual framework for this study includes an integration of
theoretical constructs from four widely utilized and tested theories of undergraduate student persistence guided by the theoretical framework of student motivation, student choice, and student persistence.

Background

The *Higher Education Act of 1965* defined an HBCU as any historically Black college or university, established prior to 1964, whose principal mission was, and is, the education of African Americans. These educational institutions are accredited by a nationally recognized accrediting agency or association, as determined by the United States’ Secretary of Education to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation. HBCUs were founded during an era when African American students were barred from attending traditionally white, postsecondary institutions. The Civil Rights Movement opened the doors of traditionally White colleges and universities to minority students, some policymakers have challenged the relevance of HBCUs, arguing that they serve no purpose in an integrated system of higher education. Of the 105 HBCU institutions in America today, 27 offer doctoral programs and 52 provide graduate degree programs at the Master's level.

However, HBCU graduate programs continue to help promote campus diversity nationally as a result of assaults to affirmative action. In 1996, California voters passed Proposition 209. The initiative prohibits discrimination against or preferential treatment for any individual or group in public employment, education, or contracting on the basis of race, sex, color, ethnicity, or national origin (Ervin & Davenport, 2007). Voters in Washington State followed suit in 1998, and voters in Texas accepted similar initiatives as well (Chang, Witt, Jones, & Hakuta, 2000). Meanwhile, *Grutter v. Bollinger* (539 U.S. 306 (2003), a case in which
the United States Supreme Court upheld the affirmative action admissions policy of the University of Michigan Law School, 5-4 decision, was overturned by a referendum of Michigan voters.

Therefore, today although HBCUs represent only 4% of all colleges and universities in the U.S., they account for nearly one-quarter of the African American bachelor’s degree recipients (Redd, 2000). HBCUs have been increasing their involvement in graduate education and since 1996 more HBCUs have begun to offer doctoral programs. Prior to 1996, less than one-quarter of the 87 four-year public and private HBCUs awarded doctorates. By 2006, the percentage of HBCUs with doctoral programs grew to 32%, with just under fifty percent of the four-year public historically Black institutions offering such programs. The increase in HBCUs offering doctorates and the number of graduate students attending these programs has led to a rapid growth in the number of African Americans receiving Ph.D.s and other doctoral degrees in the past five years. In fact, the percentage increases in African American doctorates from HBCUs appears to have accelerated, while the number of these awards overall has slowed.

The enrollment of African Americans and students of color in graduate programs is one of many problems facing this country. A lack of minority graduate students in the educational pipeline means a lack of minorities in higher education and despite minimal gains recruiting, retaining, and graduating minority students in graduate programs, a problem still exists in the graduation of doctoral students, and many universities are searching for innovative strategies to increase retention and graduation of African American students. As the overall color scheme of the Flagship and Research I institutions across the nation has become more Asian and White, African American graduates and people of color are being displaced (Hale, 2006). Therefore, this further highlights the importance of additional examination of issues related to retention and
graduation rates of African Americans at HBCUs. Because of this growing trend, HBCUs have become a refuge of last resort for graduate exploration of many African Americans and people of color (Garibaldi, 1984).

Table 1: Percentages of Change in Doctoral Degrees Awarded to African Americans at HBCU Compared with All U.S. Universities

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HBCUs*</td>
<td>35%</td>
<td>36%</td>
<td>82%</td>
</tr>
<tr>
<td>All Universities*</td>
<td>25%</td>
<td>3%</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Includes awards to U.S. Citizens and permanent residents only
Source CGSNER. ORG

Hale (2006), stated: “Black institutions of higher education have assumed the burden of responsibility for those students who have hungered for knowledge and the opportunity to gain it” (p. xvii). Therefore, the question this society must ask itself is, if HBCUs do not “do it right,” that is retain, adequately prepare and graduate minority students, who will do it? (Hale, 2006). HBCUs now more than ever have an even more important role in society through the education of African American graduates prepared and ready to compete in the global market.

Retention and Attrition Theoretical Models

Retention in post-secondary education is described as activities or programs which reduces student dropout rates and enhance the institution’s overall graduation rates (Pascarella & Terenzini, 1991). However, there exists a vast array of literature on student retention and attrition in general; over the past half century. According to Pascarella and Terenzini (1991), numerous studies such as Bean and Metzner's (1985) Nontraditional Student Attrition Environmental, where they discovered environmental factors have a greater impact on departure decisions of adult students than academic variables. Kamens (1971, 1974), used multi-
institutional data to demonstrate how colleges of greater size and complexity had lower attrition rates. McNeely (1973) "College Student Mortality", examined many factors in college student retention including time to degree, when attrition was most prevalent in a student's education, and impact of college size Spady Model (1971) studied the interaction between student characteristics and campus environment; all conducted to relate the affects of colleges themselves on the retention, attrition and graduation of students. Among them the most noted have been Tinto’s Student Integration Model (SIM, 1975, and 1997); Astin’s Student Involvement Theory (SIT, 1984); Bean’s Student Attrition Model (SAM, 1982, 1983, 1985, and 1990); and, Padilla’s Expertise Model of Successful Students (EMSS, 1991, and 1994).

Tinto’s Student Integration Model

Tinto (1975) developed the Student Integration Model (SIM) of attrition (see Figure 1). This model was to offer an explanation of the aspects and procedures that influenced an individual’s decision to leave an institution, and how these processes interact to ultimately produce institutional attrition. Tinto’s SIM model was based solely on Durkheim’s (1897) theory of suicide (McCubbin, 2003). According to McCubbin (2003), Durkheim’s theory was founded in the likelihood of someone committing suicide being predicated on the level of their integration into society as a whole.

Durkheim (1897) argued that if an individual has an adequate support network and sufficient moral integration that the likelihood of them committing suicide is reduced tremendously. To this assertion, Tinto (1975) interjected that the act of committing suicide was basically the willful withdrawal from existence by individuals, and, therefore, was equivalent to dropping out of higher education, which was the willful withdrawal by an individual from one aspect of society. Durkheim concluded that the reason an individual commits suicide is because
he or she are not sufficiently integrated into society. Conversely, Tinto (1975) asserted the reason for dropping out is a result of the individual’s insufficient integration into the different aspects of college or university life (Tinto, 1975).

Figure 1: Tinto’s Student Integration Model (1975).

According to Tinto (1975), the two most important means of student integration in a college or university are the institution’s academic and the social systems. Tinto asserted that a student’s reasoning for dropping out occurs through the lack of or extreme integration into either or both systems. Tinto asserted that if a student expends a great amount of time studying that his or her social skills suffer and vice versa. He further indicated that if a student spends a large amount of time on social activities and not enough time dedicated to studying or academics, then his or her grades reflect it. Unlike Durkheim’s (1897) model, Tinto’s (1975) model, according to
McCubbin (2003), failed to take into account the individual’s psychological predisposition in the decision to withdraw.

Key features of Tinto’s SIM model included the degree of integration in the institution’s academic and social systems, and the student’s commitment to the institution itself and his or her individual goals (the enrollment commitment). Tinto (1975) pointed out a number of characteristics which affect the student’s pre-enrollment commitment. These include individual attributes which include race, sex and academic ability. Pre-college experiences include a student’s grade point average, academic and social recognitions, and family background, (i.e., socioeconomic status, family values, climates and cultural backgrounds (Tinto, 1975).

Included also in this model are an individual’s educational expectations, which drive the student’s selection of educational institutions. This researcher stated that because each student views selection of an educational institution as pivotal to future success, commitment to that institution persistence is greatly enhanced. A student’s assessment of their post secondary experience comes in the form of cost benefits analysis. According to Tinto (1975), if the student determines that the cost benefit is high, the likelihood is that the individual will persist, and on the other hand, if he or she concludes that the cost benefit analysis is low, then it is more likely to cause dropout or withdrawal.

Tinto asserted that persisters and non-persisters view educational processes differently. Non-persisters see education as a vocational process and persisters view it as an intellectual gain. He makes a direct link of attrition to social integration, stating that it likely leads to voluntary withdrawal rather than academic dismissal. Social integration within the faculty is one of its most important aspects. According to Tinto, interaction with faculty not only increases the
student’s level of social integration, but it also leads to increased academic integration which translates to increased academic performance by the student.

Tinto’s (1975) student integration model illustrates his premise that academic and social integration, individual goal and institutional commitment are intertwined in a student’s decision to persist. He asserted that academic integration has a direct impact on a student’s individual goal commitment and commitment to his or her chosen institution is directly affected by his or her ability to socially integrate.

While Tinto’s SIM (1975) has been widely accepted for more than twenty years, according to McCubbin (2003), several criticisms exist. McCubbin stated that the criticisms revolve around Tinto’s SIM are “(a) inadequate in modeling student attrition; (b) only applicable to ‘traditional students’; and, (c) academic integration is not an important predictor of student attrition in traditional student populations.”

The criticism that SIM is inadequate in modeling student attrition stems from research conducted by Brunsden, Davies, Shevlin and Bracken in 2000. In their study, Brunsden et al. (2000) administered a questionnaire to first year students to assess the validity of Tinto’s model. They found that global application of the model proved impossible to assess its individual components. However, Brunsden et al. (2000), in their assessment and criticism, did indicate possible shortcomings of their own study, since they did not actually assess social or academic integration, only the potential of these characteristics (Brunsden et al., 2000). They also openly criticized Tinto’s reliance on Durkheim’s model of suicide, arguing that serious doubts arise when linking the relationship of suicide and student dropout.

In an effort to address the levied criticisms of Tinto’s SIM model, he made updates to take into account the importance of the classroom in the educational environment and attrition
process (Tinto, 1997). Tinto affirmed the importance of classroom-faculty interaction on the processes of academic and social integration. It is through this process that institutions realize significance in attrition rates reduction (Tinto, 1997).

In the SIM model revisions, Tinto (1997) asserted previous inadequacies in his original model as seen in Figure 2. These inadequacies occur in his modeling of the relationships between learning persistence, involvement, and quality of effort (McCubbin, 2003). He asserted the inadequacies in how SIM previously assessed the relationship between social and academic interaction as separate and discrete. He subsequently concluded that they

*Figure 2:* Tinto’s Student Integration Model revised 1997.
<table>
<thead>
<tr>
<th>Categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-College Factors</td>
<td>Sex, Race, Socio-Economic Status, SAT Scores, Class Rank</td>
</tr>
<tr>
<td>Goals &amp; Commitment</td>
<td>Commitment – degree completion, commitment to the education and occupational goals one holds</td>
</tr>
</tbody>
</table>

*Figure 5:* Tinto’s Student Integration Model revised 1997 Continued

<table>
<thead>
<tr>
<th>Categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Commitment</td>
<td>Commitment to the institution in which he or she is enrolled and the degree to which one is willing to work towards attaining one’s goals within a given institution</td>
</tr>
<tr>
<td>Social Integration</td>
<td>Ability to make friends, involvement in extra-curricular activities.</td>
</tr>
<tr>
<td>Academic Integration</td>
<td>Involvement with faculty, passing a course</td>
</tr>
</tbody>
</table>

are factors of the larger process and do not warrant individual consideration.
Astin’s Student Involvement Theory

Astin’s (1984) Student Involvement Theory posited that a student’s participation in an institution’s academic as well as social environments encourages enhanced learning and thus equates to retention of students and their successful graduation. Astin (1984) stated that students who are involved devote considerable energy to academics, spend time on campus, participate actively in student organizations and activities, and network often with faculty. On the other hand, he asserted that uninvolved students neglect their studies, spend little time on campus, abstain from extracurricular activities, and rarely initiate contact with faculty or other students (Astin, 1984). The most persuasive types of involvement are “academic involvement, involvement with faculty, and involvement with student peer groups” (Astin, 1996, p. 126). This theory is consistent with student-centered teaching approaches, in that the student has an integral role in determining her or his own degree of involvement in various educational activities.

According to Astin (1984), the quantity and quality of a student’s involvement influences educational value added attributes such as cognitive learning, overall satisfaction with the college experience, and increased student retention rates, which translates to increased graduation rates (Astin, 1984, 1996). For a student to be totally involved in the learning process, he or she must invest genuine energy in the academic relationships and activities of the institution. The amount of energy a student invests in these types of activities will vary based upon the student’s interest, goals, and other commitments.

Astin (1984) argued that instructors should use the involvement theory to maximize student learning. To accomplish that goal, instructors must be aware of how motivated students are and how much time and energy they are devoting to the learning process. Studies conducted by Pascarella and Terenzini (1991) and Tinto (1993) have investigated the effectiveness of
Astin’s (1984) Student Involvement Theory and offer support of his assertion that positive levels of involvement positively influences student’s academic experiences (Ford-Edwards, 2002).

Bean’s Student Attrition Theory

Bean’s (1980, 1982, 1983, and 1990) Student Attrition Model of persistence expanded the previous work of Tinto and Astin by integrating academic variables (i.e., student intent, goals, expectations, and external and internal environmental factors). In addition, Bean’s attrition model includes another set of five facets: (a) Routinization—the idea that student life becomes routine; (b) instrumental communication—how well an institution distributes information about student life; (c) participation in classroom decisions; (d) integration; and, (e) distributive justice—whether rewards are consistent with effort expended.

According to Felder-Thompson (2005), Bean’s model demonstrates how a student’s attitude and behavior correlates with institutional determinants to produce a level of satisfaction which encourages institutional commitment. Felder-Thompson cited Bean’s statement that a student’s environmental factor shapes his or her attitudes and invariably influence behavior. Students should feel a “sense of belonging” or “fitting in” within an academic environment in order to develop institutional commitment (Bean, 1990).

Bean’s Student Attrition Theory’s validity has been well-documented through his many persistence studies (Bean, 1982, 1983, 1985, and 1990). However, the predictive power of the influence of a student’s commitment was not supportive (Cabrera, Castaneda, Nora, & Hengster, 1992). Based on his research, Bean (1985) also developed a Conceptual Drop-Out Syndrome Model. This model focuses on a student’s socialization and how it impacts his or her academic, personal and social outcomes (Felder-Thompson, 2005). The Drop-Out Syndrome is
characterized by a student’s intent to leave, discussions about leaving and the action of leaving, Bean explains and highlights the domains of his Student Attrition Theory (See Table 2).

Bean’s (1980, 1982, 1983, and 1985) model bears many similarities to Tinto’s (1975) model in all areas except the effects of external factors on students’ persistence. He proposes that the role that external factors have on a student’s decision to stay or leave is much more intricate than that indicated by Tinto.

Table 2

*Bean’s Student Attrition Theory Domains*

<table>
<thead>
<tr>
<th>Domains</th>
<th>Characteristics of Domains</th>
<th>Domain Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>Pre-Enrollment: Grades,</td>
<td>College Grades</td>
</tr>
<tr>
<td></td>
<td>Academic Integration</td>
<td></td>
</tr>
<tr>
<td>Social and Psychological</td>
<td>Faculty Contact,</td>
<td>Institutional Fit</td>
</tr>
<tr>
<td></td>
<td>Alienation, Social Life</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>Finance, Opportunity to</td>
<td>Institutional</td>
</tr>
<tr>
<td></td>
<td>Transfer Outside Friends,</td>
<td>Commitment</td>
</tr>
<tr>
<td></td>
<td>Academic Experiences</td>
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</table>

Padilla’s Expertise Model of Successful College Students

Padilla (1991, 1994) developed a local expertise model of successful ethnic minority students at a large research university in the Southwest. Padilla sought to identify the campus specific heuristic knowledge and actions that successful minority students employ to overcome
Padilla’s expertise model is based on the results of qualitative research and on expert systems theory (Harmon & King, 1985), which suggested that the characteristics of successful college students are those in effect which make the students “experts” at being successful students. Consistent with Harmon and King’s (1985) theory, expertise is viewed as compiled knowledge, which comprises two key components: theoretical and heuristic knowledge. Theoretical knowledge is knowledge acquired through a student’s academic pursuit and heuristic knowledge is that which is acquired in everyday activities. He supports his theory that knowledge is based on acquired facts:

…the knowledge of an expert system consists of facts and heuristics. The ‘facts’ constitute a body of information that is widely shared publicly available, and generally agreed upon by experts in a field. The ‘heuristics’ are mostly private, little discussed rules of good judgment (rules of plausible reasoning, rules of good guessing) that characterize expert level decision making in the field. The performance level of an expert system is primarily a function of the size and the quality of a knowledge base it possesses. (Padilla, p. 187)

Theoretical knowledge is largely, book knowledge that is learned on campus through coursework and formal study, whereas heuristic knowledge is locally defined and is acquired experientially. Padilla et al. (1997) surmised that all students arrive on campus with an already acquired intensity of theoretical and heuristic knowledge. Upon their arrival on campus and subsequent indoctrination as a full-fledged student, they are challenged by the institution to
demonstrate increasing levels of theoretical knowledge before they can be awarded a degree. Such knowledge is typically acquired through courses and demonstrated through performance on tests, examinations, research papers, or other formal assessment procedures.

This aspect of the college experience is well understood conventionally. However, the expertise model also suggests that students must acquire a certain amount of heuristic, or practical, knowledge that is necessary to function competently, as, knowing when to drop a course, rather than failing the course and acquiring skills when to change a major can make the difference between earning a degree or not obtaining one. In the case of financial aid, students must know the importance of funding to their persistence, and must monitor key deadlines to ensure that funds are available to continue in college.

Padilla (1991, 1994) pointed out that heuristic knowledge is not usually formally taught to students nor is it significantly generalizable from one institution to another. Heuristic knowledge is passed along informally from experienced students to new students on a one-to-one basis or by student organizations to groups of new students. Overall, heuristic knowledge is not acquired systematically, thus such knowledge may not reach all students. Yet, students are required to amass a substantial body of heuristic knowledge early in their college careers and to expand this knowledge throughout their college years. Those who fail to do so are not likely to complete their degrees since heuristic knowledge is critical for success.

The importance of using Padilla’s Expertise Model of Successful College Students has been extensively examined by Trevino and Rendon (1991, 1994). This model utilizes students’ perspectives in addressing campus-specific issues (Hernandez, 2000; Padilla et al., 1997). Researchers drew on Padilla’s view that successful students’ persistence is based on the knowledge of the student rather than identifying what students do wrong (Hurtado & Garcia,
The following figure compares Bean’s, Tintos, Astin’s and Padilla's theories.

![Figure 3: A comparison of the elements in the Tinto, Astin, Bean, and Padilla Models](image)

Therefore, the researches utilized procedures that incorporates conceptual models of student persistence of Tinto (1975, 1987, 1993), Astin (1984/1985), Bean (1990, 1982, 1985), and
Padilla (1991, 1997) to examine factors that promote persistence for African American doctoral students at HBCUs in the Southern region of the United States as seen in Figure 3.

Methodology

Data were collected utilizing Likert scale surveys from two institutional groups by means of the *Doctoral Student Persistence Survey* for doctoral students to assess factors which promote persistence and those perceived barriers to student success. A convenience sample completed surveys through SurveyMonkey.com. The resulting ordinal data, for purposes of analysis was not summed but, rather analyzed on a case by case basis using Spearman Rho Coefficient to determine the relationships between factors that measure students’ perception of persistence toward degree completion (n=86 students). The population was all African American students in doctoral degree programs and institutional administrators at selected HBCUs in the Southern region of the United States. The focal institutions were: Alabama State University, Fayetteville State University, Florida A & M University, Grambling State University, Howard University and Jackson State University, and Morgan State University.

Based on the statement of the problem, the purpose of the study, and the conceptual framework, the following research questions and hypothesis were addressed:

Research Question 1: What are the motivating factors that influence African American graduate students at the respective HBCUs (Alabama State University, Fayetteville State University, Florida A&M University, Grambling State University, Howard University, Jackson State University, and Morgan State University) to persist toward completion of graduate programs?

Research Question 2: What are the factors that influence academic success for African American graduate students at the respective HBCUs (Alabama State University, Fayetteville State
University, Florida A&M University, Grambling State University, Howard University, Jackson State University, and Morgan State University)?

Research Question 3: What are the barriers that impede progress for African American graduate students at the respective HBCUs (Alabama State University, Fayetteville State University, Florida A&M University, Grambling State University, Howard University, Jackson State University, and Morgan State University)?

Research Question 4: What are the intervention efforts utilized at the respective HBCUs (Alabama State University, Fayetteville State University, Florida A&M University, Grambling State University, Howard University, Jackson State University, and Morgan State University)?

It was hypothesized that:

\( H_01: \) There is no significant difference in the success rate of African American doctoral students and relationships development with faculty within their doctoral programs.

\( H_02: \) There is no significant difference in the success rate of African American doctoral students and a supportive faculty which has a strong impact of the student’s intellectual development.

\( H_03: \) There is no significant difference in the success rate of African American doctoral students and adequate financial support and institutional commitment to the student.

\( H_04: \) There is no significant difference in the success rate of African American doctoral students and their personal commitment to the degree, family support, and practice of chosen religious belief.
H_0_5: There is no significant difference in the success rate of the African American doctoral student and feedback and grading of scholarly projects.

H_0_6: There is no significant difference in the success rate of African American doctoral students and faculty interest research and the ability to present research at professional conferences.

H_0_7: Institutional commitment, retention programs or policies, comprehensive orientations, and quality academic advisement have no significant impact on the success rate of African American doctoral students.

H_0_8: Professional development seminars or workshops and collaborative research projects have no significant impact on the success rate of African American doctoral students.

Findings

*What are the motivating factors that caused African American graduate students at the respective HBCUs to persist toward completion of graduate program*

The hypotheses answered with these statements are:

1. H_0_1: There is no significant relationship between the success rate of African American doctoral students and relationship development with faculty within their doctoral programs.

2. H_0_2: There is no significant relationship in the success rate of African American doctoral students as it relates to a supportive faculty and a strong impact of the student’s intellectual development.
3. Ho3: There is no significant relationship between the success rate of African American doctoral students and adequate financial support and institutional commitment to the student.

The data collected indicated that the motivating factors that cause African American graduate students to persist toward degree completion were the areas which centered most on their relationships with faculty within their departments. They indicated that the strong impact of at least one faculty member in their program on their intellectual development and the ease at which faculty-student relationships are developed and maintained during the student degree pursuit assisted in their persistence. Both institutional administrators and the students themselves indicated adequate financial support as a motivating factor to persistence. However, the area that seemed to appear throughout the study for students is their relationships with faculty, whether that be through fair grading policies or collaborative research opportunities.

Research Question 2

What are the factors that influence academic success for African American graduate students at the respective HBCUs?

The hypotheses answered with these questions are:

1. Ho4: There is no significant relationship in the success rate of African American doctoral students and their personal commitment to the degree, family support, and practice of chosen religious belief.

2. Ho5: There is no significant relationship between the success rate of the African American doctoral students and the feedback and grading of scholarly projects.

The data collected indicated that the factors which most influenced academic success for African American graduate students as it relates to their respective HBCUs were institutional
support and commitment, faculty support and interest in their research, professional
development, and adequate financial assistance. There were also three identified factors which
had to do with persistence from the student viewpoint. They were family support and
encouragement during the stresses of the doctoral process, their personal commitment to their
goal of degree attainment, and their belief in and practice of their chosen religious faiths.

**Research Question 3**

_What are the barriers that impede progress for African American graduate students at the respective HBCUs?_

The hypotheses answered with these questions are:

1. \( H_o6: \) There is no significant relationship between the success rate of African American
doctoral students and faculty that demonstrate an interest in their research and their
ability to present that research at professional conferences.

2. \( H_o7: \) Institutional commitment, e.g., retention programs or policies, comprehensive
orientations, and quality academic advisement have no significance on the success rate
of African American doctoral students.

3. \( H_o8: \) Professional development seminars or workshops and collaborative research
projects have no significance impact on the success rate of African American doctoral
students.

The data collected indicated that the barriers that impede progress for African American
graduate students at their respective HBCUs overwhelmingly were institutional support and
commitment, faculty support and interest in their research, professional development, and
adequate financial assistance. Though these are seen as success factors, they were also identified
as potential barriers to degree persistence. Both student participants and institutional
administrators pointed out that financial packages which included research, travel, and conference grants as well as tuition stipends were most desirable, yet the most difficult to receive.

Research Question 4

What are the intervention efforts utilized at the respective HBCUs? Recruiting and retaining minority students are growing concerns for leaders of colleges and universities across the United States. Presidents of universities and deans of colleges have depicted minority recruitment and retention as vital issues for higher education. African American students completing their undergraduate education at HBCUs are more likely than those from other schools to attend graduate school and to complete doctoral degrees. HBCUs also account for 17 percent of African American graduate students in science and engineering fields (NSF, 2000b, p. 30). Therefore, often issues of recruitment and retention are not considered important at their graduate institutions. Further, the financial assistance, often available at TWIs, is not available at most HBCUs, except for specialty areas such as the science, engineering or public health areas.

The researchers examined University websites and recruitment, admission, and retention documents of the focal institutions in order to answer this research question. One researcher serve as the director of the Graduate Feeder Scholars Program (GFSP) in the School of Graduate Studies and Research GFSP, an official partnership agreement arranged by FAMU with more than 40 participating universities located throughout the United States. FAMU acts as the hub of the consortium with a committed role of providing a pool of qualified African American students motivated to pursue the Master’s or Ph.D. degree. This individual’s role is to be knowledgeable about graduate programs, including, but not limited to a university’s recruitment, retention, and attrition statistics.
In fact, an examination of the websites and admission, recruitment, retention literature indicates that although each of the institutions under consideration had a retention and attrition policy statement, as well as a graduate school and/or graduate support program, Howard University had the only established program, the Retention, Mentoring, and Support Program. The goals of the Retention, Mentoring, and Support Program at Howard University are to:

1. provide the structure for an organized, well-designed program of mentoring and retention that will improve the quality of life for students in the Graduate School at Howard University

2. reduce attrition;

3. reduce time to degree;

4. provide opportunities for fellowships and internships; and

5. enhance career and professional development.

To achieve its goals, the Howard University Retention Mentoring Program works directly with peer mentors, graduate faculty, and graduate program directors to provide information, mentoring, recognition, role models, funding and other resources necessary to ensure the success of its graduate students. The Office of Retention and Mentoring works closely with academic departments to identify and secure funding for graduate students. Students compete for several prestigious fellowships annually both university based and nationally (See http://www.gs.howard.edu/omrs/default.htm).

Table 3 provides an Exploratory Factor Analysis of Student Persistence. The Doctoral Student Persistence Survey asked students to rate their satisfaction with factors that determine their ultimate persistence to degree completion. These factors included the student’s commitment to their goal of degree completion; how they felt that their institutions demonstrated
commitment to their degree completion through adequate financial support; their feelings on the importance of family support during the stresses of the doctoral process; and how the practice and belief in their chosen religious faiths affected their persistence toward degree completion.

Table 3: Exploratory Factor Analysis of Student Persistence

<table>
<thead>
<tr>
<th>Persistence Factors</th>
<th>% of Variance = Statistical Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment to Goal</td>
<td>39.4%</td>
</tr>
<tr>
<td>Institution Financial Support</td>
<td>27.6%</td>
</tr>
<tr>
<td>Family Support</td>
<td>20.5%</td>
</tr>
<tr>
<td>Religious Belief/Faith</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

The results of the Exploratory Factor Analysis indicated that the students had a 39.4 percent variance or statistical dispersion in their commitment to their goal of degree attainment. This analysis supports what researchers in other studies (Ford-Edwards, 2002 and Felder-Thompson, 2005) have concluded, which is that African American doctoral students are a strongly resilient group and persist beyond odds. The analysis also indicated that there was a 27.6 percent variance or statistical dispersion in the student’s belief that their institutions were committed to their goal of degree completion through the awarding of adequate financial support. Previous studies which looked at the importance of financial support to a student’s decision to persist or not to persist have been wide-ranging. These studies offered no clear indicators of its importance, however, suggesting that if a student failed to persist because of financial reasons, the student more often than not had issues with the institution itself (Ford-Edwards, 2002).
Family support indicated a 20.5 percent variance or statistical dispersion. This result is in line with other studies in that family support is seen by the majority of participants in the study as a major importance in their decision to persist. Doctoral programs are accompanied with a great deal of stressors, family support acts as a path to stress relief and potential crisis solving. Religious faith or practice in religious beliefs indicated a 17.6 percent variance or statistical dispersion. These results indicate that a participant’s religious faith or belief plays a significant role in their persistence; often offering a major source of motivation for a student’s ultimate academic success.

Each of these four persistence factors determines the student’s ultimate persistence to degree completion. They total 100 percent of the student’s overall satisfaction with factors that equal academic success. These results overwhelmingly support the fact that African American students in doctoral programs at selected HBCUs persist for a variation of reasons, but they do persist greatly in part to their own inner desire and commitment to their goals.

Analysis of Findings

Upon review of the statistical analysis, several themes emerged as significant in participants’ responses which indicate that (1) faculty support, (2) clear communication, (3) family support, (4) relationship building with faculty and other students within their programs, (5) institutional commitment to graduate education, (6) freedom from financial burdens, and (7) their belief in and practice of their chosen religion were significant factors in motivating African American graduate students towards academic success (we can’t use or note that several themes exists because this was a quantitative study – change themes to something else). Themes which emerged as perceived barriers by the students, as well as the administrators were (1) lack of adequate financial support, (2) institutional commitment to graduate education, (3) students
relationships with faculty, (4) clearly established retention policies and (5) and clear articulation of institution’s commitment to graduate education.

Consequently, the emerging themes of both persistence factors and perceived barriers offer a lens through which the student’s experiences in their respective graduate programs and institutions can be understood. It also allows the researcher’s the opportunity to ponder the development of a useful model for improving attrition, retention, and graduation rates at HBCUs nationally. Earlier we discussed previous models of students’ success by theorist Astin (1996), Tinto (1975), Bean (1980), and Padilla (1991). Each of them examined persistence behavior of students which lead to their ultimate success. However, the factors of persistence at HBCUs given their unique financial postures and limited resources sometimes vary immensely from those of TWIs, leaving their students with the task of mastering other avenues for persistence. While these models were very useful in recognizing behaviors which students utilize to persist in the social and academic educational environments, their measure of student success had often been limited to whether the student actually completed their intended degrees. This study examined what factors were perceived by both the administrators who managed graduate programs and the students who navigated those programs. From this examination, the researchers were able to gleam the emergence of the success strategies utilized by African American graduate students to persist toward degree completion. Thus, we consider those who have successfully navigated these processes, experts in the application of persistence.

It was concluded that institutional and faculty support, as well as adequate financial resources, was vital to these students' ultimate success. No association was found between the success of African American graduate students and their perceptions of the relationship of development with faculty; perceptions of supported faculty; financial support and institutional
commitment. Similarly, there was no association between academic success of the African American student and graduates in the study and personal commitment, family support, and chosen religious beliefs.

Recommendations for further study included developing comprehensive retention programs; conducting an in-depth analysis of attrition factors in doctoral education of African American students; and offering professional development workshops and seminars as a required components of doctoral curriculum.
References


Enhancing the minority presence in graduate education, 1988. Council of Graduate Schools.


Rovai, A. (2002). In search of higher persistence rates in distance education online programs. *Internet and Higher Education, 140*, 1-16.


TEACHER ACCOUNTABILITY WARS IN FLORIDA

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Abstract
The Vanderbilt study on Performance Pay reveals merit pay does not boost student achievement. Despite evidence to the contrary, many politicians and policymakers today link school accountability and school performance. Drawing on evidence from the corporate world, they assume that strong external accountability will impel schools to improve student achievement. This paper discusses one such movement in the State of Florida.
Teacher Accountability Wars in Florida

Introduction

In August 2010, Florida was one of 10 winners in the second round of the federal Race to the Top grant competition, securing approximately $700 million to be used in part to develop merit-pay plans for teachers. State school districts that signed Florida's Race to the Top application — 65 of 67 school districts had 90 days (until November 22, 2010) to work out preliminary plans with their teacher unions. The grant mandates that school districts develop procedures that base at least half a teacher's evaluation on their students' growth on standardized tests. The current grant was Florida’s second attempt to win the coveted Race to the Top federal education grant. The second time, unlike the first, the State had the backing of most of the state's teachers unions. In the first round of the application process, Delaware and Tennessee were awarded grant money with Florida finishing fourth out of 41 states. Many believed that the lack of teacher union support clearly played a role in its previous placement. In fact, a reviewer of the initial application noted the fact that only 8 percent (of) union leaders endorsed the state's application raising a concern about barriers that needed to be addressed by the state and at the local level. The Race to the Top grant and its emphasis on teacher accountability is the last in a long line of measures created by the Florida legislature to force teacher accountability.

Education in Florida

The Florida education system consists of public and private schools in Florida, including the State University System of Florida (SUSF), the Florida College System (FCS), the Independent Colleges and Universities of Florida (ICUF) and other private institutions, and also secondary and primary schools. As mandated by the Florida Constitution, Article IX, section 4, Florida has 67 school districts, one for each county (Florida Constitution). All school districts
are separate from municipal government. School districts have the power to tax their residents under Florida state law, there was a continuous effort to improve and refine Florida’s Statewide Assessment Program (U.S. Census Bureau, 2005).

The Florida Comprehensive Assessment Test (FCAT) is part of Florida’s overall plan to increase student achievement by implementing higher standards. The FCAT, administered to students in Grades 3-11, contains two basic components: criterion-referenced tests (CRT) measuring selected benchmarks in Mathematics, Reading, Science, and Writing from the Sunshine State Standards (SSS) and norm-referenced tests (NRT) in Reading and Mathematics measuring individual student performance against national norms. Table 1 illustrates a brief outline of the origin of the student assessment and school accountability system, including the origin of the Sunshine State Standards and the development, administration, scoring, and reporting of the Florida Comprehensive Assessment Test (Assessment & Accountability Briefing Book, 2007).

Table 1: The origin of the Sunshine State Standards and the development, administration, scoring, and reporting of the FCAT

<table>
<thead>
<tr>
<th>Chronology</th>
<th>The Origin of the sunshine State Standards and the development, administration, scoring, and reporting of the FCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>The 1991 School Improvement and Accountability legislation, commonly referred to as Blueprint 2000, established the Florida Commission of Education Reform and Accountability and called for sweeping changes in schools. The intent of the legislation was to ensure higher levels of achievement for all students and more accountability for schools. The legislation also committed the state to</td>
</tr>
</tbody>
</table>
rewarding higher performing schools and providing assistance to unsuccessful schools. School boards were required to identify and report on the status of schools not making adequate progress. At the end of the 1991 school year, school boards reported 72 schools in 65 districts were not making adequate progress.

1992

In October, the High School Competency Test (HSCT) administration for students was changed from Grade 10 to Grade 11. Students could continue to retake the HSCT through a thirteenth year as high school students or as adults, as long as they were continuously enrolled. The Grade 10 Assessment Test (GTAT) was first administered in 1992. It was a customized, norm-referenced, multiple-choice test in reading comprehension and mathematics given in Grade 10. The Florida Writing Assessment Program (FWAP) was administered for the first time to Grade 4 students in 1992.

1993

The program was expanded to include Grade 8 students, and Grade 10.

1994

Florida participated in the NAEP Grade 4 reading assessment. The Improving America’s Schools Act of 1994 introduced design changes that expanded the data that NAEP gathered to include mathematics and reading assessments of students in Grades 4, 8, and 12. However, due to budget issues, only Grade 4 reading was funded.

1995

The Florida Commission on Education Reform and Accountability recommended procedures for assessing student learning in Florida
that would raise expectations for students and help them compete for jobs in the global marketplace. The State Board of Education adopted the recommendations, called the Florida Comprehensive Assessment Design (FCAD), in June 1995. Also, in 1995 the State Board of Education established student achievement criteria and identified critically low schools based on these criteria. The criteria included norm-referenced test (NRT) scores at Grades 4 and 8, writing scores at Grades 4, 8, and 10, and HSCT scores at Grade 11. Schools were identified as being critically low when average scores in all three subject areas were below the minimum criteria for two consecutive years. In November, there were 158 critically low performing schools (7 percent of the total number of schools reported). Identifying these schools resulted in a commitment to improving student achievement for all schools and all students.

1996 The Sunshine State Standards, Florida’s curriculum framework, were adopted by the State Board of Education for seven subject areas. New legislation (s. 229.565, F.S.) recognized the Performance Standards as the academic standards for Florida students and authorized the Florida Comprehensive Assessment Test® (FCAT). The Grade 10 Assessment Test (GTAT) was discontinued.

1997 Schools not meeting the accountability criteria were identified and reported for the third year. The number of critically low schools decreased to 30, indicating the positive impact school accountability
was having on student achievement. The Florida Legislature created, but was unable to fund, a statewide program to recognize schools with exemplary or improved performance. Revisions to s. 229.57, F.S., required criterion referenced statewide assessments in reading, writing, and mathematics for students in elementary, middle, and high school. Grade levels were not specified. The new assessments were required to include performance tasks. In February, FCAT Reading and Mathematics was field tested in Grades 4, 5, 8, and 10. Each test included items in multiple formats: multiple-choice, girded response and open-ended items (also called performance tasks).

1998 The FCAT was administered for the first time in January to students in Grade 4 (Reading), Grade 5 (Mathematics), and Grades 8 and 10 (Reading and Mathematics). Tests at these grade levels established baseline data and included performance tasks. Achievement levels 1 through 5 were set for FCAT scores. Although the FCAT results were not used for accountability purposes in 1998, school results were reported. FCAT scores from this administration could be used to exempt students from the HSCT required for graduation. Students who scored at or higher than 327 on FCAT Reading and 315 on FCAT Mathematics could take advantage of this exemption. Based on the accountability criteria, only four schools were identified as not making adequate progress in 1998, compared to 158 three years earlier. The Florida School Recognition program was funded for the
first time at $5.4 million, and 140 schools received recognition and monetary rewards. NAEP first offered accommodations to Students with Disabilities (SWD) and English-language learners (ELLs).

1999 The Florida Legislature revised several of the statutory requirements for the state assessment program and enacted bold new accountability legislation known as the A+ Plan for Education (CS/HB 751). This legislation increased standards and accountability for students, schools, and educators. The concept of annual learning gains was added to the accountability system with the addition of tests at grades 3 through 10. The revisions also included the addition of a science assessment for students in Grades 5, 8, and 10; a norm referenced test at grades 3 through 10; the use of the FCAT for graduation; and the development of a system for calculating the academic growth of each student over a year’s time. Consistent with the new legislation, the State Board of Education identified five school performance levels as letter grades, and the 1999 FCAT results were used to assign school grades. In the first year that school performance grades were issued, 78 schools were designated as “F” schools. Students in two schools that were designated critically low performing in 1998 and received “F” performance grades in 1999 were eligible for and some received opportunity scholarships. Approximately $30 million was disbursed to 319 schools for meeting the school recognition criteria.
2000 | New FCAT Reading and Mathematics tests were field tested for Grades 3, 6, 7, and 9 and for Grade 4 Mathematics and Grade 5 Reading. This was the first time all students in grades 3 through 10 were assessed. Florida did not participate in state NAEP because of the expansion of the FCAT. The Florida Writing Assessment Program (FWAP) became FCAT Writing. The first FCAT Norm-Referenced Test (NRT) for reading and mathematics was administered in grades 3 through 10. The FCAT NRT provides information to help ensure that Florida students are keeping pace with their peers nationally. Because the FCAT NRT is designed for this purpose, it is not necessarily aligned with the Sunshine State Standards. The FCAT results for Grades 4, 5, 8, and 10 were again used for assigning school grades. All 78 “F” schools from the previous year improved their rating to a grade of “D” or higher. Four schools were issued “F” performance grades for the first time in 2000. In the third year of school recognition awards, 1,015 schools received financial incentives for earning an “A” or improving at least one letter grade.

2001 | In the third year of issuing school grades, the number of “A” and “B” schools increased from 21 percent in 1999 to 41 percent in 2001. In the same time period, “D” and “F” schools decreased from 28 percent to 12 percent. There were no “repeat” or new “F” schools in 2001. In addition, 842 schools received school recognition awards for “A”
grades or for improving by at least one letter grade. In August, the State Board of Education established the FCAT passing scores that students had to earn as one of their requirements for receiving a standard high school diploma. In December, achievement level standards for reading and mathematics were also established by the State Board of Education. Five levels of achievement were identified for FCAT scores in Grades 3, 4, 5, 6, 7, and 9 to complement the achievement levels established in 1998 for Grades 4, 5, 8, and 10.

The No Child Left Behind Act of 2001 (NCLB) was passed requiring states/districts who receive Title 1 funding to participate in biennial State NAEP in reading and mathematics at Grades 4 and 8, beginning with the 2002-03 academic year.

During the 2002 special legislative session, Section1008.25(5)(b), F.S., was amended to require the retention of Grade 3 students who failed to achieve a score above Achievement Level 1 on FCAT Reading. For the first time, it was possible to report annual growth scores for FCAT Reading and Mathematics using a developmental (growth or learning gains) scale. The FCAT developmental score scale was used to report scores representing achievement across grades 3 through 10, with scores ranging from approximately 0 to 3000. The developmental scale score (DSS) and change in this score provided parents and educators with a measure of student learning gains over a year’s time.
The use of the DSS growth score was included as part of the A+ Plan school performance grading system for the first time in 2002. Using this new system, a record 1,311 schools earned school recognition awards for earning an “A” or improving a letter grade. However, 64 schools received “F” grades. FCAT Science was field tested in Grades 5, 8, and 10 in a representative sample of Florida schools in April 2002.

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Grades 5, 8, and 10 in a representative sample of Florida schools in April 2002. In a legal challenge to the law that protected the security of the state mandated assessments, a Pinellas County student who failed the FCAT, and his family, sued to see the scored booklets. Leon County Circuit Court ruled in favor of granting access to the tests; however, the District Court of Appeals overturned the lower court decision. State and National NAEP were administered in Florida in Grades 4 and 8 in reading and writing.

2004 Rule 6A-1.094222, FAC, entitled “Standards for Mid-Year Promotion of Retained Third Graders” and effective for the 2004-05 school year, was passed. A Grade 3 student retained because the student did not pass the Reading portion of the Grade 3 FCAT is eligible for mid-year promotion during the first semester of the following academic year if the student demonstrates mastery of the Grade 3 Sunshine State Standard Benchmarks of Language Arts and beginning mastery of the Benchmarks for Grade 4 (mastery should be consistent with the month of promotion to Grade 4). A student may complete a portfolio that demonstrates mastery of the appropriate Benchmarks, or a student may demonstrate proficiency by performing at an acceptable level on a locally selected standardized assessment. Rule 6A-1.09981(8) (a), FAC, raised writing proficiency to 3.5 up from 3.0 on a 0 to 6 scale for the 2004-05 and 2005-06 school years and to a 4.0 for 2006-07 and beyond (in 2006, Rule 6A-
(a) was amended to keep the proficiency level at 3.5, rather than raise it to a 4.0 in the 2006-07 school year). Sub-paragraph (8) (c) requires inclusion of FCAT Science for determining school grades for the 2006-07 school year.

2005 In response to the FCAT Science Advisory committee, Science Performance Review committee, the Florida Association of Science Supervisors, and the Florida Association of Science Teachers, FCAT Science was moved from Grade 10 to Grade 11 to allow an additional year for students to receive high school level science instruction.

2006 In February 2006, FCAT Writing became FCAT Writing+ due to the added multiple-choice component that is now operational for Grades 4, 8, and 10. For FCAT Writing+, students receive a whole-test score between 100 and 500 as well as subscore on a rubric of 0 to 6 for the essay. Students’ scores on FCAT Writing+ were reported for the first time in May 2006. Effective for the 2006-07 school year and beyond, science will be added to the school grading calculation. Section 1003.428(2)(b)2c and d, F.S., requires remediation in the subjects of reading and mathematics for high school students in grades 9 through 12 who score below a Level 3 on FCAT Reading or Mathematics the previous school year, effective in the 2006-07 school year and beyond. Section 1008.25(4) requires each student who scores below Level 3 on FCAT Reading or Mathematics to have a progress monitoring plan that assists the student or the school in meeting state
and district expectations for proficiency, effective in the 2006-07 school year and beyond.

2007 State and National NAEP were administered in Florida in Grades 4 and 8 in reading and mathematics, and Grade 8 students were assessed in writing. Florida’s Grade 12 students participated in reading and writing national assessments.

Note. From FCAT Assessment and Accountability Briefing Book (pg. 1).

Overall, the FCAT assesses how well students are learning the Sunshine State Standards, which schools are required to teach in accordance with Florida Statutes. The FCAT includes reading, mathematics, science, and writing assessments, but the test questions are placed in the context areas of social studies, science, mathematics, reading, the arts, health/physical education, and the workplace, and they employ real-life situations to check student skills in the various subject areas.

**Florida to U.S. Gaps: Elementary and Middle School Students**

Since the mid-1980s, the standards-based education reform and accountability movement has raised expectations of performance for American schools (Buttram & Waters, 1997). To face these demands, then Florida, Governor Jeb Bush instituted the *A+Plan* in 1999, a standards-based accountability system that focuses on improving the performance of all students. The *A+ Plan main premise* was that “every child can learn and no child should be left behind” (Executive Office of the Governor, n.d.). Florida H.B.7087 (2006) otherwise known as A++ legislation, was created and adopted as a means to increase the rigor and relevance of a public school education, specifically at the middle school and high school levels. The
anticipated result of the implementation of this bill was to better prepare middle school students for high school and thereby increase high school student performance and decrease the dropout rate. However, in increasing the promotion standards for middle grade students, interpretation and implementation have created additional barriers for grade level advancement and may place more students already at-risk of failure to higher retention rates.

Due to these assessment and accountability measures, for the most part, national tests such as the National Assessment of Educational Progress (NAEP) showed Florida’s public school students gaining on their national peers from 1992-2003. The exception was in 8th-grade reading. On the NAEP, Florida has shown visible success in 4th-grade reading. Historically, Florida’s deficit relative to the U.S. has been greatest in this area (-9% in 1994), but by 2003, the percent of Florida students scoring at the basic level and above exceeded the national average. Unfortunately, similar improvements have not been realized at the middle school level. Florida’s 8th graders still fare poorly in reading relative to their national peers on the NAEP. In math, gaps have closed between elementary students in Florida and the nation. In the 1992 math NAEP testing, 5% fewer 4th-grade students in Florida were scoring at the basic level and above as compared to the U.S. By 2003, there was no difference in performance in this category, i.e., the percentages were the same for Florida and the nation. In 8th grade, however, Florida students still lagged in 2003, but the gap between Florida and the U.S. was narrowing slightly (-8% in 1992 and -5% in 2003 (Chatterji, 2005). In writing, Florida’s students have fared better in comparison to students in the nation. NAEP results are available since 1998, but it should be noted that Florida’s standards-based writing assessment program was established around 1993. By 2003, Florida’s 8th graders equaled national performance percentages, while Florida’s 4th
graders slightly exceeded the percents of U.S. students at or above the Basic level (Chatterji, 2005). Table 2 illustrates these results.

Table 2: Florida vs. Nation 1992-2003- Percentages Scoring at the Basic Level or above on NAEP

<table>
<thead>
<tr>
<th>Subject</th>
<th>Year</th>
<th>Florida</th>
<th>USA</th>
<th>GAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Grade 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>1992</td>
<td>52%</td>
<td>57%</td>
<td>-5%</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td>55%</td>
<td>61%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>76%</td>
<td>76%</td>
<td>0%</td>
</tr>
<tr>
<td>Reading</td>
<td>1992</td>
<td>55%</td>
<td>60%</td>
<td>-7%</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>50%</td>
<td>59%</td>
<td>-9%</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>53%</td>
<td>58%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>60%</td>
<td>62%</td>
<td>-2%</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>63%</td>
<td>62%</td>
<td>+1%</td>
</tr>
<tr>
<td>Writing</td>
<td>2002</td>
<td>86%</td>
<td>85%</td>
<td>+1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Grade 8</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>1990</td>
<td>43%</td>
<td>51%</td>
<td>-8%</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>49%</td>
<td>56%</td>
<td>-7%</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td>54%</td>
<td>59%</td>
<td>-5%</td>
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<td></td>
<td>2003</td>
<td>62%</td>
<td>67%</td>
<td>-5%</td>
</tr>
<tr>
<td>Reading</td>
<td>1998</td>
<td>67%</td>
<td>71%</td>
<td>-4%</td>
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<td></td>
<td>2002</td>
<td>72%</td>
<td>74%</td>
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<td></td>
<td>2003</td>
<td>68%</td>
<td>72%</td>
<td>-4%</td>
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<tr>
<td>Writing</td>
<td>1998</td>
<td>78%</td>
<td>83%</td>
<td>-5%</td>
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<tr>
<td></td>
<td>2002</td>
<td>84%</td>
<td>84%</td>
<td>+0%</td>
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</table>

From Closing Florida’s Achievement (2005)

The Florida Public Accountability System and the Florida Comprehensive Assessment Test, FCAT, have been in use since 1996. Since that time, schools have received grades, rewards and sanctions for performance, promotion requirements have changed, and the results of the FCAT are published annually for public scrutiny. With testing required in grades 3 through 11, middle schools (grades 6--8) must test all the students in their schools (Roberts, 2005). However, this system has required more accountability on the part of Florida K-12 teachers.
Teacher Accountability in Florida

According to Michael Petrelli

For going on two decades now, the twin movements to expand parental choice and foster accountability have been the major drivers of reform in the K-12 education system. And while choice and accountability can be seen as ends in themselves, for many reformers they have been primarily means: tactics for creating a high-performing education system, one that puts the needs of kids over the needs of adults. They are tonics meant to overcome the corrupting influence of complacency and protectionism within our public schools (2010)

Reformers have tried for years to draft policies that allow student-achievement data to be used to reward good teachers and identify poor ones. As early as 1997, Newmann, King, and Rigdon argued that three issues keep this theory from working in practice:

1) implementation controversies around standards, incentives, and constituencies;

2) insufficient efforts to organize the human, technical, and social resources of a school into an effective collective enterprise — what the authors term "organizational capacity"— and

3) failure to recognize the importance of internal school accountability. (p.41).

In their study of twenty-four restructuring schools, the authors found that strong accountability was rare; that organizational capacity was not related to accountability; that schools with strong external accountability tended to have low organizational
capacity; and the strong internal accountability tended to reinforce a school's organizational capacity.

Many politicians and policymakers today link school accountability and school performance. Drawing on evidence from the corporate world, they assume that strong external accountability will impel schools to improve student achievement. Therefore, linking teacher pay to student achievement has long been a goal of some educational reformers, mostly conservatives, but their ranks also include people in the Obama administration who designed Race to the Top. Those in support of accountability argue that teachers should be treated like most professionals, and be paid based on their effectiveness. This teacher accountability movement crystallized in Florida in Senate Bill 6. Senate Bill 6 (SB 6), had 38 sections that would

1) Cripple the idea of community control of public schools

2) no longer considering a teacher’s experience or advanced degrees in salaries, and

3) require even more standardized tests on our schools.

The bill threatened to push experienced teachers out of Florida’s classroom and place students in classrooms with teachers with little experience. Specifically, the bill would have:

- Decreased the ability of local school boards and school districts to make a wide array of decisions having an impact on local schools and replacing them with a one-size-fits-all approach mandated from Tallahassee.

- Required that all teachers be retained, certified and compensated based on student test scores on standardized tests -- not years of experience or degrees held.

- Penalized school districts that even consider length of service or degrees held when determining compensation or reductions in force.
Ordered that teachers be issued probationary contracts for up to five years; then an annual contract every year after that … eliminating due process.

Mandated more standardized testing for students (end of course exams for all subjects) and for teachers (additional certification requirements).

Excluded the salary schedule as a subject of collective bargaining. The state will decide what categories of differentiated pay will be provided for.

Given, the state would have been given a greater hand in appraisals, and

Abolished an effective and popular program that rewards those who become National Board Certified Teachers, a rigorous national program that awards certification after a yearlong, independent review of a teacher’s work in the classroom and knowledge of their field.

The provisions of Senate Bill 6 would have been devastating for the Colleges of Education, making advanced degrees for teachers in the State of Florida useless and virtually without value. It would have required the COEs to track all graduates and tied their jobs to past student’s performance if they were involved in the education of children, including School Counseling, Physical Education, Educational Leadership, and other programs, not just classroom teaching. In fact, COE graduate programs, not undergraduate education programs, would have taken the biggest hit from this legislation and this legislation would have eventually affected the entire university as any kind of continuing education in the arts, sciences, or social sciences for teachers or other educators would have been impacted, but the COE would have taken the hit first. Deans of the Colleges of Education around the state were “threatened” not to obstruct the bill and staff in the Department of Education were admonished to do the same. The Senate Bill 6
was on a very fast track through the Legislature and reached the Governor’s desk in record time. The bill had powerful sponsors, including former Governor Jeb Bush.

Governor Charlie Crist vetoed Senate Bill 6 on April 15, 2010. SB 6 and its companion bill in the House was defeated because people across the state—teachers, faculty, parents, grandparents, and many others wrote letters, sent e-mails and left phone messages for legislators and the Governor protesting the bill and its provisions. However, Charlie Crist’s efforts have not ended this movement.

And the beat goes on…

According to the Vanderbilt Study (NCPI, 2010), the first scientific study of performance pay ever conducted in the United States, rewarding teachers with bonus pay, in the absence of any other support programs, does not raise student test scores. The Project on Incentives in Teaching, called the POINT Experiment, took place between 2007 - 2009 school years with participation by mathematics teachers in grades 5 through 8 in Metropolitan Nashville Public Schools. Nearly 300 teachers, approximately 70 percent of all middle-school math teachers in Nashville's public schools, volunteered to participate. The complete study, including set up and analysis began in 2005 and ended in 2010. The Vanderbilt Study found that students whose teachers were offered bonuses of up to $15,000 a year for improved test scores had the same gains on standardized exams as those whose teachers were given no monetary incentives. The study tested no other types of incentives or systems of support for the teachers, such as professional development or guidance on instructional practices.

Despite this research, a bill proposing merit pay for Florida teachers will return in 2011 (Restrepo, 2010). A spokesperson for the Florida Chamber of Commerce recently stated that the Chamber expects to participate in a bill proposing merit pay for Florida teachers during the 2011
legislative session. A draft of a bill titled “Teacher Quality Legislation” is currently circulating. This bill includes changes to how and when education personnel performance would be measured in Florida. The new bill would also require the State Board of Education to establish and implement evaluation measures for teachers and administrators based on student progress in statewide assessment tests. In addition, the state board would also issue annual performance reports on graduates of state-approved teacher-preparation programs and adopt a multiyear formula to measure student gains in statewide assessment and end-of-course tests, identifying critical teacher shortage areas. Finally, school districts would be mandated to establish compensation, creating two salary schedules: one for instructional personnel who hold professional continuing contracts and another one with higher pay for instructional personnel who choose to give up professional service or continuing contracts for annual contracts, with up to 50 percent of an annual salary raise tied to a performance rating. School districts must also develop a Department of Education-approved annual appraisal system for instructional and administrative personnel based on the performance of students assigned to their classrooms or schools. The Florida Department of Education, in their approved Race to the Top grant, is instituting similar measures.
References


Florida's HB 7087: Career Prep for All Middle School Students.

"Florida State Constitution, Article IX: Education". Florida Legislature.


Restrepo, Marcos (11/19/10) Bill proposing merit pay for Florida teachers will return in 2011.


The Role of HBCUs in Today’s Higher Education Landscape

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Abstract

Historically Black colleges and universities (HBCUs) are effective in graduating African American students who are poised to be competitive in the corporate, research, academic, governmental and military arenas. Specifically, over half of all African American professionals are graduates of HBCUs. Nine of the top ten colleges that graduate the most African Americans who go on to earn PhDs are from HBCUs. More than 50% of the nation’s African American public school teachers and 70% of African American dentists earned degrees at HBCUs. Finally, both Spelman and Bennett Colleges produce over half of the nation’s African American female doctorates in all science fields. This article discusses the importance of HBCUs in today’s higher education landscape.
The Role of HBCUs in Today’s Higher Education Landscape

**Introduction**

Today, this nation’s minority population is steadily rising and now makes up 35 percent of the United States (U.S.) population, illustrating a trend that could make minorities the new American majority by 2050. New Census Bureau data estimates that minorities added more than 2 percent to the U.S. population in 2009 increasing to 107.2 million people, due to Hispanic births and more Americans describing themselves as multiracial. During this period, the White population remained flat, making up roughly 199.9 million, or 65 percent, of this country’s population. Just ten years ago, Whites comprised 69 percent of the total population and minorities 31 percent. Currently four states – Hawaii, New Mexico, California and Texas – as well as the District of Columbia, have minority populations that exceed 50 percent (Census Bureau, 2010). Such demographic changes in the nation will be reflected in the higher education student population.

The minority shift is taking place at a time when American universities are failing at graduating students---any student. In fact, data recently released by the National Center for Education Statistics (NCES, 2009) show that in 2008, four-year Institutions of Higher Education (IHEs) graduated less than 60 percent of their students in six years. In fact, public colleges and universities are less effective than not-for-profit institutions, which on average do a better job (NCES, 2009).

This problem exists despite an increase in enrollment in U.S. IHEs which have increased by 14 percent between 1987 and 1997 and 26 percent between 1997 and 2007, from 14.5 million to 18.2 million. Most of this growth was in full-time student enrollment which rose to 34 percent
from 1997-2007. During this same period, the number of part-time students rose by 15 percent. In regards to gender, the number of females rose 29 percent, compared to an increase of 22 percent in the number of males during that same period. In addition, enrollment in accredited 2-year colleges, 4-year colleges, and universities also rose during this period (NCES, 2009).

Since 1984, the number of females in graduate schools has exceeded the number of males. Between 1997 and 2007, the number of male full-time graduate students increased by 32 percent, compared to a 63 percent increase for female graduate students. Among part-time graduate students, the number of males increased by 10 percent and the number of females increased by 23 percent (NCES, 2009).

The percentage of American college students who are minorities has been increasing. Over thirty years ago, 15 percent of the college population were minorities, compared with 32 percent in 2007. Much of the change between the years 1976-2007 is attributed to the rising numbers of Hispanic, Asian, and Pacific Islander students. During this same period, the percentage of Asian and Pacific Islander students rose from 2 percent to 7 percent and the Hispanic percentage rose from 4 percent to 11 percent. The percentage of African American students was 9 percent at the beginning of the time period rising to 13 percent in 2007. In the past decade, African Americans have also made advances in doctoral degrees (National Science Foundation [NSF], 2007). From 1996 to 2006, the number of African American doctoral recipients increased 27%. The aforementioned total of African American PhDs is in comparison to the PhDs conferred by all United States universities which increased by 8%. In the last twenty years, the number of African Americans who received doctorates in science and engineering have also more than doubled (Redd, 2008). As depicted in Table I:
Table 1: Total fall enrollment in degree-granting institutions, by sex of student and attendance status: Selected years, 1970 through 2007 [In thousands]

<table>
<thead>
<tr>
<th>Sex and attendance status</th>
<th>Institutions of higher education</th>
<th>Degree-granting institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>8,581</td>
<td>11,185</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>5,044</td>
<td>6,149</td>
</tr>
<tr>
<td>Females</td>
<td>3,537</td>
<td>5,036</td>
</tr>
<tr>
<td>Attendance status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>5,816</td>
<td>6,841</td>
</tr>
<tr>
<td>Part-time</td>
<td>2,765</td>
<td>4,344</td>
</tr>
</tbody>
</table>


The enrollment of African Americans and students of color in graduate programs is one of many problems facing this country. A lack of minority graduate students in the educational pipeline means a lack of minorities in higher education and despite minimal gains recruiting, retaining, and graduating minority students in graduate programs, a problem still exists in the graduation of doctoral students. Many universities are searching for innovative strategies to increase retention and graduation of African American students. As the overall color scheme of the Flagship and Research I institutions across the nation has become more Asian and White, African American graduates and people of color are being displaced (Hale, 2006). Therefore, these activities further highlight the importance of additional examination of issues related to
retention and graduation rates of African Americans at HBCUs. Due to this growing trend, HBCUs have become a refuge of last resort for graduate exploration of many African Americans and people of color (Garibaldi, 1984).

**Historically Black Colleges and Universities (HBCUs)**

Historically Black colleges and universities (HBCUs) have led the increase in the number of African American doctoral degree holders. In 1965, in the Title III of the *Higher Education Act* of 1965, Congress officially defined HBCUs as an institution whose principal missions were and is the education of African Americans and were accredited and established before 1964. These educational institutions are accredited by a nationally recognized accrediting agency (these institutions are accredited by regional accrediting agencies) or association, as determined by the United States’ Secretary of Education to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation HBCUs were founded during an era when African American students were barred from attending traditionally White, postsecondary institutions.

The first HBCU, Cheney University in Pennsylvania was founded in 1837. Today, there are 105 HBCUs. HBCUs graduate far more than their share of African American professionals. While the 105 HBCUs represent just 3% of the nation’s institutions of higher learning, they graduate nearly one-quarter of African Americans who earn undergraduate degrees. To state it differently, HBCUs graduate 75% more of their African American students than other schools do. Specifically,

- Over half of all African American professionals are graduates of HBCUs.
Nine of the top ten colleges that graduate the most African Americans who go on to earn PhDs are HBCUs.

More than 50% of the nation’s African American public school teachers and 70% of African American dentists earned degrees at HBCUs.

United Negro College Funds (UNCF) members Spelman College and Bennett College produce over half of the nation’s African American female doctorates in all science fields (Title III Administrators, http://www.hbcut3a.org/HBCUImportance.aspx).

Since the Civil Rights Movement opened the doors of traditionally White colleges and universities to minority students, some policymakers have challenged the relevance of HBCUs, arguing that they serve no purpose in an integrated system of higher education.

Affirmative Action and Minority Enrollment in Higher Education

One factor fueling this increase has been affirmative action programs created by colleges and universities during the late 1960s and 1970s largely to comply with Title VI of the Civil Rights Act of 1964, which prohibits several types of discrimination in student recruitment, admissions, and financial aid (Ervin & Davenport, 2008). This growth was aided by the Supreme Court’s decision in Regents of the University of California v. Bakke (438 U.S. 265, 1978), which allowed race to be a determinant in the admission to graduate schools. Preferential race-based programs were developed partly in response to the demands to improve the graduation rates of minority students at Traditionally White Institutions (TWIs).

According to Jacqueline Ford-Edwards (2002), affirmative action was designed to provide higher education admission opportunities to racial and ethnic minorities and women. This institutionalization of affirmative action served to diversify higher education and thus, the
In the book *The Unfinished Agenda of Brown v. Board of Education*, Chism (2004) asserts that the Supreme Court’s decision was the cornerstone to an ongoing African American grassroots struggle to make America live up to its creed of equality for all of its citizenry. This milestone case overturned more than half a century of legal racial segregation in America’s public schools, paving the way for the Civil Rights Movement of the 1950s and 1960s and ultimately the *Civil Rights Act of 1964*. The *Civil Rights Act of 1964* greatly impacted education in general, but more importantly America’s higher education system. Armed with the Act’s tenets, African American students that were long denied admission into TWIs now stood ready to enter their self-proclaimed hallowed halls. These were equipped with federally established policies and guidelines that were intended to eliminate discrimination based on race, sex or national origin in public institutions of higher learning, public facilities in local, state and federal governments as well as employment (*Civil Rights Act, 1964*).

According to Ford-Edwards (2002), prior to the American Civil War education in publicly ran institutions were outlawed for African Americans. After the Civil War, northern benevolent societies, freedman bureaus, and African American churches began opening colleges specifically to educate African Americans collectively known as HBCUs. It was not until the passage of the *Civil Rights Act of 1964* that more African American students began exercising their rights and enrolling in TWIs.

To eradicate the vestiges of discrimination, many states resorted to equalizing policies termed affirmative action, which provided minorities (those not self identified as White or Caucasian)
and White women certain preferences in employment and college admissions. Affirmative action policies exist in many different forms as a result of constant legal attacks by those who argue that they amounted to reverse discrimination against White males (Connor, 1985). Consequently, affirmative action in America has experienced a downward spiral. Over the last forty years a number of court cases, legislative mandates and Executive Orders have sought to overturn all vestiges of educational, economic, and pursuit of liberty gains of African Americans in the United States. Supreme Court decisions during the 1970s through the 1990s significantly diluted affirmative action programs (Milakovich & Gordon, 2001).

In 1967, in the Supreme Court Case of Bakke v. University of California (438 U.S. at 320, 1978), a White University of California at Davis medical school applicant who had been rejected for admission twice, even though he considered himself better qualified with a higher grade point average than some of the minorities who had been admitted, sued the University based on discriminatory admission policies. In this case, the Court held that “a substantial interest that legitimately may be served by a properly devised admission program involving the competitive consideration of race and ethnic origin” was permissible (In Bakke v. University of California, 438 U.S. at 320, 1978).

In writing his opinion, Justice Powell affirmed the constitutionality of affirmative action admission policies in IHE (Ervin & Davenport, 2008). He stated that such policies not only promoted critical thinking, “processes he states are essential to the quality of higher education” (In Bakke v. University of California, 438 U.S. at 312, 1978) but they enhanced and strengthened a diverse society of contributing leaders and professionals. In 1978, Bakke argued successfully that the medical school’s quota for admitting minorities amounted to reverse discrimination. The
U. S. Supreme Court then agreed and Bakke was admitted to the institution (*University of California Regents v. Bakke*, 1978).

However, in 1996, California voters passed Proposition 209. The initiative prohibited discrimination against or preferential treatment for any individual or group in public employment, education, or contracting on the basis of race, sex, color, ethnicity, or national origin (Ervin & Davenport, 2008). Voters in Washington State followed suit in 1998, and voters in Texas accepted similar initiatives as well (Chang, Jones, & Hakuta, 2000) Meanwhile *Grutter v. Bollinger* (539 U.S. 306 (2003), a case in which the United States Supreme Court upheld the affirmative action admissions policy of the University of Michigan Law School, 5-4 decision, was overturned by a referendum of Michigan voters.

Other states also began implementing these and similar measures. The State of California in 2003 denied enrollment of qualified high school seniors because of instituted enrollment caps. These and other similar actions created an even wider gap in the equality in admission of minority students and the racial/ethnic make-up and complexion of this country IHE in traditionally White institutions.

The State of Texas in 2005 through Senate Bill 254 instituted caps on the number of entering freshmen, the total enrollment of freshmen and sophomore students, with a portion of the cap conditionally set aside for the enrollment of minority students. These actions forced minority students and other non-minority students to seek out second and third tier institutions and HBCUs to obtain their educational goals.

Affirmative action allows all citizens, independent of race, ethnicity, gender or socioeconomic status, to become full participants in our society. Affirmative action initiatives in the last few decades have been negatively impacted and thus disenfranchised those persons they were designed to help who are now left by the wayside. Ballot initiatives eliminated all
remnants of affirmative action policies in their respective systems of higher education and state governments. However, despite their best efforts they did not totally eliminate it. They still have affirmative action; they have just re-characterized the term and gave new names and meanings to it (Orfield & Miller, 1998; Klink, 2003; Rivers, 2000).

Past President George Bush (1991), described the unique mission of HBCUs. “At a time when many schools barred their doors to Black Americans, these colleges offered the best, and often the only, opportunity for a higher education” (p. 6). Past President Bush further stated that today, most of those barriers have been brought down by the law, and yet HBCUs still represent a vital component of the American higher education system. Therefore, in the year 2010, no doubt these institutions should still exist as a vital component in higher education as the role they play in eradicating the exclusion that was, and still in some instances, the modus operandi in TWIs.

**HBCUs and African American Graduation Rates**

While IHEs made great efforts to increase enrollment and degree success for African American students, today although HBCUs represent only 4% of all colleges and universities in the U.S., they account for nearly one-quarter of the African American bachelor’s degree recipients (Redd, 2000). Therefore, greater efforts to increase African American enrollment and persistence in graduate education must be a priority. HBCUs also play an important role in expanding educational opportunities for under-represented students. In fact, HBCUs have been increasing their involvement in graduate education and since 1996 more HBCUs have begun to offer doctoral programs. Prior to 1996, less than one-quarter of the 87 four-year public and private HBCUs awarded doctorates. By 2006, the percentage of HBCUs with doctoral programs grew to 32%, with just under fifty percent of the four-year public historically Black institutions offering
such programs. The increase in HBCUs offering doctorates and the number of graduate students attending these programs has led to rapid growth in the number of African Americans receiving Ph.D.s and other doctoral degrees in the past five years. In fact, the percentage increases in African American doctorates from HBCUs appears to have accelerated, while the number of these awards overall has slowed as Table 2 indicates.

Table 2: Percentages of Change in Doctoral Degrees Awarded to African Americans at HBCU Compared with All U.S. Universities

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<tr>
<td>HBCUs*</td>
<td>35%</td>
<td>36%</td>
<td>82%</td>
</tr>
<tr>
<td>All Universities*</td>
<td>25%</td>
<td>3%</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Includes awards to U.S. Citizens and permanent residents only
Source CGSNER. ORG

HBCUs, Jobs and Diversity

According to Jennifer Millman (2007), “the U.S. workforce is rapidly transforming, thanks to changing demographics, work-force dynamics, immigration flows and globalization. At the same time, the annual labor-force growth rates will slow to nearly a standstill by the year 2025” (DiversityInc Magazine, p. 23). Labor trends show that the current work force of baby boomers is aging and by the year 2030, research indicates that there will be 35 million more jobs than people to fill them (Millman, 2007).

Diversity in the workplace has become a global concept. Employers are looking to fill positions within their organization with individuals who are prepared to deal with all aspects of our world’s global market. The Internet has changed our marketplace conceptualization, how we
Running head: THE ROLE OF HBCUS IN TODAY’S HIGHER EDUCATION

Think of our marketplaces, and the consumers of our products and services. Taking the once boundary driven world into a boundless environment. Corporations must be ready with a diverse workforce to meet these boundless global demands. HBCUs are major contributors in meeting this need.

*Figure 1. 2007 DiversityInc top 50 companies for diversity*

Diversity engenders a more creative work force, but the convergence of different attitudes, beliefs and experiences along racial/ethnic, gender, and other lines present new challenges for employers seeking to motivate their workers. According to the Bureau of Labor Statistics (2007), “the U.S. economy is expected to expand at a moderately strong pace over the coming decade, with restrained inflation, continuing strong productivity growth, and a...favorable
outlook for a wide array of job opportunities” (p. 27), but most of the jobs opening up are going to be in management and business. People of color will disproportionately be the new entrants to the workforce according to DiversityInc Top Fifty Companies for Diversity (Figure 2), thus making the contributions that HBCUs make in this effort invaluable (Bureau of Labor Statistics, 2007).

**Conclusion**

As HBCUs continue to play a vital role in today's higher education landscape, the 2008 edition of "America's Best Black Colleges" marked the first time *U.S. News & World Report* has released a stand-alone ranking of HBCUs. Despite this recognition, HBCUs have been hit particularly hard by the recession; therefore, it is an important time to analyze their role in educating the neediest students in the higher education landscape. As Mickey Burnim (president of Bowie State University of the University System of Maryland) (2008) stated, the challenge for HBCUs in the 21st century is how to remain true to their historic mission of providing access for African Americans while doing whatever is necessary to insure the long-term viability of the institution.

The need for an educated citizenry is more important now than ever before. HBCUs’ are of important in providing a diverse, educated citizenry that is seen in the following accomplishments:

1. More than 80 percent of all African Americans who received degrees in medicine and dentistry were trained at the two HBCUs of medicine and dentistry—Howard University and Meharry Medical College.
2. HBCUs have provided undergraduate training for three-fourths of all African Americans holding doctorate degrees; three-fourths of all African American officers in the armed forces; and four-fifths of all African American federal judges (National Center for Educational Statistics [NCES], 1999).

3. HBCUs, in particular, Florida A&M University, are leading institutions in awarding baccalaureate degrees to students in the life sciences, physical sciences mathematics, education, and engineering (Black Issues in Higher Education [BIHE], 2007).

4. HBCUs continue to rank high in terms of the proportion of graduates who pursue and complete graduate and professional training (Black Issues in Higher Education [BIHE], 2007).

5. Fifty percent of the African American faculty in traditionally White research universities received their bachelor’s degrees at an HBCU (Hale, 2006).

HBCUs remain instrumental in creating an industrious citizenry and will be the cornerstone to globalization of the current and future marketplace.
References


www.aascu.org/media/public_purpose/2008/08_07burnim.pdf


Teacher-directed Synchronous and Asynchronous Group Discussions about Technology in Schools

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Abstract

In two graduate courses in the College of Education, teachers were asked to discuss amongst themselves, -- without the instructor present at the time -- several issues and readings about technology in schools. The university instructor did not monitor or participate in the chats each week; instead, the chats were considered ‘homework’ assignments and used as the basis for preparation and discussion for subsequent class meetings and assignments. Revealing information about teacher perceptions, values and philosophies were obtained from these honest and detailed online discussions, and thus were able to help university instructors a) understand global and local barriers to technology from teachers’ points of view, and b) target instruction and reform efforts in meaningful ways for school leaders at the graduate level.

Overview

Teacher talk in group discussion often reveals a variety of perceptions, dispositions, and opportunities for growth which cannot be fully captured via other means. When teachers talk to each other in diverse groups, both the variety of their experiences and the commonalities of their views emerge. Teacher perceptions of technology in general and for its use in schools clearly have an impact on implementation efforts in all types of educational settings. By listening to teachers’ willing yet unfiltered conversations about technology, leaders and colleagues may be able to hear many of the perceived barriers and attitudinal tendencies which can easily be overcome with targeted education and experience.

Conceptual Framework

The study was deployed in an environment in which both instructor and graduate students were familiar with the types of operations experienced within a constructivist tradition of teaching and learning at the post-baccalaureate level. In this tradition, discourse at the university continues among students, and thus with and without the instructor, who is seen as a peer guide during conceptual struggles, neither the primary provider of understanding nor the final arbiter of controversy. In alignment with the explanations and inferences of Gordon (2009, p. 43), the content goal of these synchronous chats within the immediate course context were minimal. Instead, broader learning and thinking objectives within the discipline helped to integrate the chats with other long-term goals. Although the chats in the current study display these kinds of active constructions by teachers of their own understandings of the subject matter (Gordon, 2009, p. 47), the students-to-students interactions remained only one part of an integrated teacher-to-student, teacher-to-students and student-to-student multidirectional constructivist conversation which each lasted over a six- to eight- week period.
A number of studies informed the progression of the current work. For example, Mäkitalo, Häkkinen, Leinonen, and Järvelä (2002) explain that teachers need to strive for mutual understandings, to share assumptions, and “not only show evidence of their understandings through written feedback, but also to provide support to their peers in their replies” (p. 247). In a study of preservice teachers, the researchers aimed to explore how participants in asynchronous discussion boards about teaching gained common ground as a precursor to achieving deeper understanding and learning.

Especially with technologically-enhanced communication, the teacher candidates needed to understand one another’s perspective prior to an in-depth understanding of the content at hand. “Presenting questions also signals the willingness of participants to continue the discussion, which is essential for maintaining [that] common ground,” they note (p. 247). The current study espouses this research, the current participants display many of the same characteristics in their discussions; additionally, it determines the viability of establishing these practices with synchronous discussions among teacher learners who are already acquainted with each other from previous courses.

Lock (2006) realizes that teachers must change their existing perceptions and develop new images, both of professional development and of teaching itself. The researcher suggests that schools must “carefully and deliberately design dynamic learning environments that foster a learning culture” (p. 663), and this suggestion applies to both K-12 schools as well as schools of education. The present study, like Lock’s, aims to build on the relationships, intimacy and trust among the current teacher participants in order to begin the process of collaborative inquiry, and make it part of the teachers’ expected routines in these courses.

Much has been written about asynchronous forum posts in Blackboard™ and similar systems in the literature. However, Van Aalst (2006) argues that “a new conceptualization of online work is needed -- not primarily discussion, but a variety of activities intended to iteratively improve a community’s ideas” (p. 280). As this researcher suggests, the volume and scope of asynchronous forum posts tend to undermine the goals of the online discussion at hand (p. 279); it is posited in the current study that weekly or more frequent synchronous chats may alleviate the problem of message counts but also (along with targeted readings) help teachers to focus on specific areas to explore for a specified time. Van Aalst’s list of the many prior online collaboration problems have been experienced previously by the participants of this study as well. Renninger and Shumar (2002) agree that fostering community among teachers with similar goals or teaching assignments is a valuable pursuit despite possible technical problems.

Dillenbourg, Schneider and Synteta (2002) assert that “many Web-based courses combine distance and presence, which makes learning environments more robust,” and that this robustness is important for the multiple aims of vocational training, for university coursework, and for lifelong learning (p. 10-11). Similarly, the authors assert that any virtual learning environment “does not have intrinsic effectiveness, only affordances,” and since expectations are raised about the usefulness of a new technological tool, learning gains are often (but mistakenly) attributed to the tool rather than to the pedagogical context in which it was employed (p. 13). The present study employs Dillenbourg, Schneider and Synteta’s structuring collaboration and
regulating interactions through helping the synchronous teacher discussion groups monitor themselves for task, time and content constraints, points on which they performed admirably.

Methods

This study reports on the synchronous online work of teachers of various K-12 grades and of varying levels of teaching experience (in other words, matriculated graduate candidates, hereinafter referred to as “the teachers”). In two graduate courses taught in the College of Education, the teachers were asked to discuss various issues and readings about technology in schools. They were instructed that these group conversations were to take place amongst themselves via a synchronous online tool, and without the instructor present. Although the content of other asynchronous chats via Blackboard™ were graded as part of the course assignments, these synchronous technology chats were not similarly assessed; teachers simply got credit for their group by submitting a transcript to the instructor by the specified deadlines. However, teachers often voluntarily referenced their group chats during class meetings, other online conversations and coursework. In addition, these “homework” assignments, in which they chatted for one hour at a time with each other about that weeks’ course topic, were assigned as preparation for subsequent class activities. The course instructor counted submitted transcripts each week to insure their timely submission.

This paper is a preliminary report on the first few of a series of courses in which the teacher-directed online conversations were conducted; the class sections described are from the same course during different semesters within a three-year period. A larger study included graduate students from a variety of courses in a College of Education sequence at the university. Teacher discussion transcripts were solicited periodically as part of course schedules during calendar years 2007-2010; exact semesters and courses of collection are not indicated in order to further protect the participants’ identities. This research follows the university’s protocols and policies for consideration of human subjects who are also students, and is considered exempt by the Institutional Review Board. The content of the chats was not considered as part of the course grade or performance evaluation of any kind; teachers were able to further disguise their identity through choice of screen name and use of a non-university email for submission of the chat transcripts to the course instructor. This report has also been provided for review after most of the participants have entirely completed their graduate studies.

Teacher discussions took place via a variety of Web 2.0 tools, including Skype™, AIM®, Zoho® and others. Topics discussed included books about the technology context of society, such as *The Long Tail: Why the Future of Business is Selling Less of More* by Chris Anderson (2006, 2008), Internet phenomena such as the online viral video “The Machine is Using Us” by Michael Wesch (2007, 2008), and white papers from various organizations such as the Horizon Report (2007-2010) and studies from the Milliken Family Foundation (2005-2009).

Results

Revealing information about teacher perceptions, values and philosophies were obtained from these honest and detailed online discussions. Teachers were instructed to discuss each reading or topic in a free-form manner within a one-week period at a time of their mutual convenience, almost exclusively in the evenings or on weekends. Rich and sometimes surprisingly negative interchanges about technologies in schools ensued, uncovering
dispositional attributes, perceived barriers, and a list of emotional and technical needs which impact technology implementation of many kinds at the classroom, school, and district levels. A total of 64 group conversations from the initial two courses included a mix and re-mix of participants so that every student shared a group with every other student at least twice in the first course, and twice in the second course; neither course contained the same students in subsequent years. Samples of three group responses, and the similarities/differences among them, are provided here in vignette fashion for illustration purposes.

**Sample Group 1**

This teacher group consisted of four female graduate students ranging in age from 24 to 60, who chose to focus this particular discussion on Web 2.0 tools. They described the tools as “great websites,” thus displaying a beginning understanding of their nature as was expected, and used the term “great” a hundred times to capture how impressed they were with the variety of new tools and the features afforded by them. The group experienced minor difficulty in talking about technology between the generations, such as when the older participants didn’t recognize instant message abbreviations such as “bc” as shorthand for because by the younger participants, but otherwise the group appeared to communicate easily about the topics at hand. Periodically, differing opinions were offered contextually and intellectually, but then followed up by some kind of reflection or analysis. For example, a point about younger generations accused of always thinking technology is “great” was followed by the reflection “I can’t believe I am saying this, but I am lost without my computer.” Subsequent interactions were supported much in the same manner by younger participants’ reflections such as “I think in this day and age we are all addicted to some form of technology.”

The group brought up additional examples of technologies we rely on every day, like cell phones and debit cards, direct deposit and job-searching sites. They also offered many non-educational and non-instructional examples of the tools, as seen in use by fellow teachers, such as showing their grandchildren’s photos on Flickr™ or using Skype™ to talk to children in the military stationed abroad. Critique ensued about how some of these tech tools were created by people without college degrees, and suspicion that content we read daily may be or have been created by random “teenagers.” This interaction is surprisingly similar to some of the sequences described later in this manuscript for Group 2, in which a critique of poorer schools getting taken over by the state and thus going “high tech” is seen as an unfair advantage of the “other.” But, unlike Group 1, Group 2’s similarly comprised teacher group offered a counter example from a real city nearby, and then another counter example which supported the original critique from a participants’ own experience. Nevertheless, Group 1 continued to show alarm at the pace of technology by focusing on a quote from the reading in which “according to a 2005 study that 57% of teens who use the Internet could be considered media creators.”

The teachers’ default evaluation stance on new Web 2.0 tools, after reading about them and trying them out as part of the course is cautious to the point of inaction, similar to what schools and teachers around the country have reported. Group 1 teachers said some of the tools “could be good” or “could useful and fun” but with the caveat that they were “not for me.” Apparently, these teachers can articulate the features of a product accurately, but can’t figure out how it might be used themselves. They provided a couple of complaints about the first time they used a new tool, even those with the simplest interfaces (“confusing,” “frustrating,” “took more
than half an hour to log on,’’ “I never tried it because I heard it was difficult to use’’), which was similar to the thoughts of Group 2, but not of Group 3, as seen below.

Sample Group 2

This group of three teachers, between the ages of 24 and 59, picked out of the reading the topics of filtering, equity, and multiple literacies. The three topics were neither predetermined by the group nor were one offered by each member; as with other conversations, these topics developed organically from interaction with the text and each other. “Filters schools have on their computers can stifle the creativity and participation of those who do not have home computers,” one participant began. The counter example discussion sequence similarly ensued as in Group 1, with a participant pointing out that indeed cities like Philadelphia provide free network access at shelters and in surrounding communities, as well as to all of their residents regardless of socioeconomic status. The conversation then returned home to their own schools, where one participant reported, “I have not seen much interest in any of the higher technology. For many, there is little or no interest in academics.”

Relating to a line in the reading about equity of technology among the “haves” and the “have-not’s,” a participant offered a connection between the reading and her observation that “poor kids without technology” was similar to illegal immigrants’ rights to education, and the group participants chimed in with other examples from the news and local problems, including perceptions about “corrupt politicians spending school funds,” and many other topics. The resolution to this thread of the conversation was offered by a participant who did not initiate the conversation, but who asked the group rhetorically, “what will happen to those kids without an education?” A flurry of responses fleshed out ideas about how the typical family unit has changed, and how “well-off” kids do not know about the poor world around them. Clearly, the teachers saw these socioeconomic connections inherent in the technology discussion and were able to bring attention to the idea of “other” at which Group 1 had arrived also.

One of the readings about multiple literacies invoked a worried reaction in a participant, who said “I almost feel that this is saying children can not relate with written text, but can relate to games.” Another similarly participant offers, “I always thought playing computer games was an escape, but not an intellectual one. Does this mean reading will become passé because children feel better playing games?” All members of the group share similar views of this perceived troubling situation, offer no solutions to it, and come to a similar conclusion as Group 3 below, who complain that there “isn’t enough time” to do all that kids need to learn in relation to tech use, but who are able to articulate their role as teachers in the process.

Sample Group 3

This group consisted of four participants, 3 females and 1 male between the ages of 26 and 52. All participants immediately critiqued the results presented in one of the readings at hand, and did so immediately at the start of their chat. They explained, “I think it was an interesting study, but a little repetitive in its findings to results at least,” and “I was surprised that at the same time students were reporting that computers and tech didn't help writing that another study [mentioned by name] was calling something similar a success.” Each described how he or she was bothered by the idea that technology didn’t help, and alternately by the idea that students’ skills are not showing improvement.
The group discussed various state tests which still require handwritten long essays, and participants quoted other studies, radio programs, and other articles or organizations which discussed students’ overall decline in writing ability. “Writing isn't necessarily worse,” one participant challenges another, “maybe different. But what should I do about it in my classroom? That's the loaded question.” Participants in this group were not afraid to disagree with each other, provide outside “scholarly” examples as evidence for both sides, or to back up assertions with personal experiences from classrooms. Yet all seemed to agree that “kids are underprepared” in general for schoolwork and for life.

Texting, formal and informal writing, what is required on the job, holistic rubrics, standardized tests, grammar vs. content, “purpose and audience need to be taught; students think of audience as only the teacher,” and the effect of tech on language like abbreviations becoming common words (as also evidenced by Group 1) were aspects of the continuing discussion. Group 3 participants also discussed kids’ inappropriate screen names for communication with adults, inappropriate photos posted by them online, cyber bullying, and students’ reliance on staying up late at night to communicate with each other. All of these were perceived as interrelated problems or issues exacerbated by access to technology.

Group 3 members were also able to summarize and synthesize their own work, and meta-cognitively reflect on the purpose of the reading and/or the discussion. One participant offered, “I think between the two readings it is safe to assume that the teenagers do not view online activities and gadgets as beneficial for school, but beneficial for them -- we need to connect the two.” A flurry of shared examples of personal videos of student work and online samples of educational use were shared and viewed by group members via links, but then they again questioned the research at hand, asking about “how much kids told the surveyors what they wanted to hear.” This suspicion of students is again similar to Group 2’s view of games and Group 1’s view of Web 2.0 tools, with the conversation once again ending on a negative note.

Sample groups are provided here to help characterize the depth and content of teacher-directed talk in response to readings about technology in society and schools. Analysis of the discussion transcripts was performed using content analysis and grounded theory both by semester and across semesters (and is underway across all chats collected during the three year period of the study. As anticipated, further detail of the many themes and viewpoints which were identified and categorized must be discussed later via a future report of the study’s findings. Although over 100 chats have been analyzed to date, the most general and preliminary results have been provided in this version. Details of the exact directions given to students, the exact topics and readings assigned by semester, and an analysis of the improvement and adjustment of the project in subsequent semesters may also be reviewed for possible impact on study results.

Clearly, teacher free-form talk about technology is not as simple or short-sighted as some may think; similarly, many of their dispositions and understandings are influenced by their current teaching situations, which are not easily overcome by experience with course content or interaction with a diverse group of peers. Preliminary analysis of these results in total show that teachers’ negativity about current technology use by their own K-12 students, both at home and at school, was quite high given the known inverse correlation between perception of use and an individual’s increased personal skill level with technology (both for the teachers and their students). Conceptualization of their classmates’ viewpoints was considerably black-and-white without instructor intervention, yet based on a complex series of informational inputs and
experiences. As is perhaps their nature as teachers, the participants were quick to render a personal judgment about any offering of ideas about technology, whether negative or positive.

Discussion

The information about teacher perceptions, values and philosophies obtained from these chat segments will be able to help university instructors understand and make decisions about the teaching of K-12 teachers about technology knowledge and reform topics. Specifically, it can assist professors in a) understanding global and local barriers to technology use in schools from teachers’ points of view, especially if those teachers are deemed to be teacher-leaders by virtue of their pursuit of additional training at the masters level; and b) targeting instruction and reform efforts in meaningful ways for school teachers and leaders through graduate level curricula and course activities.

Utilizing materials from non-educational publishers, and utilizing non-teacher-centric readings for discussion appeared to help teachers broaden their context of understanding, but did not fully integrate into their world view. Perhaps a longer time period is needed for reform of “hearts and minds,” but this study provided a clear indication that the messages from the readings were heard, even if teachers have rejected them as “not useful for my particular situation” or “someone else’s problem.” Known communication habits of teachers (which may also be preferences) were clearly seen in these exchanges, and included reflection and understanding of the speaker’s message, along with a personal view offered and a perspective rendered in almost every instance. Possibly, the content of the teachers’ messages when stripped of these types of viewpoint packaging, may indeed ultimately prove to be either more positive or more neutral (indicating confusion about what to conclude about the topics at hand).

Anonymity to the professor appears to have had perhaps some effect on the honesty and detail of the postings; timely submission and obvious group dynamics (rather than one or two participants solely dominating the discussions or contributing ideas) were the only intended initial outcomes, and these were met by the participants readily and easily. Teachers were able to speak their minds freely and thus disclose many of the important perceptions they hold and share. Not all of the teachers who shared negative thoughts or observations about technology had instant agreement among others in the group; the same is true for those who shared positive thoughts or observations and received counterexamples and criticism in return. Upon initial review, both negative and positive views were shared by teachers regardless of age, level of experience in teaching, or reported comfort level with technology in general.

Chen, Chen and Tsai (2009) conducted a similar study of teachers in Taiwan. Their analysis concluded that “teachers posted more social messages in the beginning and the end of discussion, and most messages did not involve any cognitive and metacognitive skills,” with the former characteristic similar to the current participants. However, the more substantive latter characteristic indeed describes these U. S. teacher participants; teachers in the current study may have had previous experiences with the instructor, constructivist method, or peers themselves, which may have contributed to an inherent understanding among them of what type of work was expected in the chats.

University educators, school administrators and teacher leaders who use this technique with teachers for coursework, for research, or for professional development may be able to more
easily pinpoint underlying perceptual barriers, habits of thought or communication, or reflections of teacher experiences which help to construct the patterns and reactions of teachers’ responses to certain topics. The teachers in this study were not entirely against technology for themselves or their students, or even the rest of the world; already their discussions display the type of shared mutual understanding which the research suggests is a prerequisite to deeper understanding. However, it is the teachers’ internalization of their new learning, and methods that encourage personal change and institutional reform on these fronts, which must be attended to in future studies.

References

Wesch, M. (2007, March 8). Web 2.0 ... The machine is us/ing us. Retrieved from http://www.youtube.com/watch?v=NL1GopyXT_g

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Theatricalizing “Death” in Buddhist Concept for the Audience’s “Awakening”

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ABSTRACT

This study is an experiment on using theatre as a tool to promote the Buddhist Concept of “Death”. Though death is a truth of nature as the Buddhists believe, the suffering it causes cannot be easily erased. The loss of a beloved causes incalculable grief. The purpose of this study is to create a contemporary Thai theatrical work which leads Thai audience to a spiritual awakening by realizing the impermanence of all things. Research procedure includes 3 phases

Phase 1: The study and analysis of death and dying in Buddhist tradition
This phase consists of a survey of Buddhist Scriptures (Tipataka), literatures related to death and dying. The purpose of the survey is 1. to understand the real concept of death in Buddhist Scriptures and see how the Buddhists in modern Thailand perceive it. 2. to build up theme and plot of the play script by capturing the essence of Buddhist Concept of Death. The results indicated that, in Buddhist Scriptures, the concept commonly recognized by the Buddhists are death is regarded as truth of nature, no one can escape death, death is certain, the time of death is uncertain, the only thing that can help us at the time of death is our mental/spiritual development, but what is not widely recognized and sometimes misinterpreted is we should learn about “Death before Death” or dying away from “self”. Some Buddhists, like other man in general, is still afraid of death.

The title of the play is “Dear Death” with the theme from the Buddhist Scriptures: “Sabbe dhamma nalam abhinivesaya” or “Nothing, whatsoever, should be clung to. The plot reveals the reflection of an ordinary man who is strives to reach the religious enlightenment, but great loss inevitably occurs on the pathway while he is not yet free from ‘grasping’ and ‘clinging’. His beloved grandmother is dying. He thus looks at death in other way, beautifully and magnificently, different from religion’s metaphysical concept which death is merely current of natural change, and absolutely opposite to myth and old legend which death is merciless and frightful. He imagined death as a kind-hearted god who relieved and cured those who suffered from pain and illness. The concept of Death is theatricalized by
using dance, drama, symbols and music. The visual aspect is the key element to convey the meaning. Death is personified as god who rides on heavenly exquisite chariot to take our beloved one to eternal happiness. The result is the innovative dance-music-drama that combines the classical and contemporary performing arts.

Phase 3: The performance
The performance took place in two countries; Singapore and Thailand. The interview, the questionnaire and the observation of audience’s feedback indicate that both Non –Buddhist and Buddhist audiences can follow the story which is universal, the style of presentation which consists of images and symbols, the dialogues which discuss the Buddhist philosophy’s “Death before Death” or dying from “self”. The performance can help the audience recognize how precious and how short life is and we should make it meaningful and live it fully. The performance also helps the audience understand the death process, familiarize themselves with it, remove fear and get themselves well-prepared with consciousness and intellect for the moment of great loss or death.

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“It is usually proclaimed eloquently, but ambiguously, that birth, ageing and death are dukkha. But birth is not dukkha, aging is not dukkha, death is not dukkha where there is not attachment to “my birth”, “my ageing” and “my death”. At the moment, we are grasping at birth, ageing, pain and death as “ours”. If we don’t grasp, they are not dukkha, they are only bodily changes. The body changes thus, and we call it “birth”; the body changes thus, and we call it “ageing”; the body changes thus, and we call it “death”; but we fail to see these events just as bodily changes. We see it as actual birth, and what is more, we call it “my birth”, “my ageing” and “my death”. This is a multiple delusion because “I” is a delusion to start with; so seeing a bodily change as “my birth” or “my ageing” compounds this delusion. We fail to see these are simply bodily changes. Now just as soon as we do see these as only bodily changes, birth, ageing, and death disappear, and “I” disappear at the same time. There is no longer an “I”, and such a state is free from dukkha.”

The Truth of Nature
Buddhadasa Bhikkhu
UNESCO’s great international personality

Introduction
Theatre can be used as a tool for social development. Unfortunately, it is perceived as merely a kind of entertainment by Thai audience. Contemporary Thai Theatre has been budded for more than three decades, but it has never bloomed. There is only one big theatre company in Thailand which gains reputation and financial success, for the tactics that the company uses to draw the audience are extravaganza, big-name stars,
popular music with catchy tunes, and most of all, a guaranteed overwhelmingly emotional value, the same feeling as going to a concert of favorite stars. 

Buddhism shares the same fate. Though country censuses, statistics and quotas show that it is a nation full of devout Buddhists, Thais, especially in modern society, have not been able to embrace the concept and fundamental ethics and philosophy that Buddhism represents. People go to temple for rite and ritual, making merit and wish themselves good fortune in return. The essence of Buddhist teaching has been neglected in materialistic world. The world where money and power are most sought after.

Nowadays, when Thai has to face the crisis: coup, economic slowdown, terror in the south which seems to spread out into other part, especially in Bangkok, the capital city. The situation is worsening. People become aware that their minds need a cure. They need religion to help them through sufferings. They know that Buddhism talks about suffering, to understand the nature of suffering, and how to get out of it. It is significant that the lists of top 10 best-selling books of any major bookstores in Thailand always comprises Dhamma books on how to live happily with application of Buddhist teaching in daily life written by Buddhist monks. It shows that some group of people, especially modern Thais, are striving to find their way back to spiritually peaceful state of being. They are seeking a way to comprehend the essence of Buddhism, but not by going back to the monastery where Buddhist monk chanting incomprehensible Pali.

**Theatre of Death : Theatre of Awakening**

In Buddhist teaching, Death is a natural thing. It follows the rules of three characteristics of existence; Impermanence, Incompleteness and Non-self. What comes to be must cease to be. Birth goes side by side with death, arising with ceasing, existence with non-existence. People seem to fully aware of this law of nature, but when Death is approaching them or someone they love, it is not easy to welcome Death. Death is still a word definitively shunned by all who will try to escape it at all costs. In normal circumstances, if anyone let slip the word in social gathering, he/she cannot avoid being frowned upon by others as if he/she were speaking out of time and place. For lay people, death is considered highly sinister and should never be mentioned unless entirely unavoidable. This is how most people view death-negatively, fearfully, with hostility. (Vajiramedhi, 2005)

This study is an experiment on using theatre as a tool to promote the Buddhist Concept of “Death”. Though death is a truth of nature as the Buddhists believe, the suffering it causes cannot be easily erased. The loss of
a beloved causes incalculable grief. The purpose of this study is to create a contemporary Thai theatrical work which leads Thai audience to a spiritual awakening by realizing the impermanence of all things.

**Phase 1**

**The Study and Analysis of Death and Dying in Buddhist Tradition**

**The Three Basic Facts of Existence**

"Whether the Tathagatas (Buddhas) appear or not, O Bhikkus (monks), it remains a fact, an established principle, a natural law that all conditioned things are transient (anicca), sorrowful (dukkha) and that everything is without a self (anatta)." (Sutta Pitaka)

The Three Basic Facts of Existence are also known as the Three Characteristics, the Three Signata or the Three signs. The formula for the Three Basic Facts given in verses 277-9 of Dhammapada is:

- Sabbe sankhara anicca  all conditioned things are impermanent, transient
- Sabbe sankhara dukkha  all conditioned things are sorrowful, unsatisfactory
- Sabbe dhamma anatta  all phenomena are without ego, self, substance

Therefore, if we are clinging to something, someone, or even our “self” that will cause us suffering (Dukkha), for what we are clinging to is impermanent. It has to cease to be. “Emptiness” is what we should be aware of. Bikkhu Buddhadasa explained “emptiness” as the heart of Buddhist teaching.

The saying of the Buddha which deals with the practice in regard to emptiness is the one that is the heart of the Buddhist Teachings: 'Sabbe dhamma nalam abhinivesaya' which translates literally as 'No dhamma whatsoever should be grasped at or clung to'. If one amplifies the meaning a little it may be rendered as 'no one should grasp or cling to anything as being I or mine'. 'No one' means that there are no exceptions; 'should grasp or cling' means to give rise to ego-consciousness; 'as being I': refers to the feeling called ahamkara, the grasping at a (non-existent) soul or abiding ego-entity; 'as being mine' refers to the feeling called mamamkara, the grasping at
phenomena as being connected to ego. So don't have ahamkara or mamamkara with regard to anything at all starting from a worthless speck of dust up to valuable objects such as diamonds, sapphires, gems and the objects of sensual desire, and on to things higher than that - Dhamma, its theory, practice and attainment, the Path - Realizations, their Fruits and Nibbana. Nothing whatsoever should be grasped at or clung to as being 'I' or 'mine'. This is the heart of the Buddhist Teachings and was affirmed to be so by the Buddha himself.


D definite Death will definitely come to all of us.

E equally Death will treat us equally. We all equally die.

A afraid We are afraid of Death.

T time We never know when we will die.

H how We never know how will we die.

W. Vajiramedhi wrote in his “Looking Death in the Eye” that seeing Death is seeing through the nature of all things. Constant awareness of our mortality will make us unafraid of Death. Contemplating Death can prevent bad deeds;

We should talk about death everyday and find an occasion to remind each other frequently to beware- that today we may possibly die. Hence, whatever good remains for us to do must be done in haste. Whoever we love we should let them know of our love. If we haven’t looked after our parents we should hurry up and go back to take care of them. Talk about Death twice daily, morning and evening in the same way we honour the national flag, and we Thais will be much better off, Thailand will be cleaner, corruption will decline because when you speak about death, fear of death will make you ashamed of evil and shame in the face of evil will make you give up evil deeds, your life will instantly become virtuous.

He explained that Death, according to the analytical doctrine of the Buddhist canon which incorporates the Buddhist philosophy, happens all the time. It
arises, stays and ceases. We never know how many times in a second we arise, stay and cease. Therefore, we must see the close proximity in which we are born and die, arise and cease mentally. We arise and cease all the time. Hence, we should learn and see through the phenomenon of our inner life, so that we can see death happening all the time. Such is the nature of things.

We die mentally every moment as we do physically. Our body cells die all the time. When bathing, scurfs is dead skin that disintegrates in the form of filth. After seven years our physical body is no longer the same person we once were because all cells renew themselves totally every seven years. Scientifically speaking, we become a new person every seven year.

He also further discussed that Being dead (marana) in the Dhamma is whenever mind-spirit ceases or the last mind-spirit moves from Being to the next conceived mind-spirit, the last mind-spirit that dissolves and forms into the present one, with its life disrupted, is called disrupted santati (discontinuation of life) and that makes for death. Naturally the human mind arises and dies all the time. Each cycle of birth and death is faster than a lightning flash and continues like the flow of a river.

Rules and Regulations or the Nature of Life
The nature of things consists of five tenets, namely
1. Everyone must age in the course of time. No one can avoid ageing.
2. Everyone must suffer illness in the course of time. No one can avoid illness.
3. Everyone must die in the course of time. No one can avoid death.
4. Everyone must suffer separation from whom or what they love in the course of time. No one can avoid separation.
5. Everyone who did what they did, whatever good or bad must be the recipients of their own respective deeds.

Contemplating Death
Life is more fragile and than glass and lighter than a feather. Death is approaching us, timely or untimely, so we should treat each day like the last day of our life. Buddha remarked “Let you all contemplate death well”. Death awareness has the following benefits:
- It allows you to see through the nature of things.
- When you see through it, you can live your life heedfully.
- When you live your life heedfully, you will expedite your acts of merit.
At the time of your death, you do nothing awry nor go astray. It is the basis for higher levels of insight meditation. It guarantees your new sphere of being. People who develop their awareness of Death, even if they have not attained enlightenment (nibbana), will be born in higher sphere.

And W. Vajiramedhi thus summarises the benefits of the contemplation of Death as follows:
- You live without heedlessness
- You let go of all clinging and attachment.
- You do not long for your past life at the terminal moment.
- You shun evil and fear sin, i.e. you choose to do only good deeds.
- You do not lust after material things as you must leave them behind eventually.
- You understand the impermanence of things.
- You do not fear death.
- You die in peace when your time comes.

It is the basis of higher transcendental meditation.

In death, you will be born on higher sphere as you possess a mind without blemish just before dying.

In the Visuddhimagga written by Phra Buddhagosajarn, death awareness can be contemplated through a number of means, as follows:
- In the guise of an executioner.
- By dispossessing oneself.
- By analogy.
- By visualizing the body as the home to a plethora of worms.
- By deteriorating with age.
- By seeing Death unannounced.
- By time limitation.
- By the brevity of the lifespan.

Phase 2
The creating of Theatre of Awakening : “Dear Death”, A Contemporary Thai Theatre.
The title of the play is “Dear Death” with the theme from the Buddhist Scriptures: “Sabbe dhamma nalam abhinivesaya” or “Nothing, whatsoever, should be clung to. The plot reveals the reflection of an ordinary man who strives to reach the religious enlightenment, but great loss inevitably occurs on the pathway while he is not yet free from ‘grasping’ and ‘clinging’. His beloved grandmother is dying. He thus looks at death in other way, beautifully and magnificently, different from religion’s metaphysical concept which death is merely current of natural change, and absolutely opposite to myth and old legend which death is merciless and frightful. He imagined death as a kind-hearted god who relieved and cured those who suffered from pain and illness.  
The playscript consists of 7 scenes, with approximately run-time 90 minutes with no intermission.

**Scene I : Prologue**

Dusk, Grandson helps grandmother preparing herself for a journey. He will go to see her off at ‘The Station’, where she is supposed to wait for someone called “HE”. Grandson told his grandmother not to worry and take some rest. He promised he would be with her until “he” would come and pick her up. Grandson dreams of the royal chariot and a man with god-like grace standing on the chariot’s throne. The chariot accompanied by celestial maids is passing him by. He is frightened and looks for his grandmother.

**Scene II : A Dewdrop on the Grass**

Dawn, Grandson helps his grandmother get dressed and leave their place. Grandmother points out a dewdrop on the grass which is beautiful, crystal clear and pure, but its time is so short. Merely an instant. It will evaporate, when the sun shines through. The chorus sings the Buddhist teaching in Pali “Uppajjitaṁ nirujjhantaṁ āciṁ vupasamo sukho” – All arises and ceases, that is their nature: when arising and disappearance cease completely, that is ultimate happiness.

**Scene III : Station**

Grandson and Grandmother arrive at the station. Grandmother is homesick and worried. She wonders for how long she has to wait for “HIM” at this station. Grandson entertains her by singing Dhamma song about Samannalakkhana (The Common Characteristics) – Anicca (impermanence), Dukkhata (state of suffering or being oppressed), Anatta (soullessness or state of being not self). These abstract ideas are personified by three characters and amusing choreography. There is a group of people welcome a new born child. They walk pass Grandson and his Grandmother with merriment. Only
awhile, the fun atmosphere is interrupted by siren sound. Grandson rushes out, then comes back sadly and tells his Grandmother that the baby is dead.

**Grandmother:** Life is so short Alas! 
Like a dew on the grass 
Merely an instant, 
It will evaporate.

The group comes back, carrying the baby’s dead body. The chorus sings Buddhist teaching in Pali “Anicca vata sankhara. Uppada vaya dhammino. Uppajjitava nirujjan’ti. Tesam vapasamo sukho”- Impermanent, alas, are all conditions. Arising and passing away. Having been born they all must cease. The calming of conditions is true happiness.

**Scene IV: Aciram**
In his dream, The grandson sees the dance of the losing mother. He tries to console her with Buddhist teaching, but he eventually collapses himself, realizing he is also clinging to his loved one. The dance is accompanied by the singing of Buddhist teaching in Pali.
“Addhuvam me jivitam. Dhuvam me maranam. Avassam Maya marittapam”- My life ends in death, life is not permanent. Death is permanent.
“Aciram vata’ yam kayo. Pamhavim adhisessati. Chuddho apetavunnano niratthamva kalimgaram”- O Bhikkhu, this body of yours will soon, truly and verily, lie upon the ground when all of our consciousness is gone. It is no better than a decaying wooden piece. It is useless.

**Scene V: A Nightmare**
Still in his dream, Grandson sees his Grandmother become healthy. All her weakness and illness are gone. She dances in a Thai traditional style with other celestial maids and tell him to take care of himself. She is taking a long journey to make merit. She dances and then disappears. Grandson is frightened. He tries to look for his Grandmother. The royal chariot and “HE” approaches him once again and passes him by. He runs after the chariot to find out if his Grandmother is in there.

**Scene VI: The Encounter**
The conversation between “HE” and Grandson. Grandson is asking him for more time with his Grandmother. “HE” teaches Grandson with Buddhist teaching. The scene portrays the inability of a modern man to embrace the essence of Buddhist teaching, though he intellectually knows what is good in the teaching.
Grandson: And there… I could see him again. He still resembles someone I once familiar with, He’s as graceful as god, staying on his chariot, his apparel is exquisitely beautiful.

(to Him) Will you take my grandma away from me?

HE: I part no one from anyone.

Grandson: Please kindly give me a little more time to spend with my grandma.

HE: Dhuvam Maranam

Grandson: Death is permanent.

HE: Jivitamwya aniyatam

Grandson: Life is not permanent.

HE: Maranam me niyatam

Grandson: Death is permanent.

HE: When Death is permanent. Why not thou learnest about Death before Death?

Grandson: You mean I should die away from love and attachment?

HE: Diest away from Self.

Grandson: Die away from Self.

HE: Sabbe Dhamma nalam abhinivesaya

Grandson: Nothing, whatsoever, should be cling to.

HE: Atthi nu kho kichi lokasmin yamaham upadiyamanonavajjava assam

Grandson: Nothing, in this world, that if we cling to, will never cause us suffering.

HE: Be awakened!

Grandson: Who are you?

HE: If thou art awakened., whenever, there shalleth be no “ME”.

Grandson: I want to be awakened, please help me, help me.

HE: Dhamma willeth help thee.

Grandson: I am just an ignorant.

I am in my nightmare and just can’t wake up. I’m frail. I’m ignorant.

HE: Be awakened!

Scene VII: The Last Farewell

Grandson wakes up to find out that Grandmother cannot walk. Grandmother tells him not to cling to what is not ours. Grandmother realizes the truth of life and the law of nature which is Dhamma. She asks her grandson to make the best of their last moments together by composing a poem describing “HE” and his royal chariot. While he is composing the poem, “HE” comes and takes Grandmother with him. Grandson promises that he will make only good karma (good deeds), until his time will come and he will go with that beautiful chariot himself.
Grandson

HE and my Grandma, they are as graceful as god. The ray of merit is shining through the darkness of the night. HE turns to look at me. He looks merciful, understanding, as if HE knows that I ask him to take good care of my grandma for me. I see him smile, a little smile. Now, HE and I are acquaintances. Everytime I think of my grandma, I will also think of him. I will mindfully aware that life is so short. Like a dew on the grass. Merely an instant, it will evaporate when the sun shines through. I promised to my grandma that, in this short life, I will make only good deeds, because I am her good Karma. Until then, until the day I will see HIM again. I day I will sit beside HIM on that chariot, glowing and shining. I shall be delighted with my good Karma, and realize that my life has nothing to regret.

Voice

Sabbe dhamma nalam abinivesaya

The concept of Death is theatricalized by using dance, drama, symbols and music. The visual aspect is the key element to convey the meaning. Death is personified as god who rides on heavenly exquisite chariot to take our beloved one to eternal happiness. The result is the innovative dance-music-drama that combines the classical and contemporary performing arts.

Phase 3: The performance

The performance took place in two countries; Singapore and Thailand. The interview, the questionnaire and the observation of audience’s feedback indicate that both Non –Buddhist and Buddhist audiences can follow the story which is universal, the style of presentation which consists of images and symbols, the dialogues which discuss the Buddhist philosophy’s “Death before Death” or dying from “self”. The performance can help the audience recognize how precious and how short life is and we should make it meaningful and live it fully. The performance also helps the audience understand the death process, familiarize themselves with it, remove fear and get themselves well-prepared with consciousness and intellect for the moment of great loss or death. Some critic reviews the performance as
While Buddhist teaching emphasises death and impermanence, it's not easy to set ourselves free from multiple cravings and the pleasures of a euphoric life. Death can come at any time, even without a warning, whether our own departure from this world or the loss of our loved ones.

The kind-hearted God of Death on his golden chariot eventually picks up the grandmother to take her on a journey to eternal happiness.

As much as sunset can be a beautiful sight, death can be positively viewed as a happy ending as it comes along with the cessation of suffering. Bangkok University Theatre Company attempts to bring us closer to an enlightenment of death as a truth of life through a contemporary Thai performance, Dear Death or Yern Phra Yom (Phra Yom or Yama, the God of Death). Following last month's enthralling performances at Singapore's Esplanade Theatre Studio, the theatre company will stage a bigger production of the show at the opulent Aksra Theatre, on March 28 and 29.

Playwright and director Assistant Professor Punnasak Sukee continues to portray Buddhist philosophy in this story, after last year's Dancing to Nirvana delivered the key message of Ittappajayata, the concept of existence and uncertainty. Dear Death amplifies on this uncertainty with the theme Sabbe dhamma nalam abhinivesaya, meaning "Nothing, whatsoever, should be clung to."
Playwright and director, Punnasak Sukey is keen on creating 'food for thought' dramas.

Looking younger than a fortysomething, Punnasak shares how he faced a mid-life crisis three years ago that had him questioning about whether what he was doing really served a purpose. He found an answer in Buddhist philosophies that are reflected in his works, the most prestigious being Mahajanaka The Grand Musical, to commemorate the 60th anniversary of HM the King's accession to the throne.

"It may be because of ageing that got me deeper into dhamma. At any age, you can benefit from Buddhist teaching that gives you the 'how to' to cautiously lead your life and to find a 'way out' of suffering," he says.

"But the difficult part of it is to put it into practice. Moreover, people may think it's about going to the temple, entering monkhood, or becoming a vegetarian when actually anyone can practise dhamma on a daily basis."

Moranansati, an awareness of death, is one example of Buddhist mind-training to be mindfully conscious of its inevitability and be well prepared for it.
The performance engages contemporary dance movements.

"In reality, people may shun death, fearing it as a terrible fate and a horrible thing. Dear Death aims to turn this attitude around, to become proactive about dying. Essentially, if one can detach ourselves, it will come on easy and thus the Pali verse of Sabbe dhamma nalam abhinivesaya or 'Nothing, whatsoever, should be clung to' echoes throughout the play," says Punnasak.

Dear Death tells the story of a man and his grandmother and their encounter with the God of Death. The young man, afraid that the elder will soon die, is in suffering due to his love and attachment to his grandmother. In his dream, he meets a kind-hearted god riding on an exquisite chariot to pick up people and transport them to eternal happiness.

Prayunsak Rattanaseranee plays the young man, and Neeranuch Patamasutra, the grandmother.

He's awakened to look at death, not from its dark side, but with an enlightenment that it's merely a part of a natural change. In the end, he readily accepts the loss of his grandmother, and with the uncertainty of life, he commits himself to doing good deeds.

The thought-provoking story comes to life through an amalgam of acting, singing and contemporary dancing performed by 50 students of Bangkok University's Department of Performing Arts. Sophomore student Prayunsak Rattanaseranee takes the demanding leading role of the young man, who's virtually in every scene of the 90-minute show. Neeranuch Patamasutra, the only professional performer in the cast, plays his merry grandmother who's ready to let go and embark on her last journey.
The God of Death characterised as 'He', performed by sophomore student Preechan Maneechote, appears on a man-powered golden chariot several times throughout the show. Repetitiveness of some parts of the story may have audience asking when 'He' will eventually take the grandmother to, supposedly, heaven.

Overall, Dear Death presents contemporary Thai performing arts in a riveting way. The choreography by Parinya Tongphonthong boasts a contrast from vigorous contemporary movements in the "grasping and clinging" scene to nimble footwork of traditional Thai dancing by the God of Death and his entourage.

The spectacular production features a cast of 50 performers.

Music composers Krisada and Napisi Reyes smoothly mixes traditional Thai and Western music, pali verses, traditional Thai chanting and opera singing for a stimulating score that expresses death in a sanguine rather than a melancholic spirit.

With subtitles in English, Dear Death was immensely appreciated by a multi-national audience at Esplanade Theatre Studio in Singapore. Aksra Theatre, by far, will be a grander venue and its auditorium with carvings of humans, gods, and angels and a Six Heaven ceiling provides an ethereal ambiance for the performance. Even so, will it appeal to Thais?

Contemporary Thai performances don't normally draw a big crowd but Punnasak optimistically observes an increasing number of theatre-goers who seek 'food for thought'.

"This is a story that Thais can relate to and it offers an essence of Buddhist philosophy on embracing death besides the entertainment," he says. "In Thailand, contemporary Thai performances are like buds that are ready to bloom. Somehow they never get to bloom to the fullest because of the lack of support. Nevertheless, Bangkok University Theatre Company hopes to change that and keep this performing arts alive."
Bibliography


Sukee, Punnasak. **Dear Death.** Bangkok : Bankok University Print. 2009.

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   The purpose of this interactive poster session is to define effective teacher-made podcasts for use in science secondary education classrooms. Usefulness to Practitioners

   Students with learning disabilities often need supports that their general education peers do not. Podcasts can provide advance organizers, knowledge-based information, independent reference, follow-up activities and homework assignments. Any assignment can be made into a podcast. Additionally, podcasts can be accessible to students at any time. The presenter will provide easy, step-by-step instructions for creating and using podcasts in the science classroom. Creating and using podcasts can be simple and enjoyable to teachers and students.
Abstract

Religion and the American Public School: Is There a Place for God in Public Schools?

Dr. Christopher L. Sny

We Americans are a Christian nation with a secular constitution – a paradox of a culture often at war with itself over religion that is nowhere more contentious than in our public schools. The first phrase of our First Constitutional Amendment states, “Congress shall make no law with respect to the establishment of a religion”, and then immediately follows with, “...or prohibit the free exercise thereof;” thus establishing a dynamic balance between freedom from state imposed religion while respecting and protecting individual religious practice including freedom from religion for those who choose to practice no religion at all, a daunting enforcement challenge for government in today’s multi-cultural and multi-ethnic America. The basic foundation of our American democracy with regard to freedom of religious thought and practice is the First Amendment cited above. But what is the meaning of this elegant declaration for modern American life in schools? A discussion of the often complex and sometimes conflicting views and recent case law on this core American value will be the basis for this paper. Thomas Jefferson once said that, “differences of opinion leads to inquiry, and inquiry to truth”. Jefferson, a deist in religious outlook like most of the founders, believed more in the sanctity of freedom of thought than in any prescribed method of religious expression. Thus, while we today think of ourselves including our schools, as the product of a “Christian nation” we also recognize by both aspiration and well codified law the inherent right to free exercise of religion including the right to no exercise at all, which by extension leads to the question: “Does God belong in public schools?
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Introduction

From the beginning of the public school movement in America, early to mid nineteenth century, through the “Happy Days” of the mid twentieth century 50’s, the presence of God and religion in the public school was never seriously challenged in the courts and unquestioned acceptance of religion in the public school house as in American life was an understood expectation of faculty, administration and community. That was until the 1962-'63 academic year when the Engle v. Vitale decision was handed down by the U.S. Supreme Court which stopped the practice of reading a “non sectarian Regent’s prayer” in New York public schools in which Justice Hugo Black wrote:

“…the constitutional prohibition against laws respecting an establishment of religion must at least mean that in this country it is no part of the business of government to compose official prayers for any group of the American people to recite as a part of a religious program carried on by government.” (Engle v. Vitale, 1962)

This decision was followed by the ruling in the combined cases, Abington vs. Schempp and Murray vs. Curlett that ended the practice of state initiated prayer in the rest of the
country’s schools seemingly overnight. Ms. O’Hair, a virulent atheist and founder of the “American Atheists” organization instantly became, “the most hated woman in America” along with Earl Warren, the Supreme Court Chief Justice, who reappeared on bumper stickers now fading since Brown v. Board school desegregation decision a decade earlier with bright communist red lettering that read: “Impeach Earl Warren”! Writing for the majority Mr. Justice Clark delivered the opinion saying, “While the Free Exercise Clause clearly prohibits the use of state action to deny the rights of free exercise to anyone, it has never meant that a majority could use the machinery of the State to practice its beliefs.” (Brown v. Board, (1954); Abington v. Schempp, Murray v. Curlett, (1963). Thus God had summarily been dismissed from public school – only to reappear periodically in several landmark cases decided by our nation’s highest court over the next several decades up to and including today. The question, “Does God belong in our public schools?” continues to be relevant even today and of concern to Americans of all faiths and no faith and crosses all socioeconomic lines in our culture. Why should this issue continue to be at the center of American public school life? The answer, perhaps, lies in the continually contested and sometimes seemingly contradictory decisions of our nation’s highest court with regard to religion in American life that inevitably spills over into the most public of our institutions – the neighborhood school.
Religion and Construction of Our Constitutional Home

Despite the Founders deep concern for the issue, religion appears almost an afterthought in our Constitution which references religion only in the next to last, Article VI, final clause which states: “…no religious test shall ever be required as a qualification to any office or public trust under the United States”, which appears to put the issue virtually on the back porch of our American constitutional home. The reality of course was that the issue was central to American colonial life and in order to avoid irreconcilable conflict at the constitutional convention the issue was virtually avoided in the original document. Construction began on this uniquely original American constitutional home on May 25, 1787 in Philadelphia after demolition of the crumbling and dysfunctional Articles of Confederation. Initial construction was completed rather quickly for such an important structure that would eventually provide a constitutional roof over the heads of nearly 300 million inhabitants today, when in September 1787 it was signed off on by 39 of the original 42 designing architects. The actual structure wasn’t finally accepted by the new federation of states until June 21, 1788 when the New Hampshire contingent became the ninth state to ratify and accept it as originally designed. However, it was not until April 30, 1789 when George Washington was inaugurated our first President and moved into America’s virtual constitutional home that he became the first in a long line of temporary occupants. With regard to guarantees of basic civil rights, the founders knew something was missing. On June 8, 1789 the leader of the original design team, James Madison, moved to rectify the omission by proposing a Bill of Rights as a virtual protective entry way for the new constitutional home. This virtual front porch was completed on December 15, 1791 when a majority of the original
designers by majority vote had it nailed into place. During the ensuing 219 years to date since the original construction and front porch addition, the home has been altered only 17 more times, an average of only once a decade. Despite the major civil and political storms of these past two centuries our constitutional virtual home remains basically intact and seems to weather each assault on it no matter how grave the current constitutional crisis with the unfailing enlightened guidance of each temporary occupant President, Congress and Supreme Court.

**Origins of Religion in American Schools**

Of the first 108 universities in the U.S. 106 were religiously affiliated, one of which, the first, Harvard, 1636, student handbook rule number one required students seeking entrance to know Latin and Greek so they could study scripture. “Let every student be plainly instructed and earnestly pressed to consider well, the main end of his life and studies is, to know God and Jesus Christ, which is eternal life, (John 17:3); and therefore to lay Jesus Christ as the only foundation of all sound knowledge and learning”, (Merino, 2008, p.72).

In a similar vein the first publicly supported primary and secondary schools in America were also established with religious motivation resulting in a foundation for American public education established and conducted almost exclusively by churches for the purpose of advancing their exclusive religious beliefs. As an example in 1647 the Massachusetts legislature enacted the now famous “Old Deluder Satan” Act which required towns of 50 or more families to teach children to read and write so they might
“achieve salvation and delude Satan”, (Schimmel, et.al., 2008, p.93). In fact, the concept of public education, “divorced from denominational control was foreign to the colonial mind”, (Pfeffer, 1967, p.321). Indeed, this primarily Protestant conviction of faith based literacy gave a decidedly Protestant influence to our earliest public schools which in turn later caused Catholics, Jews and other religious groups to establish their own schools since the public schools were early on in our history so infused with Protestant beliefs and practices. Justice Felix Frankfurter, writing two centuries later in the 1948 McCollum case opinion said: “Traditionally, organized education in the Western world was Church education. It could hardly be otherwise when the education of children was primarily the study of the Word and the ways of God. Even in Protestant countries where there was a less close identification of Church and State, the basis of education was largely the Bible, and its chief purpose, inculcation of piety. To the extent that the State intervened, it used its authority to further the aims of the Church. The immigrants who came to these shores brought this view of education with them. Colonial schools certainly started with a religious orientation”, (McCollum v. Board of Ed., 1948). The pervasiveness of the early religious influence on public schools is also illustrated by the primer used to teach public school pupils to read in New England in the the 18th century. The book entitled, The New England Primer taught the alphabet using letters and pictures with Biblical connotations; for example, “A-in Adam’s fall we sinned all or P-Peter denies His Lord and cries”. Because of these origins of religious involvement in public education, it has been difficult to keep public schools from becoming inundated in subsequent years with religious strife and discord, (Schimmel, et.al, 2008, p. 146). As the era of the Enlightenment encompassed the later 18th century the conflict between secular rationalism and religious
teaching intensified as noted in Adam Smith’s, An Inquiry Into the Nature and Causes of the Wealth of Nations (1776) when he said: “Science is the antidote to the poison of religious enthusiasm and superstition.” To further illustrate religious turmoil in colonial America, Justice Douglas writing two centuries later in, The Bible and The School notes:

Every one of our colonies had to a degree some union between Church and State. Some were more tolerant of religious minorities than were others. The colony of Plymouth was ruled by a governor and a small and highly select theological aristocracy, a church-state with various grades of citizenship and noncitizenship. Puritan persecuted Quaker, as before him Roman Catholic has persecuted Protestant and Anglican persecuted Puritan. Maryland became the home of religious toleration under the Catholic Calvert, extending free exercise of religion to all Christian sects except the Unitarians and to all others except the Jews. ..therefore taught the new states that an accommodation of conflicting religious enterprises was essential; and that the best way to assure individual liberty and fair treatment to each sect was to separate Church and State.”, (Douglas, 1966, p.19).

James Madison, the principle designer and author of the Constitution, in response to a 1785 bill in the Virginia legislature proposing a tax for the support of teachers of the Christian religion responded by stating his belief in separation of church and state in his “Memorial and Remonstrance Against Religious Assessment” in which he stated:

The Religion then of every man must be left to the conviction and conscience of every man; and it is the right of every man to exercise it as these may dictate. This right is in its nature an unalienable right. It is unalienable; because the opinions of men, depending only on the evidence contemplated by their own minds, cannot follow the dictates of other men: It is unalienable also; because what is here a right towards men is a duty towards the Creator. It is the duty of every man to render to the Creator such homage, and such only, as he believes to be acceptable to him. This duty is precedent both in order of time and degree of obligation, to the claims of Civil Society. Before any man can be considered as a member of Civil Society, he must be considered as a subject of the Governor of the Universe: And if a member of Civil Society, who enters into any subordinate Association, must always do it with a reservation of his duty to the general authority; much more must every man who becomes a member of any particular Civil Society, do it with a saving of his allegiance to the Universal Sovereign. We maintain therefore that in matters of Religion, no man’s right is abridged by the Institution of Civil Society, and that Religion is wholly exempt from its cognizance. True it is, that no other rule exists, by which any question which may divide a Society, can be ultimately determined, but the will of the majority; but it is also true, that the majority may trespass on the rights of the minority… experience witnesseth that ecclesiastical establishments,
instead of maintaining the purity and efficacy of Religion, have had a contrary operation. During almost fifteen centuries, has the legal establishment of Christianity been on trial. What have been its fruits? More or less in all places, pride and indolence in the Clergy; ignorance and servility in the laity; in both, superstition, bigotry and persecution. (cited in Hunt, ed., 1901)

Madison’s colleague Jefferson, voiced similar views when in 1802, after one year in the White House, he wrote to the Danbury Baptist Association of Connecticut:

Believing with you that religion is a matter which lies solely between man and his God, that he owes account to none other for his faith or his worship, that the legislative powers of government reach actions only, and not opinions, I contemplate with sovereign reverence that act of the whole American people which declared that their legislature should “make no law respecting an establishment of religion, or prohibiting the free exercise thereof,” thus building a wall of separation between Church and State. (cited in Lee, 1961)

Clearly the founders understood the separation of church and state must be part of the makeup of the new nation. Despite this understanding and declarative attempt to separate the two with the adoption of the First Amendment, conflict continued over the decades between clergy and the proponents of the state sponsored public school. As an example when Horace Mann in the 1830’s provided the leadership in the establishment of the first state system of public schools in Massachusetts, his chief opposition came from clergymen who sought to prevent him from creating what they called “Godless” institutions. Mann insisted the public schools should have no sectarian religious motivations and the state should “abstain from subjugating the capacities of children to any legal standard of religious faith.” (Schimmel, et. al., 2008, p. 147).

Later, however, contrary to Mann’s belief that the public schools should be secular, religious activities were permitted in public schools in most states, including prayer, Bible reading, and other religious exercises. By the early 20th century, most states had regular morning religious services in their public schools. These religious practices
that clearly combined church and state were upheld by a majority of state courts and thought to be consistent with state constitutions. That is until the Supreme Court resolved this issue when it held that the fundamental concept of “liberty” embodied in the Fourteenth Amendment incorporates the guarantees of the First Amendment and safeguards them against state interference. (Gitlow v. New York, 1925).

Since under the Tenth Amendment to the Constitution education has been ruled by interpretation of the Supreme Court to be a state function, even though states delegate most school operations to local governing boards, controversies involving public schools are litigated primarily under the Fourteenth Amendment “equal protection” guarantees. Further most of the court rulings with regard to religion in public schools have been established since World War II with only five cases on religion reaching the nation’s highest court before 1947.

As indicated in the following case analysis this law continues to evolve as the religious clauses, establishment and free exercise, interact with the free speech guarantees of the same First Constitutional Amendment and “equal protection” clause of the Fourteenth. The majority of church-state cases in education since the second world war have involved the Establishment Clause of the First Amendment charging state imposition of religion in schools while a fewer number have had the Free Exercise Clause as the main issue charging state infringement on individual religious liberty. The sum and substance of these cases show, despite some notable decisions maintaining the proverbial “Wall of Separation” between church and state with regard to prayer in schools, that religion may be creeping back into schools as a result of an increasingly conservative makeup of the U.S. Supreme Court.
The beginning of court sanctioned sectarian trends in American schools came with the early 20th century ruling in a landmark case filed with the U.S. Supreme Court in response to The Compulsory Education Act adopted November 7, 1922 by voters of the state of Oregon. The case, Pierce v. Society of Sisters (1925), was initiated when the challenged act, effective September 1, 1926, required every parent, guardian, or other person having control or charge or custody of a child between eight and sixteen years to send him “to a public school for the period of time a public school shall be held during the current year” in the district where the child resides; and failure so to do is declared a misdemeanor, (Alexander, 2009, p.309). The mandatory attendance requirement of the Oregon law was in line with the norm of the era with legislation passed in most states requiring school attendance to thwart the abuse of child labor which was commonly exploited in the mines and factories of the industrial revolution era of the late 19th century and early 20th centuries in this country and other rapidly industrialized nations. The contested issue in this case however wasn’t the mandatory attendance requirement but that the law required every parent or guardian to send the child to a “public school”…which “without a doubt enforcement of the statute would seriously impair, perhaps destroy, the profitable features of appellees’ business and greatly diminish the value of their property.” The Court in its opinion written by Mr. Justice McReynolds went on to note, “Under the doctrine of Meyer v. Nebraska, we think it entirely plain that the Act of 1922 unreasonably interferes with the liberty of parents and guardians to direct the upbringing and education of children under their control. The fundamental theory of liberty upon which all governments in this Union repose excludes any general power of
the state to standardize its children by forcing them to accept instruction from public
teachers only.” (Pierce v. Society, 1925).

Thus by officially recognizing the validity of a private religious education to fulfill the mandatory school attendance laws sweeping the nation during this era, the Court opened the way to the development of what later became known as the “child benefit” doctrine paving the way for the subsequent undermining of the “Wall of Separation” between church and state embodied in the First Amendment establishment clause. Under this doctrine first enunciated five years later in Cochran v. Louisiana State Board of Education, (1930), the Court ruled that a state plan to provide textbooks to parochial school students does not violate the Fourteenth Amendment. Though the Court in this case was not asked to determine whether the First Amendment was violated, the decision set the stage for a subsequent decision, ten years later in Cantwell v. Connecticut, (1940), in which the Court decided that the religious liberties of the First Amendment not only provide protection against actions by the Congress, but also, when applied through the Fourteenth Amendment, protect the individual from arbitrary acts of the states as well. Thus in Cochran the Court first identified its “child benefit” doctrine reasoning that the state of Louisiana public textbook funds were expended for the benefit of the individual child and not for religious purposes and were therefore not in violation of the First Amendment establishment prohibition. Subsequent decisions in Everson v. Board of Education, (1947), determined the establishment clause does not prohibit spending tax funds to pay bus fares for parochial school students in New Jersey, (30 states currently provide such aid in a variety of ways) and in Zorach v. Clauson, (1952) the Court found constitutional the New York practice permitting release time for
public school students to attend religious classes off public school grounds. These cases are examples of the application of the “child benefit” doctrine to further break down separation and the establishment prohibition with regard to financial support of private parochial schools with public tax monies. These decisions and the times in which they were decided were a time in American school life and law when religion was a very central and important part of the lives of most Americans whether Catholic or Protestant in their beliefs with only a few relatively small other non-Christian faiths represented in the population. In today’s larger and more secular, multi-cultural population these decisions might have been different, even with a conservative majority on the court.

By contrast in another dimension of the religious debate in our public schools however, the introduction of prayer into the daily activities of the school house, the Court has consistently upheld the anti establishment prohibition of the First Amendment. Beginning with its shocking to the general public 1962 decision to banish the New York regents “neutral” prayer from schools, Engle v. Vitale (1962), immediately followed by the combined rulings in School District of Abington Township v. Schempp and Murray v. Curlett, (1963), striking down Bible passage reading in schools, an uproar in popular culture ensued resulting in the call for impeachment of then Chief Justice Earl Warren. In the decades that followed the Court in turn struck down the practice of posting the Ten Commandments in schools, Stone v. Graham (1980), moments of prayer disguised as “moments of silence” in Wallace v. Jaffree (1985), and prayer at graduation exercises in Lee v. Weisman (1992). Each of these rulings represent a Court resisting on the one hand the religious right’s wish to inject religion into the schools in the form of state sponsored prayer while at the same time on the other hand permitting public financing of various
religious initiatives up to and including those of the Bush Administration “Republican Right” favored “faith based” initiatives carried on by the current Obama Administration’s council of 25 ministers appointed to oversee the expenditure of public funds for support of presumably “Democratic Left” favored religious initiatives. While these seemingly conflicting positions taken by the court may be a reflection of increasing ambivalence toward religion in the American life generally, they certainly have created a culture of confusion with regard to the issue of free exercise of religion for individuals versus state religious establishment prohibitions in public schools.

Perhaps the most definitive ruling supporting public finance of private parochial education to date came in 2002 when in Zelman v. Simmons-Harris, the U.S. Supreme Court ruled that Ohio Pilot Scholarship Program, a voucher program, did not violate the Establishment Clause since the tuition was distributed to parents who in turn convey the funds to the school of their choice stating in the summary of their decision: “This Court’s jurisprudence makes clear that a government aid program is not readily subject to challenge under the Establishment Clause if it is neutral with respect to religion and provides assistance directly to a broad class of citizens who, in turn, direct government aid to religious schools wholly as a result of their own genuine and independent private choice…Under such a program, government aid reaches religious institutions only by way of the deliberate choices of numerous individual recipients,” (Zelman, 2002).

Since this decision in 2002 much has happened to influence religious fervor in the U.S. as in the rest of the world with the U.S. invasion of Iraq, the economic collapse of 2008 and continued struggle of American schools to reform and meet national standards. Forty-eight of fifty states have recently committed to development of such national
standards, leading to the inevitable national curriculum that may in turn result in an increasingly conservative Court’s support for the further breakdown in the Wall of Separation for religion in schools to parallel the wholesale transfer of public tax monies to private parochial education noted in the cases decided under the “child benefit doctrine” cited above. It only remains to be seen how much longer the Court can or will resist right wing political pressure to bring God back into schools in the form of Bible reading, Ten Commandment posting, prayer at graduation and other actions urged by the powerful Christian Right in American politics.

In fact what we are quietly and gradually experiencing is a paradigm shift toward redefinition of the meaning of the public/private school concept in America. Just as segregation of the races in schools during the pre Brown v. Board era perpetuated a dual system of education, economic and religious segregation through dual taxation and vouchers is currently occurring by extension of the child benefit doctrine into 21st century schools. Combination of church and state may become an evolutionary consequence of the intersection of a failed property tax support system and popular support for prayer in schools in a time of economic crisis which also may then inevitably lead to systemic restructuring of school finance with choice as the carrot to soften the stick of increased taxation to support both private sectarian, through vouchers, and public non-sectarian schools.

Also, an increasingly conservative majority, sectarian influenced Supreme Court, (6 of 9 present justices are Catholic, with Judge Sotomayor’s ‘09 confirmation) may create a new bifurcated secular/non-secular system of private/public schools, both supported by the American taxpayer. One secular, urban, poor, under resourced and
failing its urban student population and the other suburban/rural, church affiliated and supplemented by both tuition paying church members and taxpayers providing superior parochial education via these enhanced resources with no pretense of church-state separation. This “sectarian public” model currently exists wherever popular voucher programs, (Cleveland, Milwaukee, Washington D.C.) provide an escape alternative from failing urban factory model public schools. This evolutionary church/state recombination may ultimately lead us “back to the future” of educational theocracy in schools, not unlike the colonial era in America, unless the U.S. Supreme Court moves to re establish the eroding separation of church and state constitutionally designed by our nation’s founders as the cornerstone of our American form of democracy.

Just as the twin central issues in American life, race and religion, remain the elephants in the proverbial 21st century American constitutional living room, they loom equally as unresolved issues in schools. The race issue, definitively addressed in Brown v. Board, despite five decades of implementation, has resulted in de facto resegregation of schools as a result of judicial retrenchment. Religion, which has remained a powerful force in American life from colonial times to date, also may re emerge as a central force in 21st century American schools as the result of school privatization through vouchers and similar judicial retrenchment on religion in schools disguised as the child benefit doctrine. Thus confusion with regard to religion continues in schools as the wall of separation alternately rises and falls in the face of an increasingly conservative court and the redefinition of public school to conform to the prayerful will of the radical religious right faction of Americans who fervently wish to find a new accommodation between church and state in public schools.
Conclusion

Like many Americans, I attempt to live each day in humility and gratitude for the blessings God has granted me. However, while I have nothing but gratitude and reverence for these blessings God has brought to this American life the last place I want to experience God’s presence is in a state endorsed prayer in a public school. As to whether or not God belongs in the public school, I say yes, but only in individual hearts and minds left totally free of government coercion.

References


Douglas, William O., (1966), The Bible and the School, Little Brown and Company, Canada


Harrison, Maureen and Gilbert, Steve, (2003), Great Decisions of the U.S. Supreme Court, Barnes and Noble, New York, NY.

Hunt, James F., (1901), The Writings of James Madison, Princeton University Press, NJ.


Pfeffer, Leo (1967), Church, State and Freedom, Beacon Press, Boston, MA.


Toobin, Jeffrey ((2007), The Nine: Inside the Secret World of the Supreme Court, Doubleday, NY.


**Web Sites Consulted:**

American Atheists, www.atheists.org

Americans United for Separation of Church and State, www.au.org

First Amendment Center, www.fac.org

Freedom from Religion Foundation, www.ffrf.org

Ontario Consultants on Religious Tolerance, www.religioustolerance.org


**Cases cited:**


Of Jazz and Possibility: Student Empowerment in the Music Classroom

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Abstract

This practitioner-based case study evolves from an educational research practice of qualitative, action research. The research question is "In a high school jazz ensemble, what are the effects of beginning to develop student ownership in learning?” The study’s theoretical foundations draw largely from Freire, Greene, Kumashiro, and Zander. Systematic cycles of data collection and analysis include the following methods: reflective journal entries, observational field notes, student assignments, student and parent surveys, frequency charts, photography, audio and video recordings, and frequent analyses of data by reviewing individual data sets as well as findings across sets. The author identifies codes, patterns, and themes, and makes use of constant comparison analysis and triangulation to identify necessary interventions and support conclusions. These interventions consist of opportunities for student-led rehearsal, student-led inquiry, and expression of student voice. The conclusions regarding the question are I) students given space to own learning may experience a healthy crisis; this crisis, given time, may lead students from a place of stalemate to a position of breakthrough and possibility; II) students given space to own learning demonstrate intellectual curiosity and critical thinking; III) students given space to own learning experience enhanced musicianship as a result of pursuing the context of their musical works; and IV) students given space to own learning experience existential freedom as a result of identifying problems and implementing change.
A Research Summary of Effective Teaching and Student Achievement in Urban Schools
ID Number 1382

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Abstract

The research question posed for this review is: which teaching behaviors and supports most enable students to achieve in urban schools? First, there will be a summary of the two key issues of working with students in urban school settings. Next, the authors will explore studies on the most effective teaching strategies to combat those issues and detail teacher supports that increase achievement of students in urban schools. The authors conclude with several key findings: there is an inextricable link between teachers’ instructional effectiveness and the emotional environment of the classroom; effective urban teachers displayed some common characteristics; the most effective schools implemented these common characteristics systemically; and these teaching behaviors and teaching supports must be implemented with fidelity.
The Importance of Ethics Training for Principals, Superintendents and School Boards

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This is a Workshop Proposal
Topic Area: Educational Leadership
Key Words: Ethics, Board ethics training

Abstract:
The provisions of NCLB requiring that all schools meet standards for adequate yearly progress (AYP) have presented serious challenges to many schools and districts as they seek solutions to existing student performance gaps. In addition, recent instances of unethical practices and isolated cases of cheating by some educators have raised significant ethical issues for the profession. Yet recent research has shown an encouraging and significant linkage between the ethics training of principals and student performance on state assessments that support the case for intensified training in professional ethics by districts and educator preparation programs. (Hughes & Jones 2010). Additionally, districts may find that increased levels of professional ethics training for district leadership teams and board members is helpful in building organizational health and stronger levels of commitment and integrity in district practices.

Reference:
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THE INFLUENCE OF THE PARTIAL ENGLISH IMMERSION PROGRAMS ON
CHINESE AND ENGLISH CONVERSATION AMONG PRESCHOOL CHILDREN IN
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6. Abstract and/or full paper.
Abstract

Many Taiwanese scholars and parents have concerned about whether the partial English immersion programs (EIPs) could affect the children’s Chinese and English communicative ability. This study investigates whether the partial English immersion programs could affect the children’s Chinese communicative ability and the partial English immersion programs are really helpful for children’s English communicative ability. This study uses qualitative methods which apply the participants an interview and questionnaire to explore these matters.

Key words: language immersion programs, TESOL, EFL, kindergarten, bilingual education
INTRODUCTION

Kindergarten partial English immersion programs (EIPs) have become popular for preschool children to learn English in Taiwan. Partial English immersion programs are considered good programs to learn English because of its “no Chinese-speaking” policy instead of some subjects, such as Chinese language class, art and physical education. The rationale is based on the belief that students can learn a second language by using it to communicate. Y. - L. Chen (2002) investigated that the children who study in English immersion programs could use hybrid language in their oral and written texts. Besides, I. – S. J. Chen (2006) also claimed that it is possible to carry out English literacy teaching in preschools. Although the studies showed that the children who learn two languages at same time are slower in the growth of language development than the children who just learn one language normally. Children don’t have the confusion of mixing up languages (Brown, 2000).

However, for most of preschool children, their communicative ability has not developed completely. Recently, many Taiwanese scholars and parents have concerned about whether the partial EIPs could affect the children’s mother tongue (Chinese) learning and English language learning in conversation field, such as pronunciation, vocabulary used and sentence structure (林佩蓉, 2006; Y. - L. Chen, 2002). Therefore, the purpose of the study is to investigate whether the partial English immersion programs could affect the children’s conversation in Chinese and English
Research Questions

In Taiwan, partial English immersion programs raise parents and scholars’ concerns recently. The research aims to investigate the influence of partial English immersion programs (EIPs), such as:

1. Does kindergarten partial English immersion programs (EIPs) have any effect on children’s Chinese communicative ability?

2. Does kindergarten partial English immersion programs (EIPs) really help children to learn English well?

LITERATURE REVIEW

2.1 The Theory of Bilingualism

Bilingual education originated from America, which stands for the education which teaches in two languages in general way. In order to promote amounts of immigrants who came to America to get into the society easily, bilingual education became the one of most important measures for them. In most cases, bilingual education should not only teach two languages, but also consider two languages as the appropriate medium which build the learners' whole academic knowledge, the usage of two languages and the meaning of two cultures. English immersion programs (EIPs)
can have different types, such as transitional model, maintenance model, pluralistic model and immersion model (Trueba, 1979). Besides, Brown (2000) showed that the children who learn two languages at the same time are slower than the children who just learn one language normally in the growth of language development. But they don’t have the confusion of mixing up language.

2.2 The Positive Aspects of Previous Studies

I. -S. J. Chen (2006) investigated that certain instruction strategies can help the children to extend the use of English. They can demonstrate a high level of English literacy neither in traditional literacy nor in digital literacy. To sum up, it is possible to carry out English literacy teaching in preschools. Some researchers consider that the children can learn English language well though external ways. Fassler (1998) stated that children who came from different language backgrounds can help each other to use English in informal contexts. Besides, Li (2006) stated that it has some relation between scientific concepts and English language learning for public elementary and secondary schools in Qingdao City.

2.3 The Opposite Aspects of Previous Studies

However, there are several the opposite views of the problems. First, although Y. -L. Chen (2002) investigated that the children in English immersion programs they
could use hybrid language in their oral and written texts and her study also revealed that most of children who study in EIPs don’t have negative attitudes toward language one (L1) and culture one (C1). However, some cases conducted by Chen (2002) developed negative attitudes toward either L1 and C1 or language two (L2) and culture two (C2). Secondly, Fillmore (1991) stated that L1 which children learned from their families in early age influences English language development, especially for immigrants and American Indian families. Thirdly, Hsieh (2006) claimed that learning English language in preschool age reveals some equivocal issues, such as power, system, instruction and quality in Taiwan. Finally, 林佩蓉 (2006) investigated that children can only learn English easier when they have mature development of Chinese. Besides, English programs in preschools should be orientated towards Foreign Language Exploratory Program. And she also provided several useful ways to teach English in kindergarten. In conclusion, teachers could play and study English with children in order to let them learn English in natural situation.
METHODOLOGY

3.1 Participants

The research use the cross-sectional approach which is required two groups as participants. The first group is required three 6-7 aged preschool students in kindergarten partial English immersion programs to investigate whether the programs have any effect on children’s Chinese conversation and English conversation. And the second group is required three 7-8 aged elementary students who have studied in kindergarten partial English immersion programs are also required in the research to compare with the previous group. In order to identify the participants, the research also use snowball sampling to gain the students’ further information by students’ parents and teachers.

3.2 Treatment

6-7 aged preschool students are provided for the story of English and Chinese version which called “Party Fun” by listening to the C.D. The researcher applies the story C.D of English and Chinese version which called “One Pizza, One Penny” to 7-8 aged elementary students.
3.3 Instruments/Materials

3.3.1 Individual Interview

The research design of an individual interview (Appendix 1) in both Chinese and English mixed with every student to discover something about the individual’s perceptions of the story and feelings about the story of Chinese and English version. From the individual interview, children’s communicative ability can be found more easily.

3.3.2 Questionnaire

After the students’ individual interview, the researcher apply the questionnaire (Appendix 2) to their parents and teachers, which is included several open-ended questions in Chinese to gain further information about the students’ Chinese and English conversation using. Besides, the questionnaire will be collected by the researcher within three days.

3.4 Procedure

In the beginning of the research, the researcher may use random sampling to select the groups of participants. Then, the researcher asks the students to listen to the story C.D for 10 minutes. After listening to the C.D, every student should have an
individual interview with the researcher by orally answering several questions in Chinese and English in 10 minutes.

Moreover, the students’ parents and teachers are provided for the questionnaire which is about several open-ended questions to describe their children’s English and Chinese conversation using at home or in the class.

3.5 Data Analysis

The research uses discourse analysis to gain the information from the interviewing. During the individual interview, the researcher would use the sound recorder to record the whole interviewing. After the interviewing, the researcher analyses the meaningful data from the interviewing and the questionnaires from the participants’ parents. Finally, the data from two groups of participants would be compared by the researcher.

Besides, triangulation is used to describe the ways in which the reliability of the study can be assessed. Also, after the data analysis, the researcher would show the participants and their parents the findings to see the validity of the study.
REFERENCES


林佩蓉（2004）。英語學習在幼兒教育的定位與可行路徑，幼教簡訊，25，12-14。
APPENDIX 1

Interview Questions

*以下的問題可以使用中文或英文回答：

1. 請將剛剛的故事簡單地用自己的話再說一遍。（Tell me the story in your words again.）

2. 說說看你聽完這個故事後的想法。（What do you think about this story? Do you think it is funny or sad? Why?）

3. 你覺得用英文說話或用中文說話哪個比較難？為什麼呢？

4. Do you like English or Chinese? 在上課的時候你習慣或喜歡用中文還是用英文說話呢？為什麼？

5. Do you understand what the teacher said in class? 老師上課用英文說話比較聽得懂還是用中文說比較聽得懂？為什麼？

6. 平常的時候你習慣或喜歡用中文還是用英文說話呢？為什麼？
台 湾 六-八 歲 幼 兒 中 英 文 會 話 使用 之 問 卷 調 查

1. 您的孩子(學生)平常使用英語與他人(例如爸媽、老師、同學)溝通狀況如何?
   請詳述之並舉例。

2. 您的孩子(學生)平常使用中文與他人(例如爸媽、老師、同學)溝通狀況如何?
   請詳述之並舉例。

3. 您的孩子(學生)在溝通上是否有中英語詞彙混用的情形發生?請具體說明之。

4. 您的孩子(學生)是否曾因無法使用單一語言表達自我想法而造成溝通上的障礙?
   請簡述當時狀況(如地點、時間、對象)。

5. 請簡述您對孩子使用中英文會話溝通的想法與態度。

感謝您的配合與合作！
Within music instruction in America’s schools, assessment of students’ musical understanding, progress of skills, and development of appreciation is an ongoing process. Throughout the 20th century, music programs in American schools have demonstrated strength in the quality development of performance skills, technical proficiency, and performance experiences. Curriculum documents traditionally exhibit learning objectives focused on performance skill development, which are often assessed subjectively by the instructor. When asked for evidence of music learning, music teachers turn to the attendance record, the sound of the concert, the variety and range of music presented, or the frequency with which students perform. Although motivation that leads to attendance and technical skill development are important elements of successful performance experiences, many other assessment have been implemented in school music programs that can provide opportunities to observe students’ music learning in a broader context that can focus on higher order thinking skills, such as musical understanding, creative listening skills, and aesthetic sensitivity.

Assessments have been used in schools across America as a means to understand what and how students learn music. Self and group assessments strategies, similar to ideas promoted in Arts PROPEL (Davidson, et al., 1992), includes students critically listening to their performance,
describing aural observations and make decisions for self-improvement (Burrack, 2002). The instructor provides immediate feedback concerning the quality of the performance as it relates to each category, guiding appropriate context of the student’s comments, and offering suggestions on how to improve the students’ self-assessment abilities. Improvement goals are set by the student and enhanced by the teacher through discussion. Many schools use MSWord notebook, mp3 recorders, and similar technologies to facilitate the self-assessment process. Self-assessments are maintained by each student in individual electronic portfolios. Periodically assessments are reviewed for reflection of goals and to strive for more advanced levels of learning.

Another assessment for developing sensitivity in listening skills, awareness of musical concepts, and improvement in assessment skills is referred to as the Group Assessment. Scattered throughout rehearsals over the weeks of preparation for concerts or contests, students listen to recorded segments of rehearsals for specific elements of tone quality, intonation, rhythm, balance and blend, performance techniques, and musical interpretation. They write at least one specific observation in each category on the assessment sheet, immediately followed with discussion and rehearsal application. When the students verbally offer their suggestions for improvement and immediately apply these suggestions by performing the selection, they gain independence and self direction in the learning process and exhibit an enhanced performance quality.

Too often we teach the students to perform at the neglect of true musical understanding. Each piece in our performance classes includes unique opportunities to teach the musical elements through which understanding of the music can be nurtured. Technology is an effective tool to bring cultural and historical understanding to musical compositions and provide unique ways of teaching that make learning available that is not attainable through traditional methods. Video and .jpg images can be found on the web that allows authentic examples into the classroom. Using video projection musical elements that are inherent in the music can be reinforced and assessed. Strategies using visual projection will be shared.

American teachers use many computer-based tools to create assessments to assess cognitive knowledge of musical terminology, rhythmic understanding, historical information, and other assessable content. Sometimes assessments are presented in an enjoyable format as a crossword puzzle or word search. These are very easy to create using free internet based software.
Many American music programs use new technologies to help students learn individual performance skills outside of the rehearsal. They create an accompaniment track and overlay the part with which the students practice. These are often posted as an mp3 on websites for the students to download on their computer, flashdrive, or iPod. Examples of web-based strategies from elementary to collegiate levels will be provided.

Today’s technology makes it easy to not only capture rehearsals and concerts in audio and video. Making available portions of rehearsals with which students can rehearse, assess, and set improvement goals expands assessment possibilities. Students assess and respond to rehearsal samples via email. This is a way teachers can document musical learning and improve student performance beyond the confines of the rehearsal room. This is particularly useful for ensembles that include strong visual elements, such as swing choir or marching band.

An emerging technology only recently found as useful in American music programs is video conferencing. Schools are beginning to offer in-class mentoring for new teachers, provide students with specialized instruction on not normally available, and allow students the opportunity to learn from professional musicians from around the world without leaving their classroom. We are successfully using this technology for private music lessons with notable teachers. The studio setting may involve professional mentors in student instruction and assessment. Conductors provide ensemble clinics from distance venues using video conference. It is an effective way to share student performances and compositions between schools without the time and expense of travel, enabling critical thinking skills in music beyond what was formerly possible.

An effective learning environment can be established through assessments, offering the opportunity for students to develop an awareness of the music which was initially inaccessible. Many students are not aware of many technical and expressive aspects until they listen and evaluate specific elements. An enhanced awareness presents the students with the opportunity to construct meaning of particular occurrences and, through further rehearsal, apply the isolated observations to the musical whole. These individual constructions exist in an interactive relationship of the student, their prior knowledge, and the assessment experience. Musical concepts are developed and refined within the assessment context developing a new and broader understanding of the relationship to the musical whole.

Can parents count on providers of the Supplemental Educational Services?

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Can parents count on providers of the Supplemental Educational Services?

Introduction
The No Child Left Behind of 2001 (NCLB) is marking an epoch in reforming school regardless of its accomplishment. There are varied strategies to enhance school quality, but the Supplemental Educational Services (SES) must be a challenge of narrowing the achievement gap and improving students’ performance beyond a site of school. According to NCLB, a local educational agency shall provide the opportunity of SES for students who enroll in Title I schools that failed to satisfy the Adequate Yearly Progress (AYP) for two consecutive years. Due to a relatively short history of the debate on supplemental education compared with the public school choice provisions noted in NCLB, there is little information about SES of NCLB. Furthermore, the existing studies have focused on how many students have had the benefit of SES and how much students’ achievement have been improved by SES. Yet, whether or not academic performance increases through SES depends on the quality of providers in essence. Though public money of states and districts is used in private, especially for-profit providers, most scholars have overlooked how states approve, monitor and evaluate SES providers in order to control quality of providers and provide better services for students. In this context, my research question is how states hold accountable for providers’ quality of the supplemental educational services.

Supplemental Educational Services in the United States
In the United States, supplemental education—including after-school programs, out-of-school-time tutoring programs, and summer school programs—has long been in operation (Heinrich, Meyer, & Whitten, 2009). Despite a long history of after-school programs and summer schools, these programs have put interest in intervention in children development, not in supplemental tutoring for academic achievement. Almost for the first time, Title I funds of the Elementary and Secondary Education Act of 1965, which was initiated to supplement low-income students’ educational opportunity at the federal level, have been used for improving students’ academic performance.

Leaving the government’s effort of the Title I funds focusing on low-income students who are at risk for academic failure aside, for-profit tutoring companies as one type of markets for supplemental education have emerged since in the 1980s. Yet, markets for supplemental education should be understood in a different way. Contrary to the Title I fund targeting at low-income students, the markets for supplemental education is created and operated by the class who can afford to pay additional tuition fee. Such users in markets for supplemental education have participated in supplemental education with different reasons and in different levels (Lauer et al., 2006). As McDonough (1994) described that a history of private tutoring in the US resulted from college choice industry, for-profit industries like “Kaplan Test Prep and Admission” and “The Princeton Review” have been growing with the purpose of test preparation such as SAT and ACT. Along with this, “Sylvan Learning Center” established in Oregon in 1979 and “Kumon” known as an international tutoring company in Japan are becoming one of popular supplemental tutoring services. Namely, supplemental educational services vary in duration, in target, in content and in objective.

Compared to the past that the governments’ interest and support of supplemental education had initially remained little and indirect, NCLB made it possible that the federal and state governments can be concern in the markets for supplemental education. According to NCLB, if a school entitled to Title I school fails to satisfy AYP for consecutive years, federal and state governments should provide students in the school with alternatives of either public school choice or supplemental education service. The notion that the government should be responsible for students with a poor record of academic performance and have a duty to raise test scores underlies the supplemental educational services of NCLB.

Basically, the supplemental educational services include existing after-school programs and other tutoring programs, and at the same time, focus more on academics. The difference from the public school choice programs of NCLB is in using real markets outside the US public education system. With the supplemental educational services of NCLB, parents choose one or more courses among state-approved supplemental tutoring corporations, governments pay selected corporations tuition, and tutors provide programs for students instead of teachers in failing schools. Unlike the past that the government seldom had interest in tutoring markets, they are now trying to build a cooperative relation. Of course, this governmental effort can contribute to more franchised and commercialized industry beyond growing in number (Ascher, 2006).
Previous research on SES

Despite the criticism that SES is “mini vouchers” (Hess & Finn, 2004, p. 290), disadvantaged students are likely to prefer SES to the public school choice programs of NCLB (U.S. Department of Education [USDOE], 2009). According to USDOE (2009), 17 percent of eligible students for SES actually participated in SES in the 2006-07 school year, and $ 375 million was used for SES in the 2005-06 school year. 88 percent of state-approved providers are private providers, and 76 percent of students participating in SES are served by private providers (USDOE, 2009). The more interesting fact is shown in the comparison with other private supplemental tutoring services, not with SES by federal and state governments. While 27 percent of students enrolling in eligible schools for SES paid for other private tutoring services, 67 percent of students in other public schools, not eligible for SES, used supplemental tutoring services by private corporations (Warkentien & Grady, 2009). These statistics show that despite the governments’ effort for equal and better opportunity, there must be still a gap in interest and participation rate in supplemental educational services.

Some of the recent research on SES analyzed the effectiveness of SES in terms of academic achievement. Unfortunately, the results are mixed. According to Zimmer, Christina, Hamilton and Prine (2006), rather than in reading, students signing up SES substantially outperformed in mathematics. The Chicago Public Schools found that students who participated in SES recorded small but significant gains in reading when comparing with non-participants in the same schools (Office of Research, Evaluation, and Accountability Office of Extended Learning Opportunity, 2007). This improvement was shown more remarkably in the lower grades. Similar to this, Springer, Peeper and Ghosh-Dastidar (2009) found there was a significant improvement in mathematics under SES. In contrast, the Heinrich, Meyer and Whitten study in 2009 demonstrated the different findings as a result examining the impact of attending SES on reading and math scores. They found that students in Wisconsin failed to show some significant achievement gains. In the case of Kentucky, Muñoz, Potter and Ross (2008) stated that their findings did not support the expectation of NCLB that academic tutoring services would improve student achievement. In reading and mathematics, SES participants resulted in non-significant gains. Ross and et al. (2008) also indicated that contrary to parents and teachers’ positive perception, the impacts of supplemental educational services were close to zero.

As summarizing previous studies about SES, most researchers’ interests have been limited to who participated and what students gained (USDOE, 2009; Warkentien & Grady, 2009; Zimmer, Christina, Hamilton, & Prine, 2006). Nevertheless, the impact of government-sponsored tutoring services remains as an inconclusive ending. Because SES under NCLB is a relatively new type of educational policy, it is true that in-depth studies are working (Burch, Steinberg, & Donovan, 2007). The limitation such as research subjects, controlled variables and statistical techniques makes the effectiveness of supplemental educational services hard to evaluate. Furthermore, few studies took the approach of accountability to markets for supplemental education (Association of Community Organizations for Reform Now & American Institute for Social Justice, 2004; Burch, Steinberg, & Donovan, 2007; Center on Education Policy, 2006). Due to the policy structure of SES that a parent chooses and a government pays, accountability with regard to the use of public money for private tutoring corporations matters. For governments, two rising issues are of how to find qualified providers and how to control the quality of programs.

Method and data

To investigate two aforementioned questions, I looked at administrative codes, regulations and policy guidance concerning supplemental educational service providers at the state level. According to the No Child Left Behind of 2001, because states shall approve highly qualified providers, regulation and policy at the state level can be the first indicator of examining how a state control providers’ quality before districts contract with providers. States’ regulation codes are analyzed at three stages: an approving stage, a monitoring stage, and a terminating stage. This study is focusing on the cases of three states, California (5 CCR 13075, 2010), Illinois (23 Ill. Adm. Code 675, 2010) and New York (8 NYCRR § 120.4, 2010). In view of the fact that SES utilizes the existing markets for supplemental education services, the quality of SES provided for students, to some extent, depends on how much abundant market is already established and run. The Los Angeles Unified School District in California, the Chicago Public Schools in Illinois, and New York City in New York are one of the largest urban cities in the United States. Also, since these cities have a high proportion of Title I eligible schools, more expected eligible students for SES can need supplemental education, and the state governments need to prepare for appropriate services.

Preliminary findings
Under to NCLB, the supplemental educational services are basically operated by the federal government’s guidelines (USDOE, 2009). It is difficult to find the explicit difference among states. Yet, a large part of the role and responsibility concerning policy implementation is under the state’s authority. Hence, characteristics such as demographic and political context by state can affect detailed regulatory and statutory languages to operate the supplemental educational services.

At the first stage of approval, three states are limited to eligible applicants for supplemental educational service providers in different ways. As shown in Table 1, all of states selected for this study permit a local educational agency to be an eligible applicant for the supplemental educational services. Instead, New York and California confine a local educational agency and a school to one that is not identified for improvement, corrective actions or restructuring under NCLB. Illinois restrictively allows a school district or school identified for improvement to be an eligible applicant. Contrary to California and Illinois where institutions of higher education can enter markets of supplemental educational services, New York does not include them.

Table 1
*Eligible applicant for the supplemental educational services by the selected states*

<table>
<thead>
<tr>
<th>Eligible applicant</th>
<th>California</th>
<th>Illinois</th>
<th>New York</th>
</tr>
</thead>
<tbody>
<tr>
<td>School district</td>
<td>County office of education</td>
<td>School district</td>
<td>Local educational agency</td>
</tr>
<tr>
<td>Public school</td>
<td>Private school</td>
<td>Regional office of education</td>
<td>Board of cooperative educational services</td>
</tr>
<tr>
<td>Charter school</td>
<td>Faith-based organization</td>
<td>Intermediate service center</td>
<td>Board of county vocational education</td>
</tr>
<tr>
<td>Community-based</td>
<td>Organization</td>
<td>Public school</td>
<td>Extension board</td>
</tr>
<tr>
<td>education</td>
<td>Institution of higher education</td>
<td>Not-for-profit organization</td>
<td>Non-public school</td>
</tr>
<tr>
<td>Private businesses</td>
<td></td>
<td>Faith-based organization</td>
<td>Charter school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community-based organization</td>
<td>For-profit entity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Institution of higher education</td>
<td>Non-profit entity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private business</td>
<td></td>
</tr>
</tbody>
</table>

Note: 5 CCR 13075; 23 Ill. Adm. Code 675; 8 NYCRR § 120.4

Different public education systems by state determine who reviews an application and approves a proper provider of the supplemental educational services. One thing interesting is that these different approvers in three states apply the similar standard of approval to screening providers. Of standards for approving providers, the most representative criteria is to demonstrate record in order to prove the effectiveness of providers. Since the supplemental educational services of NCLB basically aim at improving students’ proficiency of English and mathematics, the first condition to be a service provider is in showing how much participants can get benefit from this service. Despite the importance of demonstrating a provider’s record, the regulatory languages are quite ambiguous. In the case of New York, it does not mention what record providers should provide with the state governments and what kind of test will be used for this. Illinois and California include test scores in record of effectiveness, but California especially considers teachers’ evaluation on student improvement through service as one critical factor. Also, Illinois noted the ratio of tutors to students and qualification of tutors in the approving stage unlike California and New York. Except these, all of three states require letters of reference for selecting appropriate providers, insurance for liability, and fiscal condition in common.

Table 2
*Approval of providers by the selected states*

<table>
<thead>
<tr>
<th>Approver</th>
<th>California</th>
<th>Illinois</th>
<th>New York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approver</td>
<td>The State Board of Education</td>
<td>The Illinois State Board of Education</td>
<td>The Commissioner</td>
</tr>
<tr>
<td>Criteria</td>
<td>A demonstrated record of effectiveness: scores and teacher assessment</td>
<td>A demonstrated record of effectiveness: scores Letters of reference</td>
<td>A demonstrated record of effectiveness Letters of reference</td>
</tr>
<tr>
<td>Rationale</td>
<td>Letters of reference</td>
<td>California</td>
<td>Instruction</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>Instruction</td>
<td></td>
<td>The ratio of instructors to students</td>
</tr>
<tr>
<td></td>
<td>Procedures for regular progress reports</td>
<td></td>
<td>Qualification of tutors</td>
</tr>
<tr>
<td></td>
<td>Process of contracting with school districts</td>
<td></td>
<td>Procedures for reporting student progress</td>
</tr>
<tr>
<td></td>
<td>Service agreement</td>
<td></td>
<td>Evidence of financial, organizational and technical resources</td>
</tr>
<tr>
<td></td>
<td>Procedures for developing specific goals with parents and teachers</td>
<td></td>
<td>Information of program cost</td>
</tr>
<tr>
<td></td>
<td>Documents of the staffing fiscal, facility resources</td>
<td></td>
<td>Insurance for liability</td>
</tr>
<tr>
<td></td>
<td>Insurance for liability</td>
<td></td>
<td>Supports for students with disabilities</td>
</tr>
<tr>
<td></td>
<td>Fiscal stability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supports for students with disabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The term of approval</td>
<td>A maximum of two fiscal years</td>
<td>Not mentioned</td>
<td>Not mentioned</td>
</tr>
</tbody>
</table>

Note: 5 CCR 13075; 23 Ill. Adm. Code 675; 8 NYCRR § 120.4

After the state’s approval, a process of monitoring selected providers plays a significantly important role in assuring the quality of the supplemental educational services. California and Illinois state the requirement of a mid-term report, whereas New York does not mention it specifically. This process is connected with the term of approval noted in Table 2. As California confines the approval period up to two years, the information of this process is close to a general regular report. However, in Illinois where there is not a mentioned term of approval, required elements of annual reporting are used for grading each provider. For this reason, rather than any other states, Illinois shows how to calculate the effect size of supplemental educational services, its regulation has evaluation rubrics and decision matrix.

Table 3
*Monitor of providers by the selected states*

<table>
<thead>
<tr>
<th>Rationale</th>
<th>California</th>
<th>Illinois</th>
<th>New York</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual End-of Fiscal-Year Report (5 CCR §13075.3)</td>
<td>Reporting requirement (23 Ill. Adm. Code section 675.70; 675.90)</td>
<td>Not mentioned</td>
</tr>
<tr>
<td>Containing information</td>
<td>General information about schools, students, and locations served</td>
<td>General information about students served</td>
<td>Data of student progress, attendance, and satisfaction</td>
</tr>
<tr>
<td></td>
<td>Data based on test Fiscal and expenditure information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: 23 Ill. Adm. Code section 675 Appendix A to C

Based on the monitoring process, three states selected for this study noted the rationale of terminating the approval in their regulations and administrative codes. Though the way to describe the cause of termination varies by state, the common reason for termination is to fail to contribute to test scores.
Table 4
Termination of provider approval by the selected states

<table>
<thead>
<tr>
<th>Cause</th>
<th>California</th>
<th>Illinois</th>
<th>New York</th>
</tr>
</thead>
<tbody>
<tr>
<td>School and local educational agency identified for improvement or corrective action under NCLB</td>
<td>Based on Reporting results assigning each providers the status of “good standing”, “probationary status 1” or “probationary status 2”</td>
<td>Not complied with the criteria for approval and regulations</td>
<td></td>
</tr>
<tr>
<td>Failed to provide information for monitoring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failed to evaluate the progress of students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failed to contribute to increasing the academic proficiency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not complied with the criteria for approval and regulations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 5 CCR 13075; 23 Ill. Adm. Code 675; 8 NYCRR § 120.4

Discussion and conclusion

Basically, the initial purpose of this study is not to blame a certain type of languages presented in regulatory codes. It is obvious that the supplemental educational services are implemented at the federal government, but it is also true that the success or failure of the supplemental educational services depends on how much they are locally initiated. Because of different perspective on privatization of public education, it is impossible to determine which state is doing well. For this reason, this study is significant enough in focusing on how states put their efforts to winnow providers with high quality out of inappropriate providers.

The findings can be summarized in some major implications. First, an applicant limitation implies two conflicting possibilities. It can hinder and help the emergence of supplemental educational service providers. According to how much the potential provider pool is open to the existing markets for supplemental education, the probability that students as consumers and states as payers and approvers can be satisfied with the policy can change. Of course, the openness of market cannot guarantee the high quality of service. However, considering that NCLB has a premise emphasizing the improvement of public education through competitiveness, a range of eligible applicants play a significant role in raising test scores.

The second is the qualification for instruction and instructor. Schools are generally run by related codes and policies of how to select qualified teachers and what to be taught at the state or national level. However, the supplemental educational services do not. As noted above, three states do not mention the minimum qualification of tutor. Also, instruction in the selected states’ regulations pays attention more to outcome than to process. Because the actual policy implementation relied on the existing markets for supplemental education outside of the public school system in a large part, eligible students for the supplemental educational services should choose a service based on insufficient information. It means that parents and students can take in not-qualified or inefficient supplemental educational services for the reason of obscure regulatory languages.

If focusing more on the process of policy implementation than on the relation between the federal, state and local governments, measuring outcomes by qualitative tools, rewarding or sanctioning based on the results, and providing alternative opportunity for students assumed as consumers are grounded on privatization of the Neo-liberalism. Under NCLB, all of the US public schools are evaluated by test scores, and students attending so called failed schools can choose another school and take part in the supplemental educational services. Still, compared to the public schools applied strict standards by the governments and public, providers in the markets for supplemental education are not regarded as a subject of evaluation. Looking at the regulations of the supplemental educational services in NCLB, how to measure the effectiveness is still questionable in assuring of own outcomes of the policy. In other words, without stating providers’ quality, the policy is playing a role in heading private market toward public education. As Dannin (2006) indicated, the notion to solve the problem of
public education through market can result in publicization of market for supplemental education as well as privatization of public education. A remaining dilemma is that the state government is required to take responsibility for assuring the minimum quality of services insomuch as public money flows in market. Frankly, we are standing at the crossroads of potential and peril.
References
5 CCR 13075 (2010).
8 NYCRR § 120.4 (2010).


Proceeding Submission for Hawaii International Conference on Education
9th Annual Conference – January 4-7, 2011 – Honolulu, Hawaii

1. Title of Submission:

Rejection, resilience, renaissance: My 3 Rs for reviving leadership talents

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Rejection, resilience, renaissance: My 3 Rs for reviving leadership talents

"Success is the ability to go from failure to failure without losing your enthusiasm."
~ Sir Winston Churchill

“If you’re going through hell, keep going!”
~ Also Sir Winston Churchill

It has been a little more than two years since I last participated in an academic search firm’s project to hire a new Provost, and it was at a small, religious, liberal arts college in the northeast. Years prior to that experience, I had made the definitive and determined decision to enter the frenetic and grueling world of administrative searches in higher education to seek and attain a VPAA/Provost position. We have all at some point in our lives heard the phrase “everything happens for a reason.” However, I heard it far too many times throughout what eventually became a four-year journey of myriad searches, and it fully lost its ability to be consolatory in the face of rejection. Subsequently, it took many months for the deep wounds of rejection to heal. During that period of convalescence, I developed various ideas for this essay, while working diligently to revive various leadership talents I actually thought I possessed, but had seriously begun to question.

All of us, at one time or another, have experienced failure in the form of loss, futility, lack of common sense, or even naiveté. For me, one of the more difficult forms of failure to deal with comes with rejection, which is the first “R.” As a young girl...
growing up, I constantly found myself among those who were labeled the LOPs --- does anyone remember what that label meant?? It refers, of course, to being among the “last ones picked” – for kickball, softball, cheerleading, tug-of-war, spelling bee teams, whatever. The whole process of team selection was horrifying for me. Apparently, having “Markert” on your team was the kiss of death!! When you experience rejection, you might feel like:

Your ideas have not been accepted,  
You are not good enough to be on the team,  
Your opinions are not valued,  
Your proposal lacks what is required to merit funding,  
Your credentials are not well respected,  
Your affection or love is not being returned to you, or  
People simply do not like you!!

And so forth. . . .

Dealing with rejection in higher education might mean that your sabbatical proposal was denied, or your bid for promotion was not approved, or that the final chapter of your dissertation was found to be unacceptable, or your grant application was not funded, and so forth. In the face of these rejections, we might find ourselves reaching out to friends and colleagues for support, and I guarantee that one or more of them will tell you that “everything happens for a reason.” Career consulting experts who write about dealing with rejection and failure tell us to remind ourselves that “it’s a numbers game” and that we all need to encounter a certain amount of failures before reaching success in the job search. What they don’t tell us is – how many failures we should endure before ending the quest?

Here are some hugely depressing numbers that chronicle my Provost search experiences in several states across the country, and they seem to defy this sage career advice: 71 individual applications prepared and processed; 32 telephone interviews, both with search firm consultants and search committees; 23 neutral site (airport) interviews concluded; and 17 multi-day finalist interviews completed on college campuses. I received some of the 60-odd rejection notices via snail mail letters, while other curt messages arrived in my electronic mail inbox. An analysis of the content of these letters is another study unto itself, and a number of IHEs never even contacted me. On more than one occasion, a verbal pronouncement of rejection came over a cellular telephone call, received while en route to another finalist or semi-finalist interview. You can imagine the impact of that inopportune news on one’s self-esteem and confidence, especially while driving to a new campus, or running through an airport to make a quick connection.

Regardless, I remained determined to devote all efforts to being resilient despite repeated rejections. And, for each of the above applications – countless essays were written, a dozen search firm questionnaires were completed, formal PowerPoint
presentations were developed and delivered, and an endless series of demanding interview sessions were endured. Over the course of the process, I met one-on-one with at least twenty different college/university presidents, and interacted with faculty/staff union representatives, student leaders, and boards of trustees. For many of the finalist interviews, from what I have been able to discern, I finished second or third, marginally behind individuals who: were already VPAAs and thus making a lateral move; had previous experience at a similar IHE; possessed more impressive academic credentials; or were fortunate to be the institution’s internal candidate. In a few cases, the campus officers decided to suspend their search and retain the interim candidate for another year. Each time my colleagues calmly assured me that the rejection had probably happened for a very good reason.

**Resilience** or resiliency, my second “R,” generally means that one is able to bounce back, cope with disappointment, renew enthusiasm, and revitalize in the face of difficult challenges. In materials science & engineering, **resilience** refers to the property of a substance that enables it to resume its original shape or position after it has been bent, stretched or compressed – in this context, it is somewhat synonymous with elasticity. Those of us who are somehow able (perhaps magically) to be elastic, and accept a series of setbacks and adverse conditions as opportunities for growth, exemplify resilience. When it became apparent that my earnest efforts were not going to reap a vice president level administrative post, I found myself constantly questioning my own leadership abilities as dean. My resilience was jeopardized each time I failed to land the position at XYZ IHE – that place where all of the interviews had seemingly gone very well, personalities had meshed, and my capabilities seemed to align perfectly with the needs of the academic affairs division of the institution.

Closing the door on the search process was a huge positive step (albeit very demoralizing), and it forced me to stop dwelling on the rejections, and focus on resilience. Taking the necessary steps to acknowledge each and every one of my professional references, for their undying support and constant encouragement, was an intensely cathartic exercise. Following these essential correspondences, I spent the next year and a half directing energies toward creating a renaissance within a position I had held for more than a decade. Quite simply, **renaissance** as the third “R,” means a type of rebirth or revival. The term “renaissance person” generally refers to an individual who has diverse interests and expertise in a number of areas. I like to believe that as each one of us continues to grow and evolve as administrators, teachers and scholars – we are catalysts for recurring renaissance periods, both for ourselves and for those with whom we spend our time.

My decision to seek a VPAA/Provost appointment was never based on a lack of joy and satisfaction within my current decanal position – I simply felt a calling to help shape institutional direction, vision and culture at a higher administrative level in a new leadership environment. Fortunately, leadership resiliency is further enhanced when one has, like I do, an amazing group of colleagues to work with. These individuals enabled me to emerge unscathed after all of the failed searches, fully charged to act on the
courage of our convictions with optimism, to accomplish both short-term projects and long-term goals.

The most important aspect of resilience in leadership is being able to accept the “boundaries” of one’s current position and find inner resolve to expand and invigorate new initiatives within those “boundaries.” Stated differently – “If, for whatever reason, I was not meant to land an administrative appointment at the next level, let me figure out what it will take to breathe new life into my current position to move our unit forward with renewed energy, enthusiasm and conviction to remain alive and actively engaged. Both assertions spell a type of renaissance. Both also enable veteran administrators to revive their leadership talents, especially those who have spent five or more years in their appointments. They are also able to let faculty and staff members at their home institution know they are still growing, learning and improving as academic leaders, with new vitality to be an influential, contributing member of the campus community.

For all persons in leadership roles, the process of reflection is soulful and often lonely. Ultimately though, this reflection fuels the potential for renaissance which in turn kindles one’s resiliency quotient. Through much reflection and resolve during this past two years (which might represent my fourth and fifth Rs), I took on a variety of new assignments and challenges. Several specific fruits of this labor for the unit I lead at my institution include: 1. the establishment of a new revenue-generating Educational Leadership Institute, which only occurred after months of legal inquiries; 2. our acquisition of a competitive educational leadership enhancement grant funded through the Wallace Foundation, and I am one of the co-principal investigators; 3. complete restructuring and reconfiguration of the duties and responsibilities within the dean’s office; 4. this resulted in the appointment of both a new assistant dean for accreditation & assessment and a new associate dean, each of whom I am presently mentoring; and 5. creation of several new & unique collaborative partnerships with external agencies, each of which demand individual time, attention, and big picture perspectives. Many of my leadership talents were revived and revved up by virtue of these “boundary-stretching” initiatives. Concurrently, the renewal of leadership skills further enhanced this dean’s performance of all of the other day-to-day responsibilities of the job.

There is no simple recipe for being or becoming resilient, but much has been written about resilience strengths and various ways we might increase our leadership resiliency. My time spent perusing a portion of this literature essentially compelled me to write this essay. Perhaps the most salient snippet of advice I found is framed in the idea that persons who are inflexible are probably not resilient. I anticipate that readers, who may have experienced similar negative results through an arduous search process, will find new ways to revive the very leadership talents that initially motivated them to seek a higher level position. The following recipe (formula) is one I am playing around with at the moment, but ingredients will likely change as time goes on and newer flavors are introduced or discovered.

Rejection = the state of being dismissed or not considered....
Add Resilience = the ability to bounce back, cope, renew & revitalize....
Experience Renaissance = revival of intellectual or artistic talents & vigor....
Which Further Strengthens Resiliency & Ameliorates the Effects of Rejection, which =
A Cyclic and Evolving Path to Engaged & Rewarding Leadership!

Eventually, when people tell you that “you probably did not get THE XYZ
administrative position for a very good reason,” you will no longer regard the comment
as a feeble excuse for condolence. Conversely you will respond with enthusiasm – “why
of course – the entire process inspired me to revive my leadership talents and re-create
the job I am already doing quite well!” Institutions of higher education continue to
represent one of the strongest venues for optimism and hope in our contemporary world.
At all administrative levels, we need to be resilient leaders and renaissance men &
women to make sure our colleges and universities will always be places where young
adults can discover new joys about living in a global society.

Linda Rae Markert, Dean & Professor
School of Education, SUNY @ Oswego
Proceedings Submission

1. Title of the submission
   a. Bridges to Success – School district – University Partnership Clinical Faculty Training

2. Name(s) of the author(s),
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3. Affiliation(s) of the author(s),
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6. Abstract and/or full paper.

ABSTRACT: Teacher Retention Through Clinical Faculty Training

Teacher attrition is a problem nationwide; it is estimated that 30-40% of teachers leave the profession within the first five years of teaching; a Tennessee study, for example, reported that of the teachers who started teaching in 1995, 42% had left the classroom five years later. Not only is this costly in terms of money, with the average replacement cost estimated at $15,000, it can be costly in terms of academic progress of children. Children do not benefit when they get many beginning teachers; schools which have a large turnover of faculty have a difficult time doing any type of long range planning.

Ingersoll, among others, believes that the teacher shortage cannot be solved simply by hiring new teachers – the revolving door must be shut. Teachers can be retained if the organizational structure of the school is changed. Merrow writes that “We’re misdiagnosing the problem as ‘recruitment’ when it’s really ‘retention’.”

Yet, there is evidence that appropriate teacher induction programs can reduce this turnover rate. Ingersoll describes a training program which had a turnover rate of 29% for first time teachers while the predicted probability of leaving was 40%.

A collaborative effort by a University and five surrounding school districts addresses this turnover rate through a Clinical Faculty Training Program. In place now for almost 6 years, well over 250 teachers have been trained and the evidence suggests that the training has a positive impact on the transition into the teaching profession. This partnership program has the potential of working with a variety of districts which can follow the basic model.
A Unique and Effective Approach to Teaching Educational Psychology with Metaphors and Artistry

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A Unique and Effective Approach to Teaching Educational Psychology with Metaphors and Artistry

Deborah A. Stiles, Ph.D.

In 1980, when I began teaching graduate courses in Educational Psychology, I taught as I had been taught. I lectured, led discussions, gave exams, and had students write term papers. Topics included child growth and development, motivation, learning theory, instructional practice, intelligence, and achievement. The course was intensive and comprehensive and we covered psychology applied to education in just eight-weeks. Back then (and now) most of my students were tired, working adults who wanted to become certified teachers and were taking the Educational Psychology course as a certification requirement. Typically, only a few students had a background or interest in psychology and many of my students were career changers who were looking for more meaningful (but less lucrative) employment. Then (and now) classes were held in the evening and were four-hours long; sometimes my students fell asleep. Fortunately for my students, I have evolved over the years and so has my Educational Psychology course.

Today the course content is similar, but I now choreograph the four-hour “Ed Psych” classes. Every moment and movement in the class is designed to illustrate an important concept or skill. I teach my graduate students, as I would want them to teach their elementary and secondary students. I make an effort to know each of my students and their interests and goals and I differentiate instruction accordingly. I keep students involved and engaged through the use of personalized instruction and five metaphors:
sprinting, maple syrup, yogurt, hurdling, and choreography. This paper describes my current Educational Psychology course and the five metaphors.

Here is the Educational Psychology course description: Students explore the nature of human growth and development from the perspective of learning, examine the factors contributing to academic success, and consider how effective teaching can have a positive impact on students’ classroom behavior, motivation, and learning. Theoretical knowledge, educational research, and practical applications are stressed. This course includes a field experience in which students observe and interview educators and then write a paper describing their experience and applying their knowledge of educational psychology.

In teaching the course I choose not to provide a survey course, jam-packed with information on psychology applied to education. Instead, I take a very focused approach; we study only four topics and spend two weeks on each topic. I pose four questions and help these future teachers find their own answers. Each question was selected because of its importance to early career teachers and its relevance to the field of education psychology. Students explore the answers to these four questions:

1. How do your previous school experiences compare with those of students in 2010?

2. What is the relationship between intellectual ability and academic success?

3. What do you believe about human nature, classroom relationships, and discipline problems?

4. What can you learn from observing and interviewing educators?
I attempt to enliven my Educational Psychology course by presenting five metaphors: sprinting, maple syrup, yogurt, hurdling, and choreography.

Sprinting

I am a track and field athlete (now a Senior Olympian). I use starting blocks and I know if I want to finish strong while running 200 meters, I must start fast. The same principle applies to teaching an intensive Educational Psychology course. In the first class I begin with activities, lectures, course expectations, and an assignment that is due on week two. Students meet with their age groups (22-25, 26-29, 30-34, 35+ years) and they reminisce about their own school experiences. We share, summarize, and discuss their findings. I give a power point presentation on how to give a professional oral presentation as described in the Publication Manual of the American Psychological Association. For the following week, each student in the class does a brief oral presentation about “kids today” integrating theory, research, and a conversation with a child, adolescent, or parent. By week two of the course, I know a great deal about each of my students, including their interests and their academic skill levels.

Maple Syrup

I explain to my tired, working adult students that even though they are very busy, they need to work very hard in my Educational Psychology course. I use a metaphor; I ask them, “How many gallons of sap it takes to make one delicious gallon of maple syrup?” The answer is 30 to 33 gallons. Maple sap is a metaphor for all of the reading, thinking, researching, preparing, drafting, and rehearsing that is required for a polished oral presentation (or written paper). The students need to boil down the sap until its
delicious maple syrup. This metaphor works; students do high quality and delicious
presentations.

Yogurt

I teach “yogurt” classes. I want to provide my students with a course that is a
culture for their growth. I don’t want their exploration of Educational Psychology to end
after eight weeks, but to continue throughout their teaching careers. I present the structure
of the academic discipline of psychology so that they have the tools to continue to read
and study in the field of psychology.

I did not invent the metaphor of yogurt classes. A book by Belenky, Clinchy,
Goldberger, and Tarule (1986) describes Peter Elbow’s comments about courses that are
‘yogurt’ and provide growth opportunities in contrast to ‘movie classes’ in which
students are spectators who are entertained. In the first class and then again at the last
class I bring yogurts (or yogurt raisins or yogurt almonds) and give them to my students.
They enjoy these treats.

Hurdling

I own an adjustable hurdle that is used for teaching this track and field event to
children and I bring the hurdle to my Educational Psychology course. The hurdle is good
for explaining challenges and expectations. If the teacher places the bar too high, students
will fail (and they may injure themselves and/or give up). The hurdle should be set at a
challenging but attainable height. Believing in the capabilities of students is important
and confidence contributes to success. It is possible to keep raising the height of the
hurdle. This is good. The teacher should not stop raising the height of the hurdle when the
minimal level of competency has been achieved; the teacher should have high expectations and encourage students to do their best work.

I want my graduate students to encourage their elementary and secondary students; I want them to be supportive, to set high expectations, and to help the children and youth they teach to achieve. In the Educational Psychology course I try to do the same for my graduate students.

Choreography

Teaching (or taking) a four-hour night class after a long day’s work is exhausting; it’s brutal. It’s hard to keep students awake and moving. As a former dancer, I’ve observed that choreographers seem to know how to create rhythm, flow, movement, sequence, and art. I try to choreograph each class and include a variety of experiential learning activities, discussions, and lectures.

My students are graduate students; I take them seriously and I treat them as professionals. Students in my course hand in their final papers on the 7th week of class. For this paper students are required to select topics that are meaningful to them; they observe and interview at least three educators; and they apply educational psychology theory and research. They write up the paper in the standard order: title, abstract, introduction, method, results, discussion, conclusion, and references. Before the final class I read each of their papers three times; I write comments; and I grade the papers. I also prepare a talk on each of my student’s papers.

Using the four questions of the Educational Psychology course, the course builds to a “finale” in the eighth week. During the last class students write their answers to the four questions. Also, during the 8th class I pass out yogurt almonds and talk to my
students about continuing to grow as professional educators. In the most important part of
the 8th and final class, I assume the role of a discussant at a professional conference. I
comment on each of the papers and make connections and comparisons with their work.
Students learn from me and they learn from each other. As one student (a future
mathematics teacher) commented,

“I enjoyed this class and found the content particularly memorable. I think the
format allowed the information to become more meaningful. As for the paper
presentations, I found them beneficial. It was interesting to hear about the
different topics and draw similarities between like topics. Also, I felt that your
providing feedback as a discussant added value to the time and effort spent on
the research. It gave the paper importance beyond ‘just a grade’.” (Angela Ruble,
personal communication, October 15, 2010).

In summary, my Educational Psychology course has evolved over thirty years.
The course is intensive and requires a great deal of effort on my part. Each time I teach
the course I shake my head and doubt my sanity after I collect the big pile of papers on
the 7th week. I worry because I have promised to give a talk on each paper the following
week and these talks will take me many hours to prepare. When I read the papers, I feel
differently. The Educational Psychology papers are always really good. Almost every
student has selected a meaningful and useful topic and almost every student has produced
his or her best work.

References
1. Title of the submission:
The efficacy of web-based resources for Canadian instrumental music educators: A pilot study

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6. Abstract:

Music education in Canada is experiencing a period of rapid change and considerable pressure due to shifting educational priorities; cultural, social, and political changes; quickly evolving technologies; and financial pressures exacerbated by globalization. Moreover, instructional methods prevalent in Canada’s secondary school music programs are deeply entrenched in outmoded paradigms, imported from and modeled on those employed in the United States and Europe. Such practices are no longer meeting the needs and interests of the vast majority of Canadian students; consequently, approximately 90% of secondary students opt out of their school music program.

In fact, Fiske predicts that instrumental programs, particularly band programs, will become increasingly jeopardized in Canada over the next decade. He bases this prediction on several factors: Music education at the secondary level has become increasingly insular and divorced from contemporary society and its musical expressions; band, in particular, is often a more social or team-competitive experience than a musical one, therefore, the focus is typically on group results rather than the individual student’s acquisition of musical understandings, appreciations, and skills; limitations imposed by typical school band repertoire; limited opportunities for continued participation after high school graduation; and expanded interest in computer-based composition and individual, rather than large group, musical activity.

Walker, Bowman, and others have criticized Canadian music educators’ reliance on American methods and materials. Walker’s criticisms focus on the domination by school bands based on an American model in Canadian music education. He contends that curriculum materials produced in the United States are in direct conflict with the basic principles of Canadian society (i.e. cultural mosaic vs. melting pot) and urges Canadian music educators to develop Canadian solutions rather than simply adopting American philosophies, instructional methods, and materials. Similarly, Bowman attacks institutionalized music education in Canada and places the blame squarely on the shoulders of post-secondary music teacher education programs. Additionally, Morton emphasizes the need to address the ethnic diversity of Canada’s population as moral imperative for educators generally and Canadian music educators in particular. She observes that, to date, Canadian music educators generally have paid little more than lip service to this federal mandate.

Clearly, there is a need for new and innovative solutions to better meet the musical needs and interests of the Canadian students of today, as well as tomorrow. This pilot study tested the efficacy of newly created web-based video resources for pre-service and in-service music
educators. Both content and modality are assessed. Specifically, it seeks answers to two questions:

1. Do these videos effectively inform Canadian music educators about innovative and alternative instructional approaches to teaching instrumental music and possible solutions to challenges they face?

2. Are web-based resources effective in disseminating new ideas about teaching and learning instrumental music?

The method was survey research. A targeted sample of 132 secondary instrumental music educators (pre-service, in-service, and post-secondary) in each of the 10 provinces and the Yukon were invited to participate, with the hope that at least 25 would respond. Participants were asked to view nine newly created videos posted on a dedicated website (motifmusiclearning.com) and assess both the content and the medium using a researcher-developed survey (MMLVRL Online Survey).

The survey was created and data were collected and collated using an online survey management service. The study is complete and but final results have yet to be tabulated and analyzed. Nevertheless, preliminary findings indicate results are very promising. Final results will be reported in this presentation. The findings will inform the creation of a robust online digital resource library for pre-service and in-service Canadian music educators demonstrating and discussing best practices and innovative methods, strategies, and materials, and solutions to uniquely Canadian challenges. In this way it will meet an urgent and important need in music education by providing new directions for current and future Canadian instrumental music educators.
Using Manipulatives to Teach Elementary Mathematics

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Abstract: The purpose of this paper is to explain the importance and benefits of math manipulatives. For decades, the National Council of Teachers of Mathematics has encouraged school districts nationwide to use manipulatives in mathematical instruction. The value of manipulatives has been recognized for many years, but some teachers are reluctant to use them in their lessons. Throughout this paper, a discussion of the positive results of several research studies that strongly suggest the use of manipulatives will be mentioned. The history and advancement of manipulatives with also be discussed. Defining manipulatives and explaining the correct way to use them will be highlighted in this paper.

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INTRODUCTION

According to the Principles and Standards for School Mathematics, “the foundation for children’s mathematical development is established in the early years” (Seefeldt & Wasik, 2006, p. 249). It is important for children to have a variety of materials to manipulate and the opportunity to sort, classify, weigh, stack and explore if they are to construct mathematical knowledge. “In order to have opportunities to learn math, children need firsthand experiences related to math, interaction with other children and adults concerning these experiences and time to reflect on the experiences” (Seefeldt & Wasik, 2006, p. 250). Educational research indicated that the most valuable learning occurs when students actively construct their own mathematical understanding, which is often accomplished through the use of manipulatives.

HISTORY OF MANIPULATIVES

Since ancient times, people of several different civilizations have used physical objects to help them solve everyday math problems. The ancient civilizations of Southwest Asia used counting boards, which were wooden or clay trays covered in a thin layer of sand. The counting board users would draw symbols in the sand to tally inventory or whatever else they may need to count. The ancient Romans created the first abacus based on counting board. The abacus was made of beans or stones which moved in grooves in sand or on tables of wood, stone, or metal. “The Chinese abacus, which came into use centuries later, may have been an adaptation of the Roman abacus” (“Research on the” n.d.). The Mayans and the Aztecs both had counting devices that were made of corn kernels strung on string or wires that were stretched across a wooden frame. The Incas also had their own counting tool, which was knotted strings called quipu (“Research on the”, n.d.).

“The late 1800s saw the invention of the first true manipulative-maneuverable objects that appeal to several different senses and are specifically designed for teaching mathematical concepts” (“Research on the” n.d.). In 1837, German educator Friedrich Froebel introduced the world’s first kindergarten. “He designed the educational play materials known as Froebel Gifts, or Frobelgaben, which included geometric building blocks and pattern activity blocks” (“Friedrich Froebel”, 2009). Then in the early 1900s, Italian educator Maria Montessori continued with the idea that manipulatives are important to education. She designed several materials to help elementary students learn the basic ideas of math. “Since the 1900s, manipulatives have come to be considered essential in teaching mathematics at the elementary school level” (“Research on the,” n.d.). In fact, the National Council of Teachers of Mathematics (NCTM) has recommended the use of manipulatives in teaching mathematical concepts at all grade levels.

MANIPULATIVES DEFINED

Manipulatives can come in a variety of forms and they are often defined as “physical objects that are used as teaching tools to engage students in the hands-on learning of mathematics” (“Using manipulatives,” 2009). Manipulatives can be purchased at a store, brought from home, or teacher and student made. The manipulatives can range from dried beans
and bottle caps to Unifix cubes and base-ten blocks. They are used to introduce, practice, or remediate a math concept. “A good manipulative bridges the gap between informal math and formal math. To accomplish this objective, the manipulative must fit the developmental level of the child” (Smith, 2009, p. 20). Kindergarten children should have individual counters, whereas older students could use colored wooden rods that represent different numbers. The manipulative must fit the mathematical ability of the child or it is useless.

WAYS TO USE MANIPULATIVES

Manipulatives can be used in teaching a wide variety of topics in mathematics, including the objectives from the five NCTM standards: problem solving, communicating, reasoning, connections, and estimation. The materials should “foster children’s concepts of numbers and operations, patterns, geometry, measurement, data analysis, problem solving, reasoning, connections, and representations” (Seefeldt & Wasik, 2006, p.93). Teachers could use counters, place-value mats, base-ten blocks, and fraction strips while teaching from the numbers and operations standard. The counters could be used to teach one-on-one correspondence, ordinal numbers, and basic addition and subtraction. The fraction strips could be used to add and subtract fractions or to show equivalent fractions. Pattern blocks, attribute blocks and scales could be used to assist students in the learning basic algebra. Student could use geoboards when trying to identify simple geometric shapes. They could also use geometric solid models when learning about spatial reasoning. Teachers could use standard and non-standard rulers and measuring cups to represent length or volume in measurement lessons. The students could also use tiles when trying to find the area or perimeter of an object. When it comes to data analysis and probability, students could use spinners to find the probability of landing on a designated area. They could also use number cases or dice to find the probability of rolling a certain number or combination of numbers (“Using manipulatives”, 2009). The numbers of ways that manipulatives can be used are limitless. In fact, some schools use math manipulatives as a way to get parents involved. Stephen Currie, math specialist for grades Kindergarten through fourth grade at Poughkeepsie Day School in New York, created ‘mathtubs’ to pique math interest for both kids and their parents. Each Friday several students are selected to receive a mathtub, which are not due back until the next Wednesday. The mathtubs are filled with “math games and puzzles, two or more different kinds of manipulatives such as number cubes or tangrams and math challenges—questions which required no materials but creative brain power” (Currie, 2005, p. 52). Feedback from the parents was both positive and helpful. “In general, the parents appreciated the activities and were please to see their child engaged in mathematical thinking” (Currie, 2005, p. 53).

USING MANIPULATIVES CORRECTLY

Manipulatives can be extremely helpful young children, but they must be used correctly. Children must understand the mathematical concept being taught rather than simply moving the manipulatives around. Smith (2009) stated that there are probably as many wrong ways to teach with manipulatives as there are to teach without them. The math manipulatives should be appropriate for the students and chosen to meet the specific goals and objectives of the mathematical program. “The complexity of the materials provided will increase as children’s
thinking and understanding of mathematical concepts increase” (Seefeldt & Wasik, 2006, p. 93). It is also important for teachers to allow their students to have free time to play with the manipulatives. After the students have explored the manipulatives, “the materials cease to be toys and assume their rightful place in the curriculum” (Smith, 2009, p. 17). Carol Seefeldt and Barbara Wasik also think that teachers should provide children with opportunities to work with materials with open-ended objectives that have no specific preset goals. These opportunities allow the children the chance to explore their own questions and generate a variety of answers. “These experiences help children think about their world in alternative ways and help them understand that there are multiple ways to solve problems. Generating multiple solutions to problems in an essential strategy in mathematics” (Seefeldt & Wasik, 2006, p. 250).

RESEARCH AND BENEFITS OF MANIPULATIVES

The use of manipulatives is recommended by the NCTM because it is supported by both learning theory and educational research in the classroom. “Manipulatives help students learn by allowing them to move from concrete experiences to abstract reasoning” (“Research on the” n.d.). When students manipulate objects, they are taking the first steps toward understanding math processes and procedures. “The effective use of manipulatives can help students connect ideas and integrate their knowledge so that they gain a deep understanding of mathematical concepts” (“Research on the, “ n.d.).

Over the past few decades, researchers have studied the use of manipulatives in several different grade levels and in several different countries. The majority of the studies indicate that mathematics achievement increases when manipulatives are put to good use. Many studies also suggest that manipulatives improve children’s long-term and short-term retention of math. Cain-Caston’s (1996) research indicates that using manipulatives helps improve the environment in math classrooms. When students work with manipulatives and then are given a chance to reflect on their experiences, not only is mathematical learning enhanced, but math anxiety is also greatly reduced. Kenneth Chang (2008) examined the work of research scientist Jennifer Kaminski and he found that children better understand math when they use concrete examples.

Puchner, Taylor, O’Donnell, and Fick (2008) conducted a case study which analyzed the use of manipulatives in math lessons developed and taught by four groups of elementary teachers. There four researchers decided to study the way teachers use the manipulatives rather than studying the outcomes of the students. “The study found that in three of four lessons studied manipulative use was turned into an end in and of itself rather than a tool, and that in the fourth lesson manipulative use hindered rather than helped the student learning” (Puchner, Taylor, O’Donnell, & Fick, 2008, n.p.). The researchers believe this occurred because of the “deeply embedded focus in U.S. mathematics teaching on the procedure and the product” (2008, n.p.). In a few of the lessons, the manipulative use became an exercise separated from the solving of the problem. In the second grade lesson, the students simply copied the teacher’s example and never attached meaning to the manipulatives. The teacher’s manipulative use and misuse provided the researchers with a focus for further study. The researchers also realized that “teachers need support making decisions regarding manipulative use, including when and how to use manipulatives to help them and their students think about mathematical ideas more closely” (Puchner, Taylor, O’Donnell, & Fick, 2008, n.p.). Catherine Kelly, a member of the Montana Council of Teachers of Mathematics, stated that “teachers need to know when, why, and how to
use manipulatives effectively in the classroom as well as opportunities to observe, first-hand, the impact of allowing learning through exploration with concrete objects” (Kelly, 2006, p.188).

Dave Munger, author of *Researching Online*, reported the results of a study designed to describe the benefits of manipulatives. The sample consisted of two third-grade classes with twenty-six students. A two-week geometry unit from the Silver Burdett textbook was administered in both classes. The experimental group teacher used mathematical manipulatives to teach the concepts presented in the unit, and the control group teacher used only drawings and diagrams to teach the concepts. “Analysis of covariance revealed that the experimental group using mathematical manipulatives scored significantly higher in mathematical achievement on the posttest scores than the control group” (Munger, 2007, n.p.).

Additional studies have shown that students who use “manipulatives in specific mathematical subjects are more likely to achieve success than students who don’t have the opportunity to work with manipulatives” (“Research on the,” n.d.). Some children need to use manipulatives to learn to count, while other students’ understanding of place value increases with the use of manipulatives. Research also indicates that using manipulatives is especially useful for teaching low-achievers, students with learning disabilities, and English language learners.

CONCLUSION

Elementary teachers who use manipulatives to help teach math can positively affect student learning. Students at all levels and of all abilities can benefit from manipulatives. Mathematician, Seymour Papert, believes manipulatives are ‘objects to think with’. “Incorporating manipulatives into mathematics lessons in meaningful ways helps students grasp concepts with greater ease, making teaching most effective” (“Research on the,” “n.d.).
REFERENCES


Can Resiliency Training help students become more Resilient?

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Abstract: This study was designed to investigate the effects that resiliency training had upon a selected group of sixth grade students in a rural, low socioeconomic school with a student population of approximately 600 in grades K-12. Planned solution strategies included staff development training and implementing activities to establish the school climate and student readiness. The Resiliency Skills and Abilities Scale (RSAS) was used as a pretest. RSAS is a 45-item survey to determine resiliency scores, before implementing resiliency skills. Training from the Resiliency Training Program, a Trainer of Trainers by Nan Henderson, M.S.W., was used as an intervention strategy. The intervention strategies involved a section of sixth-grade students, teachers, counselors, administrators, and parents. The RSAS was administered as a posttest to students at the end of the training to measure any changes in their resiliency level. An analysis of the data and teacher perception revealed that participants’ resiliency level increased as a result of resiliency training in a rural school setting.

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INTRODUCTION

Can schools build resiliency, or is resiliency held individually? Research supports the concept that resiliency can positively impact school success (Henderson & Milstien, 1996; Higgins, 1994; Werner & Smith, 1992; Wolin & Wolin, 1994). Resilience, which is the ability to thrive, mature, and increase competence in the face of adverse circumstances, encompasses both individual and environmental factors (Masten, 1992). Lifton (1994) identified resilience as “the human capacity of all individuals to transform and change, no matter what their risks.”

Wang, Haertel, and Walberg (1994) define educational resilience as the heightened likelihood of success in school and in other educational accomplishments, despite risk and environmental adversities. A better understanding of the contribution of resilience in schools may contribute to the understanding of individual resiliency. Henderson and Milstien (1996) explain that it may be possible to help students develop the necessary strategies to develop factors that foster resiliency by creating an environment of caring personal relationships (Henderson & Melstein, 1996). While some students develop resiliency on their own, other students may need assistance in developing factors that foster resiliency.

Educators must look beyond the circumstances of children’s birth and foster their success. In his first radio address in January 21, 2001, President Bush stated, “Our country must offer every child, no matter his or her background or accent, a fair start in life with a quality education” (Bruni, 2001, p. A9). Noddings (1998) wrote, “Children will work harder and do things for people they love and trust. In other words, schools can and must provide the environment to make the difference in the lives of children” (p. 32).

Too few young people grow up experiencing key ingredients for their healthy development (Meier, 1995). They do not experience support from adults, build relationships across generations, or hear consistent messages about values. Most of our young people do not have much to do with positive issues or issues that are constructive. This results in our communities having an overwhelming number problems in the lives of our youth. However, young people who experience positive assets are likely to grow up caring, competent, and responsible.

School resiliency includes: (a) teacher involvement with the job; (b) peer cohesion, or how friendly and supportive teachers are to each other; and (c) supervisor support, or the extent to which the administration is supportive of teachers. Benard (1993) states that a nurturing school climate has a tremendous influence on children overcoming incredible risk factors. Benard further explains that creating this nurturing environment for students necessitates creating this environment for all school personnel. School administrators can facilitate a nurturing environment for school personnel by demonstrating positive beliefs, setting expectations and trusting teachers, and providing on-going opportunities for teachers to reflect, dialogue, and collaboratively make decisions (McLaughlin & Talbert, 1993). A common finding in resilience research is the power of teachers to facilitate the transformation of students being deemed at-risk to being deemed resilient. Bernard (1993) labels these teachers as “turnaround teachers.” The turnaround teachers provide and model the following protective factors: caring relationships, positive and high expectations, and opportunities to participate and contribute. Henderson and Milstein (1996) explain that schools, which build resiliency in students through creating an environment of caring and
personal relationships, have educators who have resiliency-building attitudes as a foundation. As an outgrowth of a strengths-based perspective, turnaround teachers let students express their opinions and imagination, make choices, problem solve, work with and help others, and give their gifts back to the community in a physically and psychologically safe and structured environment. They treat students as responsible individuals, allowing them to participate in all aspects of the school’s functioning (Kohn, 1993).

Masten (1992) explains that all students may be deemed at-risk at sometime in their lives. Pianta and Walsh (1996) explain that despite adversity some at-risk students are able to adapt and succeed. Research indicates that schools can assist in this development if they embody the environmental conditions that support resilient reactions to situations and events (Henderson & Milstein, 1996).

Due to the wide variability between and within young adolescents in their ability to think abstractly, it has become increasingly clear that schools with diverse and flexible curriculum seem to be in the best position to meet the needs of all students (Irvin, 1992). The school environment should contain important protective factors such as fostering a sense of achievement in children, enhancing personal growth, and increasing social contacts.

Resilience is an attractive concept particularly to anyone who has struggled to link the connection between stress and school failure. Educators are also familiar with the concept of success in the face of challenging circumstances. Instead of seeking and identifying success-producing factors in schools that succeed against the odds, discussions of resilience focus upon identifying individuals who succeed.

As researchers attempt to understand how various factors such as the child, contextual factors, and biological factors interact with exposure to difficult circumstances, the question why some individuals appear to succeed and some individuals do not remains vexing (Master & Coatsworth, 1995). It has been hypothesized that individuals who are in control, committed, and challenged may be influenced by a different set of coping strategies than individuals who are in less control, committed, and challenged by circumstances. Individuals who are in control, more committed, and challenged have been categorized as hardy or resilient. Resilient individuals tend to select and employ more active problem-focused coping strategies while those who are less hardy or resilient tend to use emotion-focused coping, avoidance, or denial (Williams, Weibe, & Smith, 1992). They also found that active or adaptive coping strategies mediated self-reported illness symptoms. These studies offer evidence that the resilient or hardy individual may transform stressful events into less stressful events.

ROLE OF SCHOOL

School involvement, cohort support, and supervisor support have been identified as important protective factors in resilient schools (Benard, 1991; Frieberg, 1994). The school environment is a critical component to the development of protective factors associated with individual resilience. Students in effective schools, which are powerful environments, can acquire resilience in educational environments that foster development and competence in achieving learning success (Wang, Haertel & Walberg, 1997).

Just as teachers can create a nurturing classroom climate, administrators can work to
create a school environment that supports teachers’ resilience, promotes caring relationships among colleagues, demonstrates positive beliefs, provides ongoing opportunities to reflect, and allows colleagues to become collaborative decision makers (McLaughlin & Talbert, 1993).

Expectedly, there have been numerous calls for school leaders to take the initiative in developing a school environment that is conducive to individual and collective success. Along these lines, Pazey (1995) emphasized that constructs of an ethic of caring and leadership practices are positively associated with educational reform. While the notion of reform is typically associated with changes in instructional practices, one can make a case that altering the school environment has the potential to make a much greater impact on all facets of the school related to productivity. Many researchers have outlined how school leaders can assist in the development of a more caring, and thus, more resilient environment. Kohn (1991) points out that caring dispositions will best be learned where the leader and peer interaction is intense and regular, and where learning is evident. This suggests that the leader needs to initiate interactions with others in the school on a regular basis. Furthermore, the leader should make sure that such interaction emphasizes “real” issues in the school and provides opportunities for both giving and receiving information from group members. Additionally, subsequent interactions should build on previous ones.

In a similar vein, Reihl (2000) described three distinct tasks of school leaders in responding to issues of diversity and equity. These tasks include fostering new meanings, promoting inclusive practices within schools, and building connections between schools and communities. Such activities enhance the schools “caring” environment and help both school faculty and staff and community stakeholders make sense of the issues related to the school. The ability for individuals to ascribe meaning to a setting creates a stronger, more resilient entity. Fullen (2001) described the principal’s role as follows:

“Effective leaders understand the value and role of knowledge creation, they make it a priority and set about establishing and reinforcing habits of knowledge exchange among organizational members”.

Clearly, the school leader can have a significant impact on school environment through a thorough and continual plan of communication concerning pertinent issues with both individuals within the school and those external to it. An enhanced, caring environment can assist the school in dealing with problems in a healthy manner.

Benard (1993) explained that a nurturing school climate has a tremendous influence on children overcoming incredible risk factors. Benard further suggested that it is far less acknowledged that creating this nurturing environment for students necessitates creating this environment for all school personnel. Krovetz (1999) echoed this theme by stating that resilience is about building a community that is rich in the protective factors of caring, high expectations, purposeful support, and ongoing opportunities for participation. It is becoming increasingly clear that in order for resiliency building to be accomplished, teachers must support their own resilience because they need the protective factors for success. Seligman (1996) contended that teachers who are student-centered use students’ own strengths, interests, goals, and dreams as the beginning point for learning and tap students’ intrinsic motivation for learning.
Fostering resiliency and increasing positive development assets of young people comprise the continuum of a comprehensive approach to improving the lives of all kids (Benson, 1997). Resiliency studies offer evidence of what practitioners have long suspected and hoped; more than any institution except the family, schools can provide the environment and conditions that foster resiliency in today’s youth and tomorrow’s adults (Henderson & Milstein, 1996). There is a statistically significant positive relation between individual resiliency and school resiliency. Research findings suggest that resiliency has a positive impact on the academic achievement of students.

Research indicates that it is probable that middle school educators can help students thrive during adolescence, improve their academic development, and ensure success in school if they assist them in developing resiliency (Richardson & Nixon, 1997). Since adolescents often develop the beliefs and values that may follow them into adulthood, middle schools are the most powerful force to recapture millions of youth (Manning, 1993). As we begin shifting our thoughts toward more positive ones, we anticipate creating communities where all young people are valued and valuable, problems are manageable, and an attitude or vision, hope, and celebration pervades community life. With this in mind, this study attempted to determine if a section of sixth-grade students at this rural school could achieve a higher level of resiliency with resiliency training in school than at a prior time without resiliency training.

**Study**

Dr. Cynthia Jew and Dr. Kathy E. Green’s Resiliency Skills and Abilities Scale (RSAS) a 45-item survey to determine resiliency scores, was used to collect data for comparison on the pretest and posttest.

The aim of this study was to build in factors that protect the individual and offset the impact of stressful life events. The school system for this study, a K-12 Attendance Center, was located in the central portion of a rural southern state. The county where the school system was located had approximately 9,000 residents and three school systems. Of the 82 counties in this southern state, this county ranked among the bottom five counties in the state’s unemployment rate. The focus of this study was to identify individual factors that contribute to educational resiliency, or academic success in adverse circumstances.

For the purposes of this study, some terms relevant to this study were defined as follows: At-risk students were defined as students who have certain characteristics such as: living with one parent, being a member of a minority group, having an English deficiency or performing poorly or failing in school. Harris (1991) described at-risk students as having poor reading skills, low aspirations, family problems, poor attendance, weak participation in school, or discipline problems. Resiliency referred to the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills (Richardson & Nixon, 1997). The following definition of resiliency was used as defined by Jew (1997) in her study.

Resiliency refers to the psychological endurance skills and abilities. That is, a child who is resilient will reduce his likelihood of serious negative impacts associated with maltreatment as other children who are not resilient (Mrazek & Mrazek, 1987). Skills include precocious maturity, conviction of being loved, idealization of aggressor’s competence, cognitive restructuring, positive projective anticipation, optimism, and hope. Abilities include rapid responsibility to danger, disassociation of affect, information seeking, decisive risk taking, altruism, and formation and utilization of
relationships. The child uses the psychological endurance behaviors to better adapt to his/her environment. Furthermore, resiliency is a belief system; a set of behaviors based on one’s belief system (pp.11-12).

OVERVIEW OF RESULTS

The primary purpose of this study was designed to determine if a relationship existed between a sample of sixth-grade students with resiliency training at the K-12 Attendance Center. A second purpose was to determine whether relationships existed between the level of personal resiliency and demographic variables with at least two at-risk factors. These variables included socioeconomic status, gender, race, at-risk factors, and individual resiliency. The 45-item instrument, The Resiliency Skills and Abilities Scale (RSAS), was used.

The specific research questions addressed in this study were as follows:

1. What was the level of resiliency of selected sixth-grade students at the K-12 Attendance Center as measured by the RSAS?
2. Was there a significant difference between the level of resiliency in sixth-grade students after implementing a resiliency-training program?
3. Was there a relationship between a student’s score on the RSAS and sixth-grade students who have at least two at-risk status factors?

Methodology

To answer the questions, the RSAS pretest and Resiliency Survey were administered to WAC sixth-grade students, who agreed to participate in this study and had parental consent to do so. Sixteen out of 18 survey forms were returned in a usable format. This represented a response rate of 89%. Demographic data were collected on all participants. For nine weeks resiliency-training skills were implemented and enhanced to the sample of sixth-graders by teacher, counselor, parents, and administration. The RSAS posttest was administered to the sixth-grade participants to measure any change in resiliency.

Characteristics of Participants

Demographic data describing the research subjects involved in the study are described in Tables 1 through 6. Table 1 presents information on the gender of all participants in the study. Female participants appear to represent a higher percentage than male participants.

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th>Percentage</th>
<th>Males</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9</td>
<td>56%</td>
<td>7</td>
<td>44%</td>
</tr>
<tr>
<td>Blacks</td>
<td>6</td>
<td>38%</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Whites</td>
<td>3</td>
<td>19%</td>
<td>3</td>
<td>19%</td>
</tr>
</tbody>
</table>

Table 2 presents information on the presence of at-risk factors in all participants. A greater percentage of African-American students had at least two at-risk factors present in their lives, than Caucasian students.
Table 2
*At-Risk Factors by Race*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>African-American</th>
<th>N</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Parent Family</td>
<td>4</td>
<td>40%</td>
<td>1</td>
<td>165</td>
</tr>
<tr>
<td>Siblings Dropped out of School</td>
<td>2</td>
<td>20%</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Changed Two or More Schools</td>
<td>1</td>
<td>10%</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>“C” Average or Below</td>
<td>7</td>
<td>70%</td>
<td>3</td>
<td>50%</td>
</tr>
</tbody>
</table>

*Findings of Research Questions*

*Question 1.* What is the level of resiliency of selected sixth-grade students at WAC as measured by the RSAS?

Table 3 represents a summary of the Total Score and Subscale Scores of the 16 participants without resiliency training. In examining the mean Total Score of 193.13, it can be concluded that the participants in the study had above average level of resiliency. The mean responses for all 45 items were examined.

Table 3
*Resiliency Scores without Resiliency Training*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score -</td>
<td>193.13</td>
<td>.650</td>
<td>4.096</td>
<td>4.487</td>
</tr>
<tr>
<td>Highest possible = 270</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Skill Acquisition -</td>
<td>65.25</td>
<td>.493</td>
<td>4.077</td>
<td>4.623</td>
</tr>
<tr>
<td>Highest possible = 90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future Orientation -</td>
<td>66.88</td>
<td>.687</td>
<td>4.078</td>
<td>4.839</td>
</tr>
<tr>
<td>Highest possible = 90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence &amp; Risk Taking -</td>
<td>61.0</td>
<td>.724</td>
<td>3.666</td>
<td>4.467</td>
</tr>
<tr>
<td>Highest possible = 90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Five items ranked higher than all others. These items included the following:

- I believe someone loves me: mean = 5.63
- I can be loved by a teacher, coach, or someone else other than my family: mean = 5.5
- Someday, I will be able to use what I have learned in my life to help others: mean = 5.38
- Everybody is able to be loved: mean = 5.31
- I look forward to the future: mean = 5.19

These results revealed that participants had a strong conviction that they were loved and demonstrated optimism and hope for their future. In addition, five items ranked lower than all other items. These items included the following:

- I believe that it is best to take a risk no matter what the consequences: mean = 2.94
- Sometimes it is worth it to take risk that I shouldn’t: mean = 3.0
- The past is not as important as the future: mean = 3.0
- I can feel what other people are feeling: mean = 3.13
- Something good always comes out of something bad: mean = 3.19

These results revealed that participants did not have a strong desire to take risks. In
addition, these results could reveal that sixth-grade students have not developed strong
decision-making strategies.

**Question 2.** Is there a significant difference between the level of resiliency in sixth-
grade students after implementing a resiliency-training program?

Table 4 represents a summary of the Total Score and Subscale Scores of the 16
participants with nine weeks of resiliency training. In examining the mean Total Score of
212.19, it can be concluded that the participants in the study had a higher level of resiliency.

<table>
<thead>
<tr>
<th>Resiliency Scores with Resiliency Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Total Score - Highest possible = 270</td>
</tr>
<tr>
<td>Active Skill Acquisition - Highest possible = 90</td>
</tr>
<tr>
<td>Future Orientation - Highest possible = 90</td>
</tr>
<tr>
<td>Independence &amp; Risk Taking - Highest possible = 90</td>
</tr>
</tbody>
</table>

Five items ranked higher than all other items. These items included the following:
- Someday I will be able to use what I have learned in my life to help others: mean = 5.94
- Everybody is able to be loved: mean = 5.5
- If one of my parents developed serious illness, I would learn a lot about it, so I
could help them: mean = 5.44
- I look forward to the future: mean = 5.44
- I believe in the “goodness” of others: mean = 5.44

These results revealed that participants had a stronger desire to be loved and help
others. In addition, these results could reveal that sixth-grade students have developed
stronger decision-making strategies, and look forward to the future.

In addition, four items ranked lower than all other items. These items included the
following:
- Sometimes it is worth it to take the risk that I shouldn’t: mean = 2.50
- The past is not as important as the future: mean = 3.31
- If something had happened, I would talk to my friends about it: mean = 3.44
- Some people cannot make it because of their childhood: mean = 3.56

These results revealed that participants did not have a strong conviction to take risks.

In addition, these results could reveal that sixth-grade students have optimism and hope.

T-test analyses were used to determine if there was a relationship between the
resiliency scores of sixth-grade students with resiliency training. The independent variables
are students without and students with training in a school setting. The dependent variables
included subscales Future Orientation, Independence and Risk Taking, Active Skills, and
Score. The mean responses for all 45 items were examined. Table 5 displays the results of
the Total Score and Subscores of the 16 participants.
Although students without resiliency training appeared to have lower resiliency scores than students with resiliency training, the differences are statistically significant. Thus, there appeared to be a relationship between resiliency scores without and with resiliency training.

*Question 3.* Is there a relationship between a student’s score on the RSAS and sixth-grade students who have at least two at-risk factors?

One-way ANOVAs were used to examine the relationship between at-risk status and resiliency as measured by the RSAS. The independent variables are at-risk status. The dependent variables include the subscales Future Orientation, Independence and Risk Taking, Active Skills, and Score. There was a slight increase in relationship between a score on the RSAS and at-risk status as determined by the presence of two at-risk factors. Table 6 demonstrates the results.

### Table 6  
**RSAS and At-Risk Status**

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Post-test</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score - Highest possible = 270</td>
<td>191.67</td>
<td>211.66</td>
<td>.681</td>
</tr>
<tr>
<td>Active Skill Acquisition - Highest possible = 90</td>
<td>65.17</td>
<td>72.33</td>
<td>.452</td>
</tr>
<tr>
<td>Future Orientation - Highest possible = 90</td>
<td>65.83</td>
<td>73.00</td>
<td>.795</td>
</tr>
<tr>
<td>Independence &amp; Risk Taking - Highest possible = 90</td>
<td>60.67</td>
<td>66.33</td>
<td>.676</td>
</tr>
</tbody>
</table>

### TEACHER PERCEPTION

Teacher observation revealed that participants’ level of resiliency increased as a result of a resiliency-training program in a school setting. Teachers observed caring and support, high and clear expectations, opportunities for meaningful participation, and skill building. Changes in internal resiliency factors of social competence, problem-solving skills, sense of autonomy, and sense of purpose and future were observed. Teachers also noticed changes in the external protective factors of helpfulness to others, high anticipations, and the desire to participate.

In the areas of social competence teachers reported an impact on students’ ability to
develop better relationships with peer friendships, communication, and trust. In the areas of problem-solving skills, they observed students as they were building a level of confidence to deal with problems and getting help from others to solve problems at home and at school as reflected in the following responses from teachers:

“The resiliency training helped my students to feel more comfortable in talking about their problems. They became more aware that there were other people going through the same things, and that they were not the only ones with that problem.”

“Students trusted more people.”

“Students talked about what to do in different situations.”

“More students were able to solve some of their problems and get through the day almost without anger.”

“They are listening better and trying to make better decisions.”

Here are some responses from participating students in this study which supports their change in behavior.

“When I get mad at my parents, I can better control my anger.”

“It helps me express my feelings with my friends that I trust.”

“I try to think before I act. I often count to ten before reacting.”

“I am proud of myself and have gained a lot of respect for myself.”

Teachers observed that students who perceived their parents as concerned about their activities and whereabouts had more positive developmental outcome in a number of areas including academic achievement and problem behavior. Teachers noticed that those participants who felt more included and respected in the school environment were the ones less likely to engage in problem behavior. They had a better desire to do right and help others.

Another teacher observation was that resilient students were able to move beyond their mistakes socially and academically. Effort and determination served as protective factors for these students because their attempts to achieve were met with positive results. By looking for the good in others, regardless of background or appearance, the door to learning always stays opened.

The teachers and school community were contributors to positive adaptation and developmental outcomes of the participants in this study. Educational counsel and guidance were also important factors in developing resilience. Difficult children present many challenges, but out of those challenges can emerge children who become very productive resilient adults.

**Conclusion of Findings**

The findings of this study lead the researchers to make conclusions that are important to sixth-grade students in this rural community. A summary of the findings is presented below:

1. The sixth-grade students involved in this study were considered resilient individuals.
2. There was a significantly higher score in the resiliency levels of students with resiliency training.
3. There was a significant relationship between resiliency scores and at-risk status by sixth-grade students.
Teacher perception was of great importance and significance in this study as they were involved with the growth and changes of the participants.

**Discussion**

The community consisted of students with lower to middle class socioeconomic backgrounds. The sixth-grade students in this study had above average resiliency levels. There are several potential reasons for this finding.

1. These students live in an impoverished rural area in the southern United States. Perhaps in rural areas, there is less of a social stigma related to poverty than there may have been in Jew’s study.

2. The rural communities in this study might be closer and more connected than the urban communities examined by Jew. Therefore poverty might not be an important issue when dealing with defining “at-risk.”

3. In rural areas in the South, students tend to place a lot of emphasis on religion. This membership in an organization may provide the necessary bonding to foster hopefulness and optimism, factors in resiliency.

4. Family factors may have played a significant part in students having an above average level of resiliency. Forty-four per cent live in two parent households. This could account for the conviction of being loved.

5. Students in this study may have different values in relation to their future goals than those in other studies because resiliency can take on different meanings for different socioeconomic classes across rural and urban areas.

6. There may be a possibility that resiliency training in school and resiliency are not connected.

Conceivably students attending this rural K-12 Attendance Center experienced caring and support, high and clear expectations, opportunities for meaningful participation, and skill building. The school appeared to provide students with a much greater opportunity for overcoming adversity and experiencing success in school than if there were no factors present.

In this study, if students identified at least two at-risk factors, they were considered a part of the at-risk group. The presence of at least two at-risk factors did produce a statistically significant relationship to their resiliency scores. This may possibly have resulted from the school families, or communities providing these students with the tools that they needed to become resilient. In addition, when examining the single-parent family and C average or below statuses, the sample groups were of unequal values. Perhaps if three or more at-risk factors had been used or if the analyses had looked at one or more elements individually, the results might have been higher.

**Recommendations for Further Research**

Significant relationships were found between resiliency without and with resiliency training. Future studies could certainly provide greater knowledge about this issue. Some recommendations for further research are as follows: (a) Conduct a study with a larger population to include sixth-grade students from various areas; (b) Conduct a study with a population that includes a combination of both urban and rural area populations to determine if geographical location impacts resiliency levels; (c) Expand the study to determine if resiliency and academic achievement are related; (d) Conduct a study that focuses on family life and home conditions that might contribute to resiliency; (e) Conduct a study that examines other risk factors in students other than those used in this study to determine if any
relationship exists between them and student resiliency; or (f) Conduct a study to determine if resiliency continues through elementary school, middle school, and high school years.

In summary, the findings in this study suggest that there was a relationship between personal resiliencies with resiliency training in this sample. Perhaps this study has raised more questions than answers. The recommendations for further research provide possible avenues to address some of these questions.
References


Krovetz, M.L. (1999). Fostering resiliency: *Expecting all students to use their minds and


28.


Titled: A Developmental Model of Environmental Education School

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Abstract for Submission

A Developmental Model of Environmental Education School

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The research aimed at developing physical and biological environment as a place for both living and learning, and developing environmental learning activities for schools. Lad Community School, Muang District, Maha Sarakham Province, was selected as a model school and 179 students from Prathomsuksa 1 to Matthayomsuksa 3 were chosen as the sample group. The research methodology used was an action research integrated with an experimental research emphasizing on the development of physical and biological environment and the development and application of learning plans to study the effects of the learning plans on students’ environmental knowledge, students’ attitude towards environment and environmental ethics. The results were revealed as follows:
1. For physical and biological environmental development, the physical and biological environment of the school was improved and the quality of the school’s environment after the evaluation was at the high level (84% of the total score). When examining the school’s environment separately in different quality standards, it was found that 12 environmental quality standards were at the highest level and 4 quality standards were at the high level.

2. In terms of learning plan preparation, the school teachers created 15 learning plans by integration from the regular curriculum for the learning activities of the students in the school and 5 projects for promoting environmental development, which included Bai Sri tray project, rice container making project, school garbage management project, biomass compost project, and organic farming project. The evaluation results of the teaching plans were at the highest level (82.13% of the total score).

3. Regarding students’ environmental knowledge, attitude, and environmental ethics, it was found that the environmental knowledge of the students in general after learning was significantly higher than before at the statistic level of .05. The students’ attitude towards environment in general and in all different grade groups after learning was significantly higher than before at the statistic level of .05. In terms of environmental ethics, only the students in Prathomsuksa 4 and 5 groups significantly had higher ethical knowledge after learning at the statistic level of .05.

Keyword : Environmental Education School
What Do Mothers Learn From Children? : The Case Study of Kids Art College.

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Introduction

1) The Japanese pre-school system.
In Japan, most children over 3years old enter kindergarten ‘yochien’ or nursery school ‘Hoikuen’. Parents send their children to the pre-school or the bus stop of kindergarten bus. Generally speaking, most pre-school have classes which 10 to 30 children and 1 or 2 teachers belong to. Parents go to pick their children up when the pre-school is over. They usually leave education to the teachers and rarely attend the activities because they are busy in their work or housework. It is rare that the pre-school asks parents to attend the programs proactively though the situation slowly changes.

2) Solitude to take care of little children in Japan.
In Japan, the local community is weakening because of a decrease of household sizes and high population fluidity. This brings solitude to take care of children. It is difficult for parents who move to a new place to make friends.

These parents tend to have trouble with taking care of their children. If the grandparents or other family members are not living close by and there is no community which helps young parents, they neither depend on others when they are in poor health nor consult about troubles of childcare.

In addition, they only get limited information on child care. Instead of having information by people, they need to rely on the magazines or the Internet. Such information entails many difficulties to live up for beginner parents as it is not flexible enough that parents may not able to arrange it for their own child. In the worst case, these information from media unnecessarily worry parents.

In this situation, we must prepare good childcare support as soon as possible.

3) Needs to create a sustainable society
In addition to local problems, now we are facing serious international problems. For example, environmental pollution is spreading all over the world. Scrambling limited
natural resources and misunderstanding of diversity of belief end up to international conflicts. In order to solve these problems, it is necessary to understand people who are in different situations and to cooperate with each other. We must realize peaceful coexistence.

We can learn how to realize peaceful coexistence in a small community. Only the individualism doesn't realize a sustainable community. If one person makes some benefits, it may damage another. People need to sympathize with each other to maintain a good community.

4) To solve these problems

In these social backgrounds, Kids Art College (KAC) was established in 2005. KAC is a new type of pre-school in which both mother and child learn together. Mothers attend the program everyday and spend three years here.

In three years, mothers make good relationships with others and get to cooperate with them taking care of children. Mothers in KAC sometimes need to accept different opinions of others and seek the way to coexist with various people. But once it is succeeded, all mothers recognize various individualities and take care of all children as if they are their own.

This attempt was started under the educational policy of Kyoto University of Art and Design. The university aims to create a peaceful world through arts and affords a chance to study arts for people of all ages by setting the preschool and distance learning systems.

What is the KAC?

KAC is a new type of pre-school that both mother and child enter together. Most of them spend three pre-school years here. We named this pre-school “college” because mothers are also students of this institution and attend the program everyday together with their children. In Japan, it is rare that mothers come to pre-school with their children everyday. Most children, 3 years to 5 years old, enter a nursery school “hoikuen” or kindergarten “yochien”. Generally, parents don’t need to attend the program.

Everyday they spend from nine 9am to 2:30pm together at KAC. 35 mothers and 36 children are registered now. The pre-school building stands on the premises owned by Kyoto University of Art and Design. We use one floor of the building. The floor is half divided into three rooms. There are two big rooms where children can run around. The biggest room has a kitchen while the smaller has a piano. The smallest room with many
picture books is suited for reading. The building is situated on the foot of a mountain so children can go out and play on the mountain immediately.

KAC asks mothers to come everyday because it is the key of mother’s learning. It is a hard request for mothers because they are busy in housework. But most mothers who choose this alternative to a yochien have various, strong motivations. Some mothers may come here for the purpose of seeing the development of their child continuously, some making friends through childcare, and others reconsidering their way to educate children.

KAC gives opportunity to encounter friends to take care of children together. It is not only a support for young parents but also an education opportunity for all parents. Mothers who make good relationships with others weaken their anxieties and reconsider their way of instruction to child. Most of them tend to force good behavior, but they need to wait their child's development and give chance to the thought how it should behave. They get at ease in themselves. This is also good for their children.

What Do Mothers Do?

It may be difficult for you to imagine this new type of school. First of all, I introduce the activity of mothers and children from 9am to 2:30pm.

Maybe a nuance of the word “Art College” reminds you on art lessons or talent education of art. But the staff of KAC rarely teachs these kinds of technique. Instead, parents and children are able to learn many things through daily life here.

1) The time of playing and learning

Mothers and children spend “the time of playing and learning” from 9am till 10am. During this time, mothers and children engage in any activity which they are interested in. In this regard, some mothers may play piano, some knit, or others cook sweets. During these activities mothers enjoy chatting and sometimes they talk seriously about their family affair. Talking to each other makes their friendship close.

Meanwhile some children play with their friends without adults. Sometimes they invite the staff or mothers to play with them. Other children participate in activities of adults. So we can see various patterns of interaction simultaneously.

2) The time of dialogue

After “The time of playing and learning”, from 10am to 11:30am everyone participates in the same activity. We call this time “The time of dialogue”. In this time, children share their experiences. For example, one child may show a beautiful insect
that it had caught in the morning to everybody. Another child does forward upward circling on the horizontal bar in front of friends, because he has trained very hard and hoped to show it to friends. So we can see that children who show the leadership in the activity get confident. Sharing their experiences brings good effect to every child.

The staff coordinates these activities putting mother’s talents and interests to use. So for example the staff proposes to a mother who had worked as a baker that she should make bread with yeast fungus together with children. Or if some mothers are interested in growing plants, the staff will recommend to seed vegetables with children. In this regard we can see that mothers enjoy producing the program for children and get ideas to enjoy childcare by their own way. Creative ideas are often provided from mother’s interests, and the staff tries to utilize these ideas to the activities of children.

3) The time of reflection

Everyday, mothers have a meeting before going home. They share today’s experience like a worry or notice about the development of their child. They don’t only talk about their own child but also the other’s children as they spend the day with many parents and children. Some mothers may see the development of their own child differently because another mother may provide her with a new point of view. Additionally, mothers can hear various opinions and reconsider their way of child caring. So time of reflection helps mothers in many ways to feel that they are never alone with their happy and worried feelings.

What Do Mothers Learn?

Mothers learn various things. I will give some concrete examples. I use diaries of mothers as instruments of research. To write a diary is a part of the educational programs of KAC. Mothers write a short diary everyday. They should write the affairs, feelings, and notices of the day. Everyday mothers hand in the diary to the staff. The staff writes comments for mothers or development of their children. It is a tool for communication. In addition, it helps to reflect their learning when they read their own diary after a long time past.

I am a member of the staff of KAC and I have confirmed to mothers that I use their diary as instruments of papers and present on any conferences. I use codenames in the diaries.
Episode 1  Realizing a new aspect of a child by seeing her playing.

It is the first year for Mrs. Sugiyama to come to KAC. She worried that her daughter Aiko was too modest to express herself.

She wrote about when Aiko and another child scramble the swing. There are two swings in KAC. There is a sofa for adults near the swings. She might look at Aiko from the sofa.

The first worry which new comer mothers often have is a fight of children. Before entering this pre-school, mothers and children only experience family affairs. Especially children who don't have a brother or sister rarely experience troubles with friends. Once they commit to a group, mothers get to realize a new aspect of their child.

It is troublesome for mothers to watch their child scrambling for a swing and beating or being beaten by another child. At first, mothers simply stop the fight saying “Fighting is bad.” or "Be nice to each other.”.

Mrs. Sugiyama was also surprised about the fight of children. But in this diary, she finds the change of behavior of her child in the fight with friends and regards the change as a good development.

Of course, she understands that the violence is bad and wants Aiko to make peaceful relationships with her friends. But she sees a development in the expression of her insisting. Because though she had only been patient when she faced some troubles with friends, after she got close to Ryoko, she got to express her emotion. Aiko gets confident because she succeeds to make close bond with friends.

It is important for a little child to insist on itself not to suppress her emotion and avoid troubles. Especially Japanese children tend to solve the conflict by being patient in many situations. But only being patient, children cannot get the ability to solve the

July 1, 2009  From the diary of Mrs.Sugiyama, Mother of a girl Aiko

Dear  Aiko
I heard that you and your friends said loudly "change!" "no" or “change!” "OK" near a swing today. I thought you had only been hesitating or watching before.
I saw you were crying when you scrambled for a swing with Ryoko and lost by her. I thought it was rare. Usually you don’t assert yourself and only wait after you say “change”. But you insist only to Ryoko. I guess Ryoko is your closest friend.
conflict. Children must express themselves and listen to the emotion of others to understand each other. It is the first step to express their own emotion.

Mrs. Sugiyama found that the fight is an opportunity to learn how to manage stressful events and to solve the conflict for children. She tried to watch the trouble and supported her daughter’s emotional development except for the case which may injure her friends. It makes the basis of reliable relationships and a close bond with her child.

**Episode 2  Finding pleasure in the growth of another child.**

This diary was written after a year later of episode 1. Himeko, the daughter of Mrs. Nakagawa, and the other children became the second older class. It had been a year since their mothers entered here.

Mrs. Nakagawa wrote about Aiko who we just talked about in episode 1.

<table>
<thead>
<tr>
<th>May 28, 2010   From the diary of Mrs. Nakagawa, mother of girl Himeko.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What I realized and thought today.</td>
</tr>
<tr>
<td>・ Aiko showed her empty lunch box in order to appeal that she ate faster than usual. I think it is a good relationship to understand her feeling immediately without speaking to her mother.</td>
</tr>
<tr>
<td>・ I feel she has developed because she tries to interact with Himeko and Takako by jumping and clowning, although she had always played with adults not with Himeko. She tries to make friendships with kids of the same age though the expression remains still immature.</td>
</tr>
<tr>
<td>・ Yesterday, Himeko suddenly began to cry in the bath and confessed that “Today, I was told that ‘You mustn’t play with us’ by Takako and Ryoko. What a pity.” I was surprised of her intricate relationship with friends even of four or five years old. I cannot imagine it from her childish character like a runabout being naked. She said that “I cannot be nice with them. It is difficult”, though I thought you got along with them. I realized you already had intricate feelings.</td>
</tr>
</tbody>
</table>

At this time Mrs. Nakagawa understood the meaning of Aiko’s action easily and she felt happy. It was not because she evaluated to eat faster but because Aiko, who couldn’t eat much, tried and succeeded to eat fast. It was sympathy rather than praise. Mrs. Nakagawa could catch the heart of the child because she participated in its daily life. Thus, the mother encouraged Aiko to develop.

Mrs. Nakagawa also realized that the relationship between Himeko and her other friends gets intricate. Some Japanese children keep their worries in mind because they think having a trouble is bad and feel ashamed. In that case, children don’t like to be
asked about their worries. Getting over this kind of trouble needs complete trust that the mother is always loving and saving me and a good balance of relationship between child and mother.

The most important thing for the mother is to understand the child's feeling and to give a support which the child needs. Maybe it is only to hear. Mrs. Nakagawa understand that Himeko developed to have intricate relationships. She may regard Himeko's friendship with Takako and Ryoko more mature than before, prepare to support and advise her when Himeko needs it.

Children greatly develop in a group. Watching the growth of child in a group is very important to understand a child's behavior and mind. As the mother participates in KAC, she can be a good supporter of her child as she knows the world of children.

**Episode 3  Mother's development through child caring.**

Mrs. Furuta is the new comer of this school. Mrs. Gamou has spent five years here.

<table>
<thead>
<tr>
<th>May 7, 2010   From the diary of Mrs. Furuta</th>
</tr>
</thead>
<tbody>
<tr>
<td>What I moved yesterday</td>
</tr>
</tbody>
</table>

Suddenly, I heard a loud voice and found that Mrs. Gamou scolded Jun. It was so serious that I couldn't stop to watch them. I heard Mrs. Gamou was saying “It's against your interests!” from a distance. I didn't know what he had done, but I was moved by her serious attitude. How wonderful she could scold another child so serious. It's impossible if she didn't love him as her own child. I am happy to enter this school. I hope to become a mother who can scold other children seriously.

As I mentioned before, all mothers take care of all children while cooperating with each other. But it is difficult for newcomer mothers to deal with other’s children as their own especially when they must scold a child, for example when a child acts dangerously for others or hurts others feelings. Newcomer mothers tend to hesitate about cautioning because they think that they should not intervene the childcare of another household.

Mrs. Furuta got to hope to become like Mrs. Gamou in the future because she found what mothers should be like in Mrs. Gamou. She thinks that it is important to accept the feelings of the child. She regards Mrs. Gamou as a good model because she can consider the feeling of all children and doesn't take a passive attitude towards social
pressure.

The merit of making good relationships is not only the support of child caring. A newcomer mother encounters various people who have various identities and ways of thinking. Sometimes she got moved by others. At other times, she must manage a conflict of opinions, reconstructing her view of life and child caring. KAC is the place to learn human relationship and to find their own way of child caring through a group life.

**Episode 4  Making reliable relationships**

The diary was written when Mrs.Nakagawa could not come to the school because of her injury. For a while, Mrs.Baba, who is the mother of Takako, took Himeko to the pre-school. Although Himeko spent discouraging days here without her mother, Mrs. Baba and other mothers helped her.

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June 18, 2010  From the diary of Mrs. Nakagawa.

・ Since I got injured on June 6, I had been helped by mothers of second older class. I was not good at relying on others though I was always relied by others and overcame hardship by myself. But in this time, it was hard for me to take care of Himeko by myself, though Himeko also helped me. I could depend on Mrs. Baba and other mothers. Everyone helped us. The injury was unhappy, but I felt very happy to find the kindness of my friends for this week.

・ It is the best treasure to get many friends who are kind to me like a family. I am happy that I have found myself to be pleased with the development of kids, even not in the case of Himeko, and to love all kids. I am also happy that kids always trust to other mothers even if she is not his mother. I want to appreciate it.

As I mentioned in episode 2, Mrs.Nakagawa understands the character of other children well and takes care of them. She is so sensitive and honest that she always helps other mothers. Her injury ended up to be a good opportunity for Mrs.Nakagawa to learn mutual aid.

Other mothers also understand many children and support each other to take care of them. Bringing up all children by all mothers, they can make good, reliable companions.

**Conclusion**

As I mentioned before, KAC is the place where mothers help each other to take care of children. By learning various ways to care children, they develop as a mother
together with their child.

KAC offers the chance to participate in children and to make a bond between mothers. These also mean to learn from others and to consider about diversity of individualities. In order to make a good community for childcare, it is necessary for mothers to be thoughtful of all children and all mothers. The goal, creating a community in which everyone can coexist, is connected with making a peaceful world.

Children give us many chances to reconsider about our lives. Often they conflict with their friends but they surely seek to the ways to make up. They don’t fix the relationships when it is in bad condition. We can learn to coexist from children. Having the purpose to raise children connect with many people. People can make a better world if they hope for the common future.
Title of the submission: TEACHER EDUCATION: FROM EDUCATION TO TEACHER SUBSTANCE AND PRACTICE

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TEACHER EDUCATION: FROM EDUCATION TO TEACHER SUBSTANCE AND PRACTICE

Abstracts

This article aims to reflect the trajectory of the teacher from the perspective of building and rebuilding the knowledge of the professional in education; it shows the teacher constituting the development of his knowledge-substance and knowledge-practice over the course of teacher performance, which makes each professional unique, though they consist of the same feelings and the same needs. These perspectives are made salient in the view of authors such as Tardif, Maués, and others. The methodological proposal used is naturalistic-constructive. This article deals with the difference between a mathematician and a Mathematics teacher, and highlights the aspects relevant to classroom practices in this discipline. The importance of practices that are reflective, critical and allied to theory is also highlighted. The characteristics pointed out in the text with respect to teacher education evidence the need for general cultural education, that is, the education of a “civilized man”. This characteristic, when constructed, enables the Mathematics teacher to relate the content of this discipline to the daily situations of the student’s life, thereby establishing the meaning of the discipline for the student.

Keywords: Teacher Education, Mathematics, Mathematics Teacher

INTRODUCTION

Every teacher, before becoming one, has been a student, and certainly innumerable experiences, as a student, have an impact on the learning process and, by extension, the teaching process, since teaching and learning are interwoven.
The teacher’s first contact with the teaching career is like an object of study for other teachers. This means to say that teachers, apart from aiming to achieve determined objectives in education, also work on an ‘object’, which is the student (Tardif, 2002). Tardif, upon identifying students as objects, sees them as human beings who, while socialized, are individualized, unique, and each one has particular characteristics, differences, a particular way of learning, comprehending and understanding, not only the content inherent to the academic context, but also to society as a whole.

This way, the academic, the future teacher, builds his conceptions with respect to teaching and learning, according to the experiences had through different pedagogical conceptions, once each teacher assumes a theory of teaching and learning.

In the perspective considered, the student, upon entering teacher education courses, comes rooted in ‘conceptions’, ‘ways’ or ‘models’ that were experienced as a student. These experiences are capable of aiding in his own education as well as complicating or inhibiting the development of proper teaching practices, since they imply the consideration of a style of ‘teaching’ related to the way in which he had learned.

One study presented by Raymond et al. (1993) points out these conceptions regarding teaching, as implicit and established as certainties, since this is how they learned and how they intend to ‘teach’.

This position appears to imply that being a teacher means taking a ready and complete pedagogical model, and simply repeat it (as if that were possible) like an unchanging technique that can be applied without adaptations or changes necessary for each context.

However, the teacher is directly connected to objects of knowledge, and they are built and rebuilt constantly. Thus, taking a teacher as a model cannot mean adopting a
way of being or doing, since we cannot, given that we are unique, but he should be
reflected in it like a stimulating model to achieve his own objectives which enable the
development of one’s own autonomy, personally as well as professionally.

This autonomy enables the teacher to not only perceive or understand the
academic and social context, but mainly, to perform in a way that improves them,
contributing towards the enhancement of one’s own knowledge as well as those
involved in such contexts.

Only by understanding the circumstances of each context and the consequences of
the processes under way can the teacher build and rebuild his autonomous performance,
that which reflects his understanding of the situation and the possibilities of defending,
improving and even changing them (Contreras, 1997). This represents a pursuit, a
learning process and the construction of a reflective and critical teacher.

Teacher education refers to a series of factors, among them practice, the aspect
which contributes to the construction of knowledge. Certainly, practice in itself is not
only about knowing, but when it provokes a critical effect in knowledge it can be
understood as a learning process, where teachers rebuild their education.

Practice allied with theoretical conceptions structures the identity and the know-
how of the teacher. Maués (2007) reinforces this idea saying that teacher education must
be based on a solid theoretical background. The teacher builds his own knowledge,
complete with sets of knowledge, those currently as well as previously acquired, which
contribute to the creation of a unique professional identity.

The identity and the know-how of the teacher are related to the way in which he
develops his classroom activities, in other words, through the different ways in which he
can contribute to the development of the teaching and learning process. But, for this he
needs to have a quality academic education. An education capable of building and
rebuilding practices and/or experiences acquired and developed by the academic over the course of his life, or, the education of a “civilized man” (Carr, 1995; Kant, 1958; Ortega and Gasset, 1999). The ideas of Carr, Kant and Ortega and Gasset on the education of a “civilized man” implies thinking about civilized not in the ornamental sense, but as a system of ideas about situations, the world and humanity in each era, and being able to reflect and conjecture about them.

The perspectives mentioned above can improve the quality of academic development, and by extension, the quality of teaching, since teaching is a cyclic process, and since working teachers at the teaching levels prior to Higher Education have, for the most part, come from these levels.

QUALITY IN TEACHER EDUCATION: mathematician or Mathematics teacher

Quality university education has lately been an object of concern and international level studies. And one of the indicators pointed out by the World Bank (1995, 2000) regarding a qualification that tends to the demands of the market is a greater adaptability of Higher Education to the demands of the job market. This demand of the academic, apart from competence in a specific area of knowledge, flexibility and awareness of knowledge that, upon graduating from a Higher Education institution, his education is not ready and complete, but demands constant renewal and improvements, in order to keep up with the scientific and technological advancements of the globalized world.

This means to say that there is a need for continuous study, which makes the professional more and more qualified in his profession, being able to contribute with greater success to his area of performance. In this context, the graduate programs, with their relevant research, respond to educational needs, improving teaching in the institution itself and by extension the educational quality of the previous levels.
A quality teacher education, whether from an undergraduate or graduate program, or a continued education course, is a relevant aspect in the teaching and learning process for all levels of education. The teacher is a fundamental part of this process.

Teacher competence is not summed up in a technique composed only of skills specific to his discipline; in other words, “the teacher is not a technician or an improviser, but a professional who can use his knowledge and his experience to develop himself in preexisting practical pedagogical contexts.” (Sacristán, 1995, p. 74).

Understanding teacher professionalism goes beyond knowledge and skills: it includes attitudes, behaviors and values that form the particularities of the teacher. Being a teacher means being capable of programming one’s own program of professional development. It means being open to learning as a whole, being an investigator in the whole of the teaching profession, to know how to adapt the content of the discipline to the needs of the job market.

The needs of the area of teaching Mathematics go far beyond knowledge of Mathematics. They mainly require knowledge of how to teach it. In this sense, teacher education in this area requires a set of strategies that contribute to better teaching, and consequently better learning. This set of strategies refers to differentiated learning activities, such as using games, mathematical modeling, expository classroom dialogues, and tutorial services, among others. This diversified set of methodological practices will be understood here as “good practices” for teaching Mathematics.

When “good practices”, mainly in Mathematics, are experienced by academics, they can be learned, and then applied to their own teaching practice. However, it is known that for a differentiated teaching practice, there are various factors that are involved, like for example, the organizational structure of the teaching institution where they will be taught. Nevertheless, the use of good practices for teaching Mathematics in
academic development enables the students to learn, to compare and contrast new information from known information. This means to say that one is collaborating towards the education of a critical and attentive teacher, in other words, enabling the construction of teacher autonomy.

This suggests, then, that the teacher who only ‘professes or teaches’ should start to rethink his role as an educator. The teacher who is aware of his teaching role needs to answer to the demands of the job market, which means to say that teaching Mathematics needs to be aimed at applicability; that is, the student needs to learn how to use and perceive where to use Mathematics from school in his daily life. Learning needs to be meaningful for the student (Ausubel, 2000). Studies in the area of Mathematics emphasize the importance of teaching aimed at meaningful learning for the student (Nuthall, 1997; Good, Grouws and Ebmeier, 1983).

The National Council of Teachers of Mathematics (NCTM, 1989, 1991, 2000) emphasizes teaching Mathematics aimed at understanding and applications. Exercises aimed at the capacity to explore, conjecture and reason logically, as well as use a variety of mathematical models effectively to solve non-routine problems. The idea of developing Mathematics this way is based on the reasoning that this discipline is more than a set of concepts and skills to be dominated, it includes methods of investigation and reasoning, means of communication and notions of context. But for this fact to occur in the classroom, the teacher needs to be capable of using a variety of practices in the classroom that contemplate such needs.

Good teaching practices in Mathematics contribute to learning being able to keep up with scientific and technological progress. Teaching this discipline cannot be limited to reproductions or labeling and identifying things, it needs to be aimed at production; in other words, the student must know how to solve problem situations present in his day to
day life, to apply Mathematics to their social context, and not only in situations presented in the classroom, since Mathematics is one of the strongest factors of social progress, due to its absolute universal dominance over all other disciplines, even the native language.

However, in classroom practice, what we see are practices contrary to teaching which enables the student to build his mathematical thinking. Most students do not use Mathematics from the classroom in real life, they learn how to do mathematics exercises, but they do not learn why or what to do them for; that is, they cannot see where to apply Mathematics in real contexts (Zaslavsky, 1994; Whitney, 1987).

This can be related to the resistance and/or the difficulty of many students in learning Mathematics, since it is being worked on in a very decontextualized way, disconnected from thought, from action and from understanding; in other words, mathematical content is approached in an instructional way, and mainly, algebraic. This denomination is used in a pejorative sense, to designate that which is complicated, attributing meaningless memorizations and repetitions to Mathematics, and not to the algebraist mathematician himself.

Algebraist teachers, according to teacher José Ferraz de Campos, waste time “[…] by proposing and cramming the students with abstract, uninteresting and fastidious difficulties, instead of searching within the endless wealth of facts and circumstances from ordinary life, the necessary data for organizing useful problems.” (apud Tahan, 1961, p. 62).

Perhaps this algebraist influence is due to teacher education itself, which often falls short of the necessary minimum. Whether it is easier to be algebraist with the students, instead of thinking with them, discussing and/or providing them with discussion and/or understanding, since, providing an opportunity for understanding requires courage and mainly a holistic command of the discipline, which is sometimes difficult for a teacher
from this area, and certainly much more difficult for those with only a general education and those prepared to teach in the initial grades.

There is also a certain discrepancy between what is understood as a teacher of Mathematics and a mathematician. There is, according to Fiorentini and Lorenzato (2006), a relative difference between the two: the mathematician is directed towards Mathematics in itself, while the teacher/educator mathematician conceives it as a means, a tool for student development, trying to promote education through Mathematics.

One attributes the algebraist nature of the students to the algebraist teacher; that is, he is not a Math teacher and not a mathematician, seeing that the latter aims to produce new knowledge and mathematical tools that enable the development of the Science, while the former has his teaching practices focused on the student. If this teacher is not a mathematician and not a teacher of Mathematics, what is left for him to be is an algebraist.

According to Fragoso (2001), routine is parallel to algebraism. The algebraist practice is a symptom of routine, provided by improvisation, that is, there is no class preparation. Even if one has broad experience (or repetition), planning is still necessary, in order to avoid the lack of variety and to make the classes more dynamic. But, for this, it is necessary to have a teacher who craves for improvement, who is concerned with the evolution of knowledge, who has a quality education and uses it in his teaching practice. According to the National Curricular Parameters, “part of the problems referring to teaching Mathematics is related to the teaching education process, with respect to initial education as well as to continuing education.” (Brasil, 1997, p. 24).

Through the whole attributed to the Math teacher, one can say that it is not interesting for him to know ‘a lot of Math’; what matters, is knowing how to teach it well, since, in the teaching and learning process, he is a guide, an advisor, the one who
organizes and creates learning conditions which are able to spark the interest of the
student and encourage him to act, to think mathematically and to learn. However,
knowing how to teach Math is not an easy task; this requires constant study. This enables
the Math teacher to better combine theory and practice, to diversify his teaching
strategies (good teaching practices), to discuss and share experiences or knowledge, in
other words, to improve his methodology.

Martinez and Cervone (2008) claim that research has proven that an improvement
in the results of student learning is directly connected to improvements in teaching
practices. Stein (2001) argues that better teaching practices in Math include activities
centered on important mathematical ideas, the use of multiple representations of concepts
as well as of the procedures involved, which can be solved through innumerous
strategies.

Some authors present the dissemination of good teaching practices, such as aspects
relevant to quality higher education (Chickering and Gamson, 1987). Carrol and
McConchie (1998) analyze the advancement of the quality of Higher Education based on
the conception of learning organization; in other words, learning at this level of teaching
needs to be connected to good practices, since they contribute to a quality university
education, as well as to the quality of the teaching institution.

It is thus necessary to have a quality university education, which enables the future
teacher to develop good teaching practices, that is, an education that enables the
construction of a methodology capable of improving the teaching and learning process of
Mathematics, through multiple teaching strategies, and not simply with the use of “spit
and chalk”.
THE TEACHER OF MATHEMATICS: good practices permeating his work

Every teacher, inevitably, adopts a pedagogical perspective; that is, they use teaching and learning theories, since pedagogy is nothing more than the teacher’s practice, in which he is constantly exposed to situations that only he can solve, without recipes or models, but within his capacities and limitations. In this sense, the condition that there is no such thing as work without technique extends to the issue that there is no teaching and learning process without pedagogy. This means that pedagogy is aimed at all of the aspects that can influence this process, seeing that the content to be taught requires necessary transformations and adaptations in order to be understood by the group that is being ‘taught’, making the management of the subject matter a pedagogical challenge. To overcome this challenge, the teacher needs to have total command of the content, which facilitates and enables the development of unique techniques and/or those adapted to the situation, in other words, the good use of a set of good classroom practices.

One cannot say that a methodology or practice is better than another, but that a set of them can contribute to the better learning of Mathematics. The conception of good teaching practices, especially in teaching Mathematics is pointed out as a good path that provides different forms of teaching, hence different forms of learning. This is essential to the teaching and learning process, since this way each teacher is unique, the students are as well, and the different forms, practices, or paths used for learning enable the contemplation of different learning styles, that is, they increase the chances of a greater number of students learning better.

There certainly is not one teaching practice better than another, which is why the use of a varied set of them can provide a better teaching and learning process. This
refers to a methodological practice aimed at understanding and not memorization, to applicability and not to repetition, in connection to reality and not dissociated from it, since diversity broadens the possibilities of learning. If this practice is used and developed for teaching Mathematics, this discipline can become easy, feasible and interesting for the student, since he begins to understand it and apply it to his daily life.

The methodological suggestions or diversity of teaching strategies are formed by a vast spectrum of practices, which can be adapted, improved or rejected by the teacher, depending on the situation where they are given applicability. Within this set of practices, the use of analogies and metaphors is mentioned; problem-solving; mathematical modeling; the formation of study groups and monitoring; classroom research; the use of para-educational as well as educational books; practicing Mathematics in teaching workshops; the use of mathematical games; interdisciplinarity; transversal topics; the use of new technologies and other situations that contribute to non-routines in the classroom.

However, a list of diversified activities and/or practices can become valid only when enriched by the creativity and dynamism of the teacher, but this follows from a quality teacher education, from a continuous process of continued education.

FINAL CONSIDERATIONS

When the teacher builds his practice over the years, transforming his knowledge into an identity and know-how, he is investing in his own teaching methodology, providing quality teaching, hence a good learning process. When the teacher thinks about his work in a critical and reflective manner, reinforcing his ideas and consolidating them with relevant theories, he is being a true teacher, since he is
pursuing ways to improve his work, that is, to improve the teaching and learning process.

Observe that teacher education does not take place in a decontextualized manner or from one day to the next, it happens, it is built and rebuilt in time and with time. It is never ready and complete, it is under constant development. But, for this, the teacher needs to be present and be different over time and not just go through the motions.

Teacher education, with an emphasis in this article on teachers of Mathematics, brings attention to an education aimed at the capacity to use different teaching and learning strategies, that is, the relevance in adjusting the guidelines of good practices. They can provide a continuous improvement in the quality of learning, increasing, this way, the academic success of the students and answering the scientific and technological demands of the 21st century.

REFERENCES


COLLABORATION AMONG THE TEACHER EDUCATION INSTITUTIONS: 
THE PAFTE-CAVITE EXPERIENCE

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Abstract

The Philippine Association for Teacher Education (PAFTE) is a network of caring and competent teacher educators engaged in continuing education, innovations, and scholarly works (PAFTE, 2008). When the dean of the College of Education of De La Salle University-Dasmarinas (DLSU-D) became the auditor of PAFTE Region IV-A Chapter in 2003, she, together with two other DLSU-D faculty, organized the provincial chapter. This was a response to the challenge posed by the Commission on Higher Education (CHED) IV-A Director to share the university’s expertise with the other teacher education institutions (TEIs) in Cavite.

Through documentary analysis and key informant interview, this paper presents the historical growth of the association from 2004 to 2010 focusing on its role in providing its member schools with standardized policies in teacher education and sponsoring training programs for teachers and students that aimed to equip them with the necessary competencies, making them more competitive yet retaining their individual personalities. Specifically, the paper discusses (a) the specific programs sponsored by the association, (b) the benefits received by the member schools, (c) the issues and concerns that threatened the sustainability of the association, and (d) the recommendations for possible areas that can be strengthened.

Keywords: collaboration, teacher education, school partnership

Introduction

Collaboration is defined simply in the Webster’s Dictionary as the act of working together. This term is used synonymously with teamwork, partnership, alliance, networking, and cooperation. This is oftentimes used not only in the industry but also among the government and nongovernmental units, as well as in the schools. Collaboration among schools has been a common by-word. In the Philippines, schools are challenged to engage in collaborative or networking activities to develop linkages for faculty and student exchange programs; to share best practices in teaching and learning and/or school management and supervision; to provide opportunities for joint training programs; to do cooperative researches; to provide venues for a short visit; or to exchange books, journals, teaching materials, scientific papers, research reports, and other academic information. These are generally the contents of the Memorandum of Agreement (MOA) or Memorandum of Understanding (MOU) entered into by the two schools collaborating with one another.
Slater (2004) mentioned that “the ability to work collaboratively with others is becoming an essential component of contemporary school reform”. She further stated that “as school systems in many countries have restructured their organizational features and activities, the need to develop a more collaborative approach has been a part of the direction”.

In conjunction, Inger (1993) and Garmston and Wellman (1999) discussed the need for a meaningful teacher collaboration. They asserted that “teacher collaboration produces significant benefits like improving student learning”. Likewise, “collaboration and collective learning are considered as part of the characteristics and requirements in forming professional learning communities,” according to DuFour and Eaker (1998) and Hord (1997). On the other hand, the National Staff Development Council (2010), as well as Riel and Fulton (2001), highlighted the role of technology in collaborative professional learning where they will be “able to share ideas, strategies, and tools with one another through interactive ways”. All these point to the importance of “collaboration or the formation of partnerships amongst schools” which is a trend that is noted in society today (Slater, 2004).

The formation of partnerships among schools is not a new concept among Philippine educational institutions. The Mendiola consortium, which is based in Manila and was founded in 1974, has been a learning community for more than three decades. It derives meaning and success from the fruitful collaboration of the member schools’ involvement in the areas of research, faculty development, student development, and community service (Mora, 2009). The South Manila Inter-Institutional Consortium, which was also founded in 1974, is another example of a successful partnership that primarily aims to foster collaboration among member-institutions by maximizing resources through joint course offerings, restructuring of curricula, exchange of information and faculty for academic excellence, and sharing of facilities (Banaga, 2009).

The formation of partnerships among schools does not only happen through these samples of school consortia. Partnerships among educational institutions also happen when professional organizations whose leaders are academicians extend the membership to institutions and not only to individuals. This is the case of the Philippine Association for Teacher Education or PAFTE.

**Statement of the Problem**

This study presented the historical growth of the Philippine Association for Teacher Education (PAFTE) - Cavite Chapter since its inception in 2004, focusing on its role in maintaining strategic alliance among the TEIs in the province.

Specifically, the following questions were answered in this study:

1. What programs were sponsored by the association for the Education students, for the Education teachers, and for the cooperating teachers and principals?
2. What benefits were received by the Education students, the Education teachers, and the cooperating teachers and principals?
3. What issues and concerns threatened the sustainability of the association? and
4. What other areas can the association strengthen to improve its services to its members?
Methodology

This study is a qualitative research that specifically used the documentary analysis and key informant interview techniques in gathering the data needed to answer the specific problems of the study. The documents that were studied and analyzed were the following: PAFTE-Cavite minutes of the meetings, letters, resolutions, attendance reports, and evaluation forms, as well as the issues of DLSU-D Newsette and DepEd endorsements. For the key informant interview, there were six officers who were interviewed regarding the benefits gained by the TEI students and faculty on PAFTE-Cavite activities, problems encountered in terms of these activities, and the areas to improve on and their recommendations for such improvement. The officers interviewed were the active members of PAFTE-Cavite Chapter. Aside from these officers, the secretary of the former dean of the College of Education (COE), DLSU-D was also interviewed since she was the key person who has contacts with all the member schools.

Findings and Discussion

PAFTE is a network of caring and competent teacher educators and is a prime mover for quality teacher education. It is a learning community of teacher leaders engaged in continuing education, innovations and scholarly works. It is an advocate of the teaching profession and a prime mover for national development (PAFTE, 2008).

PAFTE as an organization has the following objectives:

1. To promote and maintain unity, professionalism, and excellence among teacher educators, TEIs, and professional teachers;
2. To raise and maintain standards of teacher education and enhance the nobility of the teaching profession through effective leadership and enlightened fellowship;
3. To stimulate, support, and undertake researches, and other scholarly works and innovation that will contribute to the improvement of teacher education;
4. To disseminate new knowledge, information, and materials through publications, seminars, workshops, lectures, conferences, and other forms of continuing professional education activities; and
5. To serve as partner of the Philippine Government in promoting national development through preservice and in-service teacher education.

Membership in the PAFTE is through the regional PAFTE organization. The PAFTE is present in all the 17 regions (Regions 1, 2, 3, 4A, 4B, 5, 6, 7, 8, 9, 10, 11, 12, 13, NCR, CAR and ARMM) of the Philippines. Each region has a complete set of officers and adopts the national PAFTE constitution. Any member should belong to the regional chapter.

At the DLSU-D, the faculty members and administrators of the College of Education (COE) are all members of PAFTE Region IV-A, the university being part of the CALABARZON area. On 24-25 July 2003 during the PAFTE’s 8th Annual Regional Convention, the dean of the COE was elected auditor of the PAFTE Region IV-A while two other COE faculty members were, likewise, elected as members of the Board of Directors (published in Newsette 2003).
In the courtesy call made by the PAFTE Region IV-A officers to the Commission on Higher Education (CHED) Region IV-A Director, Dr. Isabel Inlayo, on 16 June 2004, she discussed the importance of provincial clustering among schools. This concept was in line with CHED’s thrust of monitoring higher education in the country’s different regions. She recommended that areas for improvement in curricular offerings, identified through self-assessment, be met through the sharing of both material and human resources by schools within the same province (published in Newsette, 2004).

Responding to the challenge posed by the CHED Region IV-A Director, the COE dean called for a meeting of the deans and/or heads of TEIs in Cavite on 27 August 2004. Aside from DLSU-D, this was attended by 11 other TEIs as follows: University of Perpetual Help of Rizal-Molino, Colegio de Salitran, Immaculada Concepcion Colleges, Rogationist College, Imus Institute, Southern Philippines Institute of Science and Technology, Philippine Cambridge School, Emilio Aguinaldo College, Cavite State University-Indang, St. Jude College, and Eulogio “Amang” Rodriguez Institute of Science and Technology-GMA. The presiding officer explained that the meeting was called for to organize a PAFTE provincial chapter, which was in line with the thrusts of CHED IV-A and PAFTE, and to pave the way for the sharing of resources among the Cavite TEIs, thereby further improving the quality of education offered in the said institutions. The said meeting also resulted in the discussion of the following items: involvement of student teachers, seminar-workshop for the faculty and administrators of the TEIs, as well as for the cooperating teachers and principals, memorandum of agreement for the Student Teaching Program, Observation and Participation/Community Immersion, and review center for Licensure Examination for Teachers (LET) in Cavite (reflected in the 27 August 2004 minutes of meeting).

In the preceding meetings called, the membership of the association expanded to include these other schools: Philippine Christian University, Western Colleges, St. Francis of Assisi College, University of Perpetual Help of Rizal-GMA, Cavite State University-Rosario, Cavite State University-Naic, St. Joseph College, Polytechnic University of the Philippines-Maragondon, and Olivarez College, increasing the provincial membership to 21 schools. This was the start of the collaboration of teacher educators in Cavite which resulted in the sponsorship of 11 activities from year 2005 to 2010.

Table 1 reflects the 11 activities that were sponsored by PAFTE-Cavite since its inception in 2004. Five of these activities were specifically for the fourth year Education students aimed to further hone their skills in teaching and managing classroom situations. Three were allotted for the cooperating teachers and principals who helped the TEIs in developing the needed teaching competencies of the future teachers. Two were intended for the faculty members as they were helped in improving their assessment skills and their ability to prepare appropriate syllabi. One was intended for the graduates of these TEIs so that they would be ready to take and pass the board examination. This activity, however, in spite of the good number of attendees as reflected in the attendance sheet, was not repeated. There was also no record on how they performed in the board exam, which could have been the best evaluation for the success of the activity.

It can also be gleaned from the table that the topics for the activities sponsored by the association were relevant to the needs of the participants. However, the number of activities sponsored for
Each year was not equal and there was a year, 2008, when no activity was done. This was commented on by one of the officers of the association when he was interviewed.

Further perusal of the documents revealed that aside from the activities listed, PAFTE-Cavite also paved the way for the Cavite TEIs to be members of the National Council of Education Deans (NCED) and to attend the workshop it sponsored on the “New CHED Teacher Education Curriculum” held on 27 September 2006. The workshop provided details to current course descriptions and formulated selected course syllabi in the undergraduate areas of specialization of science, mathematics, language, social studies, and special education.

Through the key informant interview, it was pointed out that one major accomplishment of the association was the endorsement of the Department of Education, Cavite Province on the standardization of policies for the Student Teaching Program. This was made possible through a meeting attended by the deans of the Cavite TEIs, the Assistant Schools Division Superintendent and one Division Supervisor from the Department of Education, Cavite Province on 2 September 2005. They agreed on the amount and distribution of the practicum fee paid by the student-teachers. A sample of the MOA for the Student Teaching Program was also drafted. This means that cooperating schools will no longer compare the practices of two or three TEIs who sent their student-teachers for immersion.

Table 1. List of Activities Sponsored by PAFTE-Cavite

<table>
<thead>
<tr>
<th>Date Sponsored</th>
<th>Title of the Activity</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 January 2005</td>
<td>Seminar on “Envisioning Teachers as Agents of Change”</td>
<td>• 4th year Education students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Student Teaching supervisors</td>
</tr>
<tr>
<td>16-31 May 2005</td>
<td>12-day LET Review Package</td>
<td>• Graduates of TEIs who are not yet LET eligibles</td>
</tr>
<tr>
<td>2 September 2005</td>
<td>Forum on the “Standardization of the Student Teaching Program”</td>
<td>• Representatives from the Department of Education-Cavite Province</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deans of Cavite TEIs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Student Teaching supervisors</td>
</tr>
<tr>
<td>22 October 2005</td>
<td>Seminar-Workshop on “Guidelines and Deployment of Student Teachers” and “Book Writing and Developing Critical Thinking”</td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Student Teaching supervisors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cooperating teachers and principals</td>
</tr>
<tr>
<td>18 November 2005</td>
<td>Seminar on “Image and Teaching Skills Enhancement for Global Educators”</td>
<td>• 4th year Education students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td>24 November 2006</td>
<td>Seminar on “The World of Teaching in the Century of Change”</td>
<td>• 4th year Education students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Student Teaching supervisors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cooperating teachers and principals</td>
</tr>
<tr>
<td>15 February 2007</td>
<td>LET Workshop with Dr. Leus</td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Participants</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4 May 2007</td>
<td>Seminar on “Developing Learner-Centered Course Syllabus”</td>
<td>• Other DLSU-D faculty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td>15 November 2007</td>
<td>Seminar on “Classroom Management”</td>
<td>• Other DLSU-D faculty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td>30 May 2009</td>
<td>Orientation to the Cooperating Schools on the Field Study and Practice Teaching Programs of the TEIs (Experiential Learning Courses)</td>
<td>• 4th year Education students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
<tr>
<td>11 December 2009</td>
<td>Seminar on “Understanding by Design (UBD)”</td>
<td>• 4th year Education students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty of Cavite TEIs</td>
</tr>
</tbody>
</table>

Aside from the list of PAFTE activities, the benefits received by the participants were also identified. From the interview conducted with the PAFTE-Cavite officers, it was revealed that the activities sponsored by the association were beneficial to the participants, both students and faculty. Specifically, they enumerated the following as the benefits derived from these activities:

1. PAFTE activities provide opportunities for faculty and students to grow professionally. The various activities keep the faculty members and students abreast with the latest development in the field of education, provide networking and linkages for both faculty and students, provide opportunity for exchange and adoption of best practices done in other member institutions and serve as the clearing house for coordinating CHED policies with DepEd for better implementation of CHED memoranda regarding teacher education.

2. The faculty members and students were provided updates on the latest issues about the latest trends in education. They were also given the chance to know the latest programs of DepEd and CHED. They were able to meet people who were also in the field of education. Students and faculty got to meet their counterparts from the different teacher education institutions in the province. They were given the opportunity to exchange notes with their counterparts from the different educational institutions as well.

3. The activities of PAFTE-Cavite have brought new life to prospective teachers. Definitely, they have learned a lot not only to renew their commitment to teaching but they also gave different colors to those who are shifting to teaching even if they are not education graduates.

4. Students gained more knowledge regarding new teaching strategies and met new friends from the other TEIs. The faculty members learned new technologies and methodologies from the seminars given by PAFTE-Cavite.

5. Students are more aware of the new trends and new thrusts of the College of Education. They become well-informed after attending the seminar. The faculty members learned different methods and new styles.

6. Students were updated and they learned new information. The faculty members learned new things after they attended the seminar.
In spite of these benefits, the officers were also asked about the issues and concerns that threatened the sustainability of the association. Four of them said that they experienced no problem with the association and its activities. One mentioned about the problem on venue not being able to accommodate all the student-participants. Another one said that there was a time when there were very few attendees, hence, there was an excess in food and hand-outs. The problems mentioned were all due to poor communication among the organizers and the participating schools.

Perusal of the documents also revealed that one of the concerns faced by the association was the irregular attendance of half of its members. From the 21 member schools, usually only 10 were represented in the meetings called. This probably caused the problem in the attendance of the participants since not all were present to disseminate properly the information discussed in the meeting.

When asked about the other areas that the association can strengthen to improve its services to its members, the interviewees gave the following recommendations:

1. PAFTE should continue to provide more activities to upgrade the quality of teacher education in the province and to increase the passing rate of the different member institutions. In this line, it is recommended to involve all TEI representatives in planning annual activities and create various committees to work on the above undertaking;

2. There is a need to have a long preparation, specifying the duties of the officers; and

3. Junior PAFTE membership should be continued.

The recommendations focused on the provision of more activities. This implies the need of the member TEIs for a training program for both their faculty members and students. In relation, to make these activities more successful, there is a need to plan out carefully the activities and to ensure that each officer performs the tasks assigned to him/her. The last recommendation is worthy to consider since the creation of Junior PAFTE, composed of fourth year Education students, paved the way for better camaraderie among the students. Their leadership skills were also honed since they were allowed to work together in some of their activities.

Taking all these things into consideration, the officers were asked if the PAFTE activities are worth continuing. The resounding answer was “Definitely YES, PAFTE-Cavite activities are worth continuing because they serve as an avenue for updating the TEIs in the province of the changes and development in education. Likewise, PAFTE-Cavite serves as a very good partner in preparing the future teachers in facing the challenges of the profession”.

Summary

The study showed the growth of PAFTE-Cavite. The various activities sponsored by the provincial chapter have impacted on the training not only of the Education students but also of the Education faculty and the cooperating teachers and principals. They gained new knowledge as they learned updates on the latest developments in the field and they collaborated with each
other. This collaboration resulted in a strong partnership among the member schools and produced harmonious working relationships among the faculty and the students. Problems met were very minimal and were easily solved. The association shows a strong leadership but needs more open communication and more support and cooperation from the members. There is a need for the provision of more activities and the revival of the Junior PAFTE membership. All in all, PAFTE-Cavite was able to perform its role as a provider of standardized policies in teacher education in the province and as a sponsor of training programs for teachers and students that equipped them with the necessary competencies, making them more competitive yet retaining their individual personalities.

References:


DepEd’s indorsements dated 26 September 2005 and 2 December 2005


http://www.pafte.org (uploaded in 2008)


EMERSION ON DEVELOPMENT ORIENTATION OF CAVITE
PROVINCE PNP: IMPLICATION TO POLICE ENHANCEMENT PROGRAM

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ABSTRACT

This study was conducted to analyze the emersion on development orientation of the Cavite Province PNP and its implications for police enhancement program. The survey instrument used was the Modified Development Value Orientation for Law Enforcers, which was anchored on International Studies. This value orientation was composed of the following: commitment to innovation, action propensity, concern for economic development, and concern for economic equality, concern for public participation, local commitment, conflict avoidance, and selflessness.

The 213 respondents were subjected to the Modified Development Value Orientation of Law Enforcers. The survey instruments used in this study were subjected to dry run validity in the selected Police Stations in the Province of Batangas. The data gathered in the final revision of the survey questionnaires were used to answer the sub-problems of the study.

Based on the results of the study, the strengths and weaknesses of the men-in-uniform will serve as re-training to enhance police orientation in order to address the needs and demands of the community; to serve as inputs in the formulation of the new policies and other related decisions of the PNP, for the revitalization of the police career, education and training and for the improvement of the police efficiency and effectiveness.

Introduction
Development is a multidimensional process involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty.

There are three basic components of core values that should serve as conceptual basis and practical guideline for understanding the inner meaning of development. These core values – sustenance, self-esteem, and freedom – represent common goals sought by all individuals and societies. They relate to fundamental human needs that find their expression in almost all societies and cultures at all times (Todaro, 1997).

Mahatma Gandhi is considered as the forefather of development. His thought on development was focused on development “from below.” The People Power is an example of the development from below which was meaningful and a significant event in the lives of the Filipinos. The dramatic radical change of the country was felt not only here but also in the entire world.

For development to take place, development orientation is necessary. Development orientation is grounded on the concept of development. This is a set of values for development as spelled out by the International Studies of Values in Politics. As such, it was originally used to measure the degree of commitment of peace officers. It also measured the agreement and disagreement of people on their development values.

The thrusts of New Public Administration include: an emphasis on the values that animate both the discipline and its practitioners, a dissatisfaction with bureaucracy and thus a search for alternative delivery systems; and a
discovery that policies and programs need direct attention, not just through the staff functions. Thus, the content areas for this variety are studies on public service values and ethics and accountability, alternative delivery systems, and public policy and programs administration (Cariño, 2002: 8).

On public service values, two papers were published in 2002. They predated the American new PA by almost a decade, suggesting that the Philippine concern on this issue has not been triggered by any colonial mentality. Bureaucratic self-discipline was the focus of the third paper published in 1973. In the same year, a set of values collectively called “development orientation” was conceptualized and public groups of public servants, notably career executives and school administrators as to their degree of development – orientedness. This was a research theme consciously made to serve the goals of development administration with its concern for commitment to change and growth (Cariño, 2002: 9).

In the foregoing statement, what is needed is a commitment to development. This commitment must be reflected in the expansion of the role of the police workforce as social agents of change.

**Background of the Study**

Widespread abuses and corruption are offshoots of police involvement in partisan politics. This paved the way for Republic Act 4864 which was otherwise known as the *Police Act of 1966: The Police Reformation and Professionalization Act*. To carry out its objectives at undertaking reforms in police performance at national level, the National Police Commission (NAPOLCOM) was created under the Office of the President. Despite its merits, the Act still failed obviously because of the “tayo-tayo” system. This
Act was short-lived as the Martial Law regime militarized the police.

Section 12, Article XV of the 1973 Constitution called for the establishment of an Integrated National Police (INP). Under Presidential Decree No. 765, the INP was established and composed of the Philippine Constabulary as nucleus and the INP as component under the Department of National Defense (DND). The PC remained and continued as a major branch of service of the Armed Forces of the Philippines (AFP). The power and functions of NAPOLCOM were transferred to the INP. The PC-INP then became a useful tool for intimidation and repression of the citizenry by the Marcos martial rule.

Learning its lesson, the Aquino Administration saw to it through its 1987 Constitution that the “State shall establish and maintain one police force, which shall be national in scope and civilian in character, to be administered and controlled by a National Police Commission.” Implementation of this mandate was effected by R.A. 6975 also known as “The Act Establishing the Philippine National Police under a Re-organized Department of the Interior and Local Government, and for Other Purposes”, which laid down the restructuring of the police organization. Coming into force on January 2, 1991, the PC was dissolved and thus, ceased to be the nucleus and organic component of the police organization. The Philippine National Police (PNP) was born.

Now, after nine years, the members of the Senate claimed that the civilian character of the PNP is not actually present or at least has not materialized in full. The widespread hysteria over the upsurge of organized crime in the nation and the scandals that plague the PNP organization pushed
the upper chamber to pass a PNP Reform Law. The senate bill version included a section on the “civilianization” of the PNP organization, thereby abolishing the rank classification of the PNP under R.A. 6975.

The final version is a consolidation of Senate Bill 2215 and House Bill 10089 which was signed into law on February 25, 1998 and was later known as R.A. 8551 or the “New Police Act of 1998: An Act Providing for the Reform and Re-Organization of the PNP and for Other Purposes”. The titles and rank classifications under R.A. 6975 were retained, however the educational qualifications for PNP members were advanced. This law is aimed at professionalizing the police service even more with the advent of higher education as a pre-requisite for admission in the police force. Field grade police commissioned officers are not spared the new requirement through the inclusion of post-graduate education as necessity to become a Chief of Police (COP).

Between the law and law enforcement always stands the policemen. Officers are entrusted with vast powers and they possess wide latitude of discretion to exercise these powers. The policemen must wear many professional hats to perform their roles with skill and success, including those of information processor, community organizer, crime analyst, counselor, street-corner politician, arresting officer, religious preacher, schoolteacher, liaison officer and arbiter. Any of these roles taken individually would require a high degree of education; collectively, they point out necessity for an educated police organization.

It must be frankly admitted that there exists a universal strong prejudice against the police. When strenuous efforts are being made in a police agency
to build up respect for the police and their morale, it is rather ungracious to
dwell on the efficiency of the police. But an understanding of the situation
with reference to crime makes it necessary to state the situation as it generally
prevails, and this means criticisms. The following are of the most common
criticisms, to wit:

- Some of the policemen are not educationally qualified and
  therefore, cannot cope successfully with criminals.
- The policemen are lack of training, and if ever trained, there were
  no sufficient equipment and other teaching aids used in the training.
- The Policemen are receiving less attractive salary as compared to
  other government employees, and therefore, highly qualified and
  competent people are not attracted to law enforcement profession.
- Police service is the last recourse of job hunters who failed to gain
  employment in their field of profession according to their
  educational qualification, thereby making the police service as
  dumping ground for lame duck job hunters, who in the first place
  have no interest in joining the police service, but for the sake of
  employment, they are now members of the PNP.
- The general criticism of the police is that, it is both inefficient and
  ineffective.

The criticisms seemed to boil down to the level and quality of education
of the police. This is a sad reality for the rank and file policemen. Over the
years, the police career education and training has always been considered
one of the rational and fundamental cornerstones for improving police
efficiency and effectiveness. Yet, the idea of continuing professional
education and training for police officers has evoked an awesome amount of emotional argumentation and debate. The controversies usually stretch from the mundane to the sophisticated, centering on the issue such as the benefits of higher learning, its implications on policing, its validity as a legitimate occupational necessity for police, the most type of educational and training experience for them and the quality of such programs available for the police.

Expanding the raison d’etre for police career education and training is a must in order to achieve professionalism. The need for communicative skills and the ability to express oneself capable are dimensions required of present day policemen. Even the most basic level of police communication task, which is report writing and the indispensable skills obtained through career education and training can really add significant dimension.

It must be recognized that the overall educational level of the public is likewise increasing. This poses a subtle, albeit grim obligation for the police. To succeed, they must be provided with the mental psychological tools, which are at least proportionate, if not superior to those of the general population whom they supposedly render public safety service.

A lot of queries delve today on the impact of education on the professionalism of the PNP. Will education really have any bearing or could it effect any change at all in the police services? How will a highly educated police force like the PNP cope with the present developments in crime, the community and globalization? Will the PNP just retreat into the fortitude and contentment of its past to cope with present realities or adapt to the present and future trends?

It is along these points that the researcher felt the need to look into the
emersion on the development orientation of Cavite Province PNP.

Statement of the Problem

This study aimed to explore and analyze the emersion on the development orientations of Cavite Province PNP and its implication to police enhancement program.

Specifically, it attempted to answer the following questions:

1. What is the level of development orientations of the Police Commissioned Officers (PCOs) as regards to the following:
   
   1.1 commitment to innovation,
   1.2 action propensity,
   1.3 concern for economic development,
   1.4 concern for economic equality,
   1.5 concern for public participation,
   1.6 local commitment,
   1.7 conflict avoidance, and
   1.8 selflessness?

2. To what extent is the level of development orientations of the Police Non-Commissioned Officers (PNCOs) as to the following:

   2.1 commitment to innovation,
   2.2 action propensity,
   2.3 concern for economic development,
   2.4 concern for economic equality,
   2.5 concern for public participation,
   2.6 local commitment,
   2.7 conflict avoidance, and
2.8 selflessness?

3. Is there a significant difference in the level of development orientation between the PCOs and PNCOs in the eight (8) development orientation values commitments as law enforcers?

4. How are the demographic profiles of the law enforcers related to the eight (8) development orientation value commitments of the law enforcers? Is there a significant relationship, if any?

5. From the findings, what implications maybe drawn for the police enhancement program?

SCOPE AND COVERAGE:

This study focused on the emersion on development orientation of the Cavite Province PNP and its implications to police enhancement program. The respondents of the study were chosen from seventeen (17) Police Stations in the Province of Cavite. There were 27 Police Commissioned Officers (PCO) or 12.67 percent while 186 Police Non-Commissioned Officers (PNCO or 87.33 percent with a total of 213 respondents.

The 213 respondents were subjected to the Modified Development Value Orientation of Law Enforcers, which was anchored from the International Studies of Value Orientation.

METHODOLOGY:

In this study, the descriptive-normative survey with the questionnaire and documentary analysis technique was used as the research method with the Province of Cavite as the research setting. The data were analyzed through the use of the following statistical tools: percentage, weighted mean, z-test and chi-square.
Findings

From the data collected and the sub-problems formulated, the following are the findings:

1. The PCO respondents indicated that they have high level of development in the commitment to innovation; concern for public participation; local commitment; conflict avoidance and selflessness. These were supported by the obtained overall means of 3.62; 3.52; 3.57; 3.58 and 4.01.

On the other hand, they also revealed that there levels of development orientation were only moderately high in action propensity, concern for economic development and concern for economic equality. These findings were supported by the obtained overall means of 3.32, 3.28 and 3.26.

2. The PNCO respondents have similar development levels were they revealed that they have high orientations in commitment to innovation; commitment to local concern; conflict avoidance; and selflessness. These findings were evidenced in the obtained overall means of 3.63; 3.66; 3.57 and 3.93.

On the other hand, the PNCOs indicated that action propensity, concern for economic development, concern for economic equality, and concern for public participation were moderately high as supported by the obtained overall means of 3.32; 3.30; 3.27 and 3.44.

3. The PCOs and PNCOs significantly differ in their development orientation as to the concern for public participation. This finding was supported by the obtained Z-value of 2.071, which is much higher than the tabular value of 1.97 at .05 significant level. The hypothesis is
therefore rejected.

It is also noted that no significant differences were found between the PCOs and PNCOs level of development orientation in the areas of commitment to innovation; action propensity, concern for economic development; concern for economic equality; local commitment; conflict avoidance and selflessness. These findings were evidenced by the obtained Z-values of .035; .673; 1.460; 1.520; 1.058; .844 and 1.108 which were much lower than the tabular value of 1.97 at .05 significant level. The hypothesis is therefore accepted.

4. The PCOs and PNCOs indicated that educational attainment and length of service in the PNP are significantly associated with the eight (8) development orientation since the obtained chi-square values of 48.623 and 111.074 were much higher than the tabular value of 41.337 with 28 degrees of freedom at .05 significant level. The hypothesis is therefore rejected.

On the otherhand, no significant relationship existed between the eight (8)-development orientation value commitment and the gender, civil status, age bracket and the type of HEIs, the criminology course taken. The obtained chi-square values were much lower than the tabular value at .05 significant level. The hypothesis is therefore accepted.

5. These are implication that maybe drawn from this study such as: revitalize RA 8551 which aimed at professionalizing the police service; organize and conduct more continuing staff development programs; implement the immersion as an approach to criminology education for future policemen; strengthen the career development orientation programs and
likewise consider the recruitment and promotion of more female PCOs to promote the gender development in the Philippine National Police.

Conclusions

From the findings of the study, the following are hereby concluded:

1. The Police Commissioned Officers and the Police Non-Commissioned Officers who are assigned in the different Police Stations in the Province of Cavite are willing to sacrifice for others and to divest one’s own interest for the peace and order in the community. They are also committed to innovate changes in the PNP by creating new ideas or solutions to community peace and order problems.

2. The Police Commissioned Officers and the Police Non-Commissioned Officers in the Province of Cavite strongly believe on risk-taking as important component to effectively and efficiently deliver peace and order services to their constituents in the community through innovations, challenges and changes in the Philippine National Police.

3. There are strong indications that the Police Commissioned Officers and the Police Non-Commissioned Officers have the tendency to effect internal and external changes in the organization of the PNP for better service in accordance with the needs and demands of the community.

4. The Police Commissioned Officers and the Police Non-Commissioned Officers have developed high sense of volunteerism and is willing to share their expertise, experiences and education to others in the community without expecting any reward.

5. There are significant implications that may be derived from this study such as the identification on the strength and weaknesses of the men-
in-uniform which will serve for the re-training to enhance police orientation; may serve as inputs in the formulation of policies and other related decisions of the PNP; revitalization of the police career, education and training that has always been considered one of the fundamental cornerstones for improving police efficiency and effectiveness.

**Recommendations**

From the conclusions drawn in the study the following recommendations are hereby forwarded:

1. Since there are strong manifestations that the Police Commissioned Officers and the Police Non-Commissioned Officers have developed high commitment to police work, there is a need to capitalize on these to strengthen the good qualities through continuing career development programs with appropriate budgetary allocations from the agency concerned to fully implement the programs.

2. There is a need to adhere to the development career doctrine in the entire PNP organization since the police is the most important factor in development which in the process he becomes more self-reliant and at the same time interdependent on one another.

3. Since the police officers have not fully internalize the conflict avoidance which is akin to “pakikisama”, they should be made aware that this value may not contribute to the effective and efficient delivery of peace and order services in the community. This may be done through re-training of the policemen on a periodic basis.

4. There is a need to take cognizance on the implications drawn
from this study. Doing so will make the PNP leadership aware that re-training and immersion program will contribute to the quality service among peace officers in the community.

5. It is recommended that the results of this study be disseminated to all concerned agencies for their information and guidance as regards to the development orientation value commitments of the police work.

6. It is further recommended that similar studies be undertaken particularly on the interpersonal values, personal and values and police work values in order to fully understand the PNP as an organization.
Introduction

A nation needs a protector from any threats, the lives of its people should be preserved, and their rights and beliefs should be protected. Nowadays, terrorism and coercion from the so-called “outside forces” are much unbridled. These outside forces are the different groups of criminals who have their own way of earning the negative way of living and threatening the security of the nation. Crimes committed by these groups of people are one of the main problems of the Philippines and other nations in the world. As a response to these problems, the law enforcement agencies developed different plans and programs to address these needs with the help of the community through its continuous cooperation. The PNP has developed different programs and activities in Police Community Relations and has implemented to persuade support from the community.

Pace (1991) states that understanding the over-all crime prevention, crime suppression, and the limitations of the criminal justice system are needed to understand the complexity of community relation. Relating the purpose of community relations to the contemporary culture and crime is necessary to glimpse the need for improved community relations. Furthermore, he defines community relations as “The total effort of the criminal justice to become a part of the community” (p.5). These factors that contribute to the community relation as a whole are human interaction, human relation, community crime prevention, community interaction and public relations. Citizen, components of the criminal justice system and different institutions especially the
school, should support and cooperate with each other to confront crime.

Community partnerships should begin particularly in school, which is composed of groups of people like students, teachers, staff and administrators within its area of learning. These groups of people play a vital role in establishing partnerships between schools and the police. Both should play on the same team and police visibility is a positive pointer that they are giving guarantee that the schools are safe and conducive to learning.

Presidential Decree 603 states that the child is the most important asset of the nation. Every effort should be exerted to promote his welfare and enhance opportunities for a useful life. The molding of the character of the child starts at home and other institutions like the school, church, the guild, and the community in general should assist the home and the state in the endeavor to prepare the child for the responsibilities of adulthood.

Different sectors and institutions especially the schools are important in helping the country to build a strong foundation and solidity of the future of the children. Furthermore, provincial and national government officials shall see to it that school children and students are provided with adequate school rooms and facilities. Such officials should also see to it that the school environment is free from hazards to the health and safety of the students (Art. 45 PD 603). In the matter of safety and security situation, children’s education can be affected by crime and violence inside and outside of the school. To prevent this obstacle, the school should realize the value of maintaining good community relations, especially with the law enforcement agencies.

According to Pace (2007), mutual trust, cooperation and support of the community and the criminal justice agents are considered as a complex process. The justification of developing good community relations can be best understood from the programs and activities developed and implemented by the community and the police. The police should gain the confidence of the members of the community for them to be able to work hand-on-hand to battle the threats in the society. Support, cooperation and coordination from the different sectors especially the government, school officials and others is necessary in order to solve the problems.

O’Brien (as cited in the work of McCamey, et al., 2003, p.197) pointed out the
nature of police community relations, He states that:

*The central position of the police in the community critically affects all sections of society. The multiple duties of the police at all times and in all areas of the community dictate that they must influence the daily life of each citizen…*

*Unfortunately in recent times, there has been a rupture of mutual trust between the police and some segments of the community.*

In the same light, McCamey, et al. (2003) mention that the encounters between the police and other citizens can become problematic depending on the number of factors which include the impressions of both the police and the community that are brought to the encounter. Encounter settings (private or public, familiar or unfamiliar), number and types of participants involved, the degree of control exercised by the participants, and what actually happens during the encounter are some contributory factors that make the encounter of the police and the citizens to become problematic. Moreover, police community relations are composed of two components, the human relation and public relation. Reiss (as cited in the work of McCamey, et al., 2003, p.201) believes that “It is possible to exaggerate the difficulties involved in police encounters with other citizens. Most encounters are civil, characterized by some degree of mutual concern, understanding, and respect”. The efforts on behalf of the police to develop and present favorable image consists the public relation component.

In addition, Miller and Hess (2002) reveal that police should actively engage the community in problem solving to develop the community partnerships. Community partnerships and problem solving are the two core components of community policing. Sir Robert Peel (as cited in the work of Miller & Hess, 2002, p.481) believes that in modern policing, community support and participation is important to the police work for them to be effective. He further states:

*To maintain at all times a relationship with the public that gives reality to the historic tradition that the police are the public and the public are the police; the police being the only members of the public that are paid to give full-time attention to the duties that are incumbent on every citizen in the interest of the common welfare and existence.*

Public opinion of the police is shaped by a variety of factors. Police misconduct
can severely damage the image and integrity of a police department (Hickman, et al., 2004).

Police Community Relation is a concept and philosophy of the police designed to have a good and true relationship between the police and the community. These two important components of the society should work together to control, prevent crime, and eliminate threats in the security of everyone. Police becomes a part and member of the community by having an actual interface with society. Having a high crime rate and crime volume affects not only the safety of the members of the community but as well as the economic growth of a country and the future of our children.

The researchers aimed to measure the extent of implementation and effectiveness of Police Community Relations in District II of Cavite to identify its effectiveness in gaining the rapport, support and cooperation of the community in the fight against criminality.

**Statement of the Problem**

The study determined the implementation and effectiveness of the Police Community Relation Programs in District II of the Province of Cavite.

Specifically, it sought to answer the following questions:

1. What is the extent of the occurrence of the following offenses in the calendar year 2007:
   2.1 index crimes; and
   2.2 non-index crimes?
2. What is the extent of the implementation of the Police Community Relations (PCR) in District II of the Province of Cavite as regards the following areas:
   3.1 Building citizens-police partnership;
   3.2 Police adequate response to complaints in the community;
   3.3 Decentralization of police decision making; and
   3.4 Restructuring of police training and education?
3. What are the implications of the result of the study for crime prevention and control programs of the PNP in District II of Cavite?
Scope and Delimitation

The study covered District II of the province of Cavite. It is composed of one city and six municipalities. These are Trece Martires City and the municipalities of Imus, Dasmariñas, Carmona, General Trias, Tanza and General Mariano Alvarez.

The respondents were the police officers both commissioned and non-commissioned, and the citizen of each city and municipality. The research study was delimited only to answer the general and specific problems through the survey instrument to accentuate the following:

1. Assessment of the Police Community Relation Programs implemented in the selected municipalities and city.
2. Documentary analysis of crime rate and crime volume, the occurrence of criminal behaviour and offenses in crime statistics.
3. Assessment of the effectiveness of the extent of implementation of Police Community Relation Programs.

Methodology

In this study, the descriptive method of research was employed to assess and measure the implementation and effectiveness of Police Community Relations in District II of Cavite, consisting Trece Martires City and the municipalities of Imus, Dasmariñas, Carmona, General Trias, Tanza and General Mariano Alvarez.

The respondents of the study were the community members (students, teachers, barangay and Sangguniang Kabataan officials, professionals and other residents), and police officers, both commissioned and non-commissioned. Four hundred community members and 96 police officers with a total of 496 respondents participated in the study.

The study gathered the data from Trece Martinez City and the municipalities in District II of Cavite. The crime statistics, crime rate and crime volume were obtained from the respective police stations of the six municipalities. The data were analyzed and interpreted. The researchers wrote a letter to the respective Chief of Police of each police station and to the Barangay Chairmen to seek permission to conduct the study in order to obtain the necessary information. Survey questionnaires were used to measure the extent of implementation of Police Community Relation with regard to crime prevention and control. Percentage and weighted mean were the statistical instruments
used to analyze and interpret the data. Percentage was computed to obtain the relationship of the demographic profiles of each respondent with the total population. On the other hand, weighted mean was computed for the extent of implementation of Police Community Relation.

Findings

1. There are two classes of crime, the non-index crimes and the index crimes. Non-index crimes are crimes which are punishable by Special Laws while index crimes are those crime and offenses which are under the Revised Penal Code (RPC) or Criminal Law. Examples of index crime are robbery, arson, theft, murder, homicide, physical injury and others which can be seen in the RPC. On the other hand, non-index crimes are punishable under Special Laws such as car napping, estafa, illegal possession of dangerous drugs, illegal possession of firearm/ammunition and deadly weapons and the likes which is the punishment crime is provided by the Special Laws (www.pnp.gov.ph).

The crime statistics record of year 2006 and 2007 showed that there is an increase in crime volume in District II of Cavite from 754 in 2006 and 785 in 2007. There is a high occurrence of crime (index and non-index) in the area of District II in year 2007 compared last 2006. On the other hand, there is a decrease in crime volume in the whole Province of Cavite, composing of the three districts, which is 1,836 in 2006 decreased to 1,676 in 2007. The police and the community must coordinate and support each other to eradicate crime in their area of responsibility and it can be done through a good PCR (Police Community Relations).

According to Cavite PPO the recorded crime volume of 1,676 in 2007 was broken down to 987 index crimes and 689 non-index crimes as compared to 1,836 in
2006 with 1134 index crimes and 702 non-index crimes. There was a decreased of 160 crime incidents or 8.71%. Index crimes consist of crimes against persons and property. From the 987 index crimes, theft has the highest with 228 incidents.

The average monthly crime rate was pegged at 6.24 as compared to 6.32 in 2006 or 1.28% decrease. The index crime rate of 2007 is 3.68 as compared to 3.91 in 2006. The non-index crime rate of 2007 is 2.57 as compared to 2.42 in 2006.

The index crime solution efficiency of Cavite PPO for 2007 is 81.66% as compared to 83.95% in 2006, and there was a decrease of 2.73% and non-index crime solution efficiency for 2007 is 96.23% and 97.15% in 2006 or a decrease of 0.95%. The overall crime solution efficiency of Cavite PPO is 87.66% in 2007 as compared to 89.00% in 2006 or a decrease of 1.51%. The decrease of the crime solution efficiency was brought about by the 207 unsolved crime incidents reported.

In general, Cavite PPO is exerting all the efforts to maintain the peace and order situation within the Province of Cavite. Anti-criminality programs are set in place by the Chiefs of Police to reduce the crime incidents in their AOR (area of responsibility). Monthly COMSTAT conference is being held for the purpose of determining the crime prone areas of a certain locality and for the Chief of Police to be guided on where to deploy his personnel on certain days and hours. (Cavite PPO Crime Analysis for 2007)

**TABLE 1**

**COMPARATIVE CRIME STATISTICS**

<table>
<thead>
<tr>
<th>COMPARATIVE CRIME STATISTICS</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Period Covered: January to December 2007</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OFFENSE CLASSIFICATION</td>
<td>2006</td>
<td>2007</td>
<td>Variance</td>
</tr>
<tr>
<td>CRIME VOLUME</td>
<td>1.836</td>
<td>1.676</td>
<td>-160</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td><strong>INDEX CRIME</strong></td>
<td>1134</td>
<td>987</td>
<td>-147</td>
</tr>
<tr>
<td>Crime against Person</td>
<td>555</td>
<td>555</td>
<td>0</td>
</tr>
<tr>
<td>Murder</td>
<td>160</td>
<td>168</td>
<td>8</td>
</tr>
<tr>
<td>Homicide</td>
<td>127</td>
<td>123</td>
<td>-4</td>
</tr>
<tr>
<td>Physical Injury</td>
<td>223</td>
<td>220</td>
<td>-3</td>
</tr>
<tr>
<td>Rape</td>
<td>45</td>
<td>44</td>
<td>-1</td>
</tr>
<tr>
<td><strong>Crime against Property</strong></td>
<td>579</td>
<td>432</td>
<td>-147</td>
</tr>
<tr>
<td>Robbery</td>
<td>198</td>
<td>204</td>
<td>6</td>
</tr>
<tr>
<td>Theft</td>
<td>381</td>
<td>228</td>
<td>-153</td>
</tr>
<tr>
<td><strong>NON - INDEX CRIME</strong></td>
<td>702</td>
<td>689</td>
<td>-13</td>
</tr>
<tr>
<td><strong>MCR</strong></td>
<td>6.32</td>
<td>6.24</td>
<td>-0.08</td>
</tr>
<tr>
<td>Index Crime Rate</td>
<td>3.91</td>
<td>3.68</td>
<td>-0.23</td>
</tr>
<tr>
<td>Non- index Crime Rate</td>
<td>2.42</td>
<td>2.57</td>
<td>0.15</td>
</tr>
<tr>
<td>Crime Solved</td>
<td>1.836</td>
<td>1.469</td>
<td>-367</td>
</tr>
<tr>
<td>Crime Unsolved</td>
<td>202</td>
<td>207</td>
<td>5</td>
</tr>
<tr>
<td><strong>INDEX CRIME SOL EFFICIENCY (%)</strong></td>
<td>83.95%</td>
<td>81.66%</td>
<td>-2.29%</td>
</tr>
<tr>
<td><strong>NON - INDEX CRIME SOL EFFICIENCY (%)</strong></td>
<td>97.15%</td>
<td>96.23%</td>
<td>-0.92%</td>
</tr>
<tr>
<td><strong>CRIME SOL EFFICIENCY (%)</strong></td>
<td>89.00%</td>
<td>87.66%</td>
<td>-1.34%</td>
</tr>
<tr>
<td>Population</td>
<td>2,419.2</td>
<td>2,236.9</td>
<td></td>
</tr>
</tbody>
</table>

2. The extent implementation of the police community relations (PCR) in District II of the Province of Cavite as regards the following areas:

TABLE 2

Frequency Distribution of Community-Respondents on the Extent of
### Implementation of Police Community Relation (PCR)

#### BUILDING CITIZENS-POLICE PARTNERSHIP

| Extent of the Implementation of PCR | MEAN  | INTERPRETATION |
|------------------------------------|-------|----------------|----------------|
| **Q 1.** The PNP is conducting lectures and seminars in barangays and schools regarding the ways on how to eradicate or fight criminalities. | 3.2875 | Seldom Implemented |
| **Q 2.** The PNP is posting and releasing notices pertaining to their crime prevention and PCR programs in the community. | 3.4025 | Seldom Implemented |
| **Q 3.** The PNP is giving the community a knowledge and information pertaining the new laws, rules and ordinances. | 3.4450 | Often Implemented |
| **Q 4.** The PNP conducts programs to build and enhance the good relationship of the police and the community. | 3.4975 | Often Implemented |
| **Q 5.** The PNP helps in resolving problems in every barangay or community. | 3.58 | Often Implemented |
| **Q 6.** The PNP is active in coordinating with the citizens and officials of barangay to know the problems/concerns in the Community | 3.6500 | Often Implemented |
| **TOTAL** | **3.4778** | Often Implemented |

This implies that police community relation on building citizens-police partnership is observed by the community-respondents as often implemented. The respondents are aware of the extent implementation of Police Community Relation, therefore PCR officers are responsible enough in implementing their projects and activities by building a strong citizens-police partnerships.
TABLE 3

Frequency Distribution of Community-Respondents on the Extent Implementation of Police Community Relation (PCR)

POLICE ADEQUATE RESPONSE TO COMPLAINTS IN THE COMMUNITY

<table>
<thead>
<tr>
<th>Extent of the Implementation of PCR</th>
<th>MEAN</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q 7. The PNP entertain the comments, opinions and suggestions of the community pertaining to the ways on eradicating or fight the criminalities.</td>
<td>3.60</td>
<td>Often Implemented</td>
</tr>
<tr>
<td>Q 8. The PNP responds and give solutions in the problems and concerns of the citizens.</td>
<td>3.61</td>
<td>Often Implemented</td>
</tr>
<tr>
<td>Q 9. The PNP serves the community very well, by providing quality service.</td>
<td>3.63</td>
<td>Often Implemented</td>
</tr>
<tr>
<td>Q 10. The PNP help the citizens in settling and resolving the Problems in the barangay or community.</td>
<td>3.8250</td>
<td>Often Implemented</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3.663</td>
<td>Often Implemented</td>
</tr>
</tbody>
</table>

This implies that Police Community officers communicate with the community by regular meeting and implementing projects towards harmonious relationships and maintenance of peace and order in District II of the Province of Cavite.
### TABLE 4

**Frequency Distribution of Police-Respondents on the BUILDING CITIZENS-POLICE PARTNERSHIP**

<table>
<thead>
<tr>
<th>Extent of the Implementation of PCR</th>
<th>MEAN</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q 1.</strong> Police communicate the philosophy and concepts of PCR through open forum, personal and news media or citizen’s meetings.</td>
<td>4.6250</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 2.</strong> Police discuss with the citizens what are the PNP plans and programs for a specific time and date.</td>
<td>4.4167</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 3.</strong> Police officers involved the elected barangay and local officials in the formulation and implementation of PCR programs and activities.</td>
<td>4.4687</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 4.</strong> At all organizational levels police participate in two-way communication with citizens and community leaders.</td>
<td>4.5000</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 5.</strong> All police personnel commit themselves for the implementation and success of PCR.</td>
<td>4.4479</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 10.</strong> Police Community Relation Officer socialize or interact with the community to gather information for the planning of PCR programs.</td>
<td>4.5417</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 12.</strong> Police officers coordinate with the other agencies with regards to PCR activities.</td>
<td>4.5833</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4.5119</strong></td>
<td><strong>Fully Implemented</strong></td>
</tr>
</tbody>
</table>

It can be gleaned from the table that the overall perception of the police-respondents as regards this PCR on building citizens-police partnership is fully-
implemented and supported by the mean of 4.5119. It is important to note that the perception of the police-respondents is contrary to the perception of the community-respondents. The former perceived this aspect as fully implemented while the latter is only often implemented.

**TABLE 5**

**Frequency Distribution of Police-Respondents on the**

**POLICE ADEQUATE RESPONSE TO COMPLAINTS IN THE COMMUNITY**

<table>
<thead>
<tr>
<th>Extent of the Implementation of PCR</th>
<th>MEAN</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q 20.</strong> Police officers are open-minded to any problem that involves the relationship between the community and the police to immediately respond and formulate a solution.</td>
<td>4.7083</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>4.7083</td>
<td>Fully Implemented</td>
</tr>
</tbody>
</table>

This suggests that there is a sufficient response to the needs of having an answer to every problem regarding peace and order in the community; and as civilian in character, police are approachable and a public servant that you can lean on.
### TABLE 6

Frequency Distribution of Police-Respondents on the

**DECENTRALIZATION OF POLICE DECISION MAKING**

<table>
<thead>
<tr>
<th>Extent of the Implementation of PCR</th>
<th>MEAN</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q 6.</strong> Chief of police practice and emphasize broad-based participation in policy making.</td>
<td>4.4896</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 7.</strong> Police officer consider the comments and suggestions of the public officials in the planning of programs and activities.</td>
<td>4.5417</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 8.</strong> The group formulating the programs are composed both PCO and PNCO.</td>
<td>4.4271</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 9.</strong> Police identifies the needs in the implementation of PCR plans and programs.</td>
<td>4.4896</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 11.</strong> Police Community Relation Officer use the available data and information as basis for the formulation of PRC plans and programs.</td>
<td>4.4792</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 13.</strong> Chief of Police decides on what plans and programs for PCR should be implemented in his area of concerned.</td>
<td>4.3438</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td><strong>Q 16.</strong> Chief of police identify the problems in PCR to come up the solution for the enhancement of the organizational policy and training of the officer.</td>
<td>4.4167</td>
<td>Fully Implemented</td>
</tr>
</tbody>
</table>
Q 17. Police officers are required by the chief of police to undergo a series of seminars or schooling that will help in the improvement of all aspects of PCR.

Q 18. Chief of Police assigned police officers who are experienced in dealing with the community.

Q 19. Police officers welcome the comments, opinion, and suggestions of the community and use it as basis for the formulation of organizational policies, methods and procedures.

| TOTAL | 4.4458 | Fully Implemented |

This suggests that the police are closely coordinating with the community, and the programs and activities are based on the needs of their area of responsibility. Also the voice of the community is being heard and considered in the formulation of a valuable scheme towards a peaceful community.

**TABLE 7**

Frequency Distribution of Police-Respondents on the RESTRUCTURING OF POLICE TRAINING AND EDUCATION

<table>
<thead>
<tr>
<th>Extent of the Implementation of PCR</th>
<th>MEAN</th>
<th>INTERPRETATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q 14. The police and the community officials meet or attend seminars to come up PCR programs suited to the needs of the community.</td>
<td>4.5104</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td>Q 15. Police officers are given seminar to enhance their inter-personal and intra-personal relationships.</td>
<td>4.4687</td>
<td>Fully Implemented</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4.4896</td>
<td>Fully Implemented</td>
</tr>
</tbody>
</table>
As a whole, the mean 4.4896 interpreted as fully implemented suggests that police officers undergo a continuous education and training to provide a better service for the community.

3. The implementation of the Police Community Relation (PCR) in District II of the Province of Cavite as observed by the residents, policemen are closely coordinating with the community especially with the barangay officials. The police are exerting their efforts towards the attainment peace and order in the province which were proven by the report given by the Provincial police headquarters which indicate the increase of crime solved. Also the findings of the study suggest that a stronger Police Community Relation with a committed policeman, a cooperative residents and a supportive government will form a long-term solution to prevent and control crimes. Also partnership between the police and the community will be a great help in the public safety.

Moreover, the findings of the study revealed that the extent implementation of Police Community Relation (PCR) plays a very important role in preserving and maintaining peace and order in the community. A better partnership and open communication between the law enforcement agencies and community can eradicate and prevent the occurrence of crime. The reality of lack of man power of the PNP can be solved and can be sustained by tapping the barangay officials and the citizens to work hand-on-hand to fight the criminality. Police and citizens are both two important components of the society/community, with regard to ensuring the safety and peace in the community, the former and the latter are both responsible for this matter. The PNP is providing programs and activities to fight the criminality, and they reach out for the
help of the community through the Police Community Relation Activities. On the part of the community, they are encouraged by the PNP to report all the crime incidents and suspicious activities in their area for the PNP to do necessary actions. And on the other hand, the community wanted to be understood and heard by the PNP. To bridge the gap between the police and community PCR (Police Community Relation Program) is designed for the benefit of both groups.

**Conclusion**

Based on the findings of the study, the following conclusions were drawn:

1. Through the extent implementation of PCR in the District II of the Province of Cavite more crimes were solved. Public servants do their best to prevent and control crime by balancing their rapport to the community

2. The Police Community Relation programs and activities are fully implemented in District II of the province of Cavite through the effort given by the police and community. With this relationship a more peaceful and well-order community is being observed. The policemen are responding to the needs of the community vis-à-vis both have a goal of building a peaceful nation.

3. Full implementation of the Police Community relation has a major role in the improvement of the crime prevention and control as the responsibility of the Cavite police and the community.

**Recommendations**

Based on the findings and conclusions, the following recommendations are made:

1. There is a need to strengthen the values of family ties of the community and love of country, people and faith in GOD.
2. The church should be a tool in awakening the citizens in taking good care of each other, and becoming concerned of the welfare of the community.

3. Barangay officials should follow the policies courteously, and implement them faithfully. This will be realized by continuing the education provided by the local government with PNP doctrines and the department as in-charge.

4. PNP with the coordination of the community should formulate strategic solutions or options that can directly eliminate or eradicate and prevent the number of crimes or socially related problems.

5. School or universities should help organizing a forum as an instrument for the information drive regarding the intensification of the police community relation, and to increase the consciousness of the people regarding criminality.

6. As part of curriculum, a comprehensive and improve program for the youth to engage, learn opportunities and to create a strong sense of community among leaders, parents and students. In addition, Public Safety courses should be given at least 6 units of this endeavor.

Afd232426
Cell Phone in Classroom: A Literature Review

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Steven Dale Aagard

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Abstract

Cell phone is the fastest growing technology among the young generation or the net citizens. However, cell phones are considered more as a distraction in the classroom teaching than a means to support student’s learning. Cell phones can be noisy and distracting. But they can also be an aid to learning (Docksai, 2009). The paper will examine past five-year literature on cell phone use in the classroom.

Purpose of study

Cell phones are powerful little handheld computers (Eifler, 2009). Cell phones are getting smarter with better features, increasing hardware and software supports, low monthly connection charges, and growing applications for mobile education. Lindquist et al. (2007) posited that cell phone features such as SMS and MMS are robust, simple, affordable, and familiar to students. Within an educational setting, using cell phones as an interactive tool requires minimal technical and financial support: the majority of the students possess the needed hardware and software (Divitini et al., 2002) and communication occurs via existing cell phone networks (Markett et al., 2006). Several educators have studied cell phone in the classroom and have provided favorable opinion for its use (Trotter, 2009; Milrad & Spikol, 2007; Markett et al., 2006). This led us to ponder whether cell phone use in the classroom is just a distraction or a smart tool for learning and teaching.

The questions we asked as we tried to find answers are: why cell phones are still not considered for classroom teaching? Why cell phones are not favorably accepted as other technologies such as computer? Are cell phones only a distraction to students’ learning? Will the use of cell phones in the classroom effects students’ learning? These questions seem to emerge
quite often among many educators and learners alike. The purpose of the study is to explore the 
literature concerning cell phone use in the classroom for learning and teaching.

The supports for cell phone use are more widespread in the existing literature. For 
instance, Scornavacca, Huff, and Marshall (2009) posited that the rapid proliferation of cellular 
phones has presented an opportunity to develop new interactive classroom systems, which have 
the potential to enhance students’ learning experience. And for Eifler (2009), after experiencing 
the effective use of cell phone in the classroom, he started to appreciate the possibilities cell 
phone could bring into the classroom learning. In his words, “I now propose that there are 
pedagogically defensible alternatives to silencing cell phones in our classroom” (p. 3).

There are many proper uses of cell phones such as enhancing class projects, test reviews, 
and instructor communication and feedback (Docksai, 2009). In a study with a large classroom 
of more than 100 college students, Scornavacca, Huff, and Marshall (2009) found that cell phone 
use in the classroom provided a very positive experience to the instructor that helped to increase 
the quality and quantity of student feedback during the class. Studies have used SMS (short 
messaging service) and MMS (multimedia messaging service) for student’s interactivity in the 
classroom via polling and feedback (Lindquist et al., 2007; Markett et al., 2006; Cobb et al., 
2010), and beyond the classroom for after-class discussion (Markett et al., 2006). SMS and MMS 
are found to encourage shy, non-participatory or self-conscious students, increase learner-content 
interaction, promotes classroom accountability, and encourages student interaction (Markett et 
al., 2006).

However, Wei and Leung (1999), Campbell (2004), and Campbell and Russo (2003) 
found classrooms to be the least acceptable place for cell phone use. David Strom, the general
counsel for the American Federation of Teachers (AFT) said, “cell phone is disturbing to the educational process” (as cited in Honawar, 2008, p. 29). Moreover, with the advent of cell phone cameras, there are more concerns for cyber bullying and cheating. Many educators ban the use of cell phones in their classrooms considering it as a distraction to the learning process and compromising examinations (Braguglia, 2008). Katz (2005) found that younger educators seem to accept cell phone communication technologies more easily than their older counterparts. Not surprisingly, in a national survey on cell phones in American high school, Obringer and Coffey (2007) found that 82% of parents were supportive of the school’s overall cell phone policy. These may be the reasons why cell phones are not favorably accepted as other technologies for classroom teaching and learning. Are educators not joining the students to help use their preferred mode of communication? Or are there more reasons for not adopting cell phones in the classroom? From our review of literature thus far, we found majority of the studies supported the use of cell phone in the classroom despite some prevailing limitations such as small screen, text abbreviations, privacy, cheating, ringing, and bullying, among others.

Analysis of literature

Due to the rapid growth of Web 2.0 technologies, it is difficult for many Web developers to survive long on the Internet. From our literature review, we found few of the applications and tools used in the study were no longer in business or operations. Because of the fast changing nature of technologies, we narrowed down our search of literature to the last five years. We will analyze the key findings and incorporate them into our paper presentation.
Future Implications

Cell phones can be a major distraction to learning when students use them improperly. The experience of Scornavacca, Huff, and Marshall (2009) with the use of cell phones in the college classroom showed that positive results can be achieved by encouraging students to bring their mobile phones out in the open and to use them to contribute to the class, and to their own learning – that is, by joining them instead of trying to beat them.

Elizabeth Hartnell-Young stressed, “we hope that, in the future, mobile phone use will be as natural as using any other technology in school”. Will Elizabeth hope materialize? There are several positive indicators such as, increasing calls against the ban of cell phone use in the classroom, growing number of research on cell phone use, increasing capabilities of smart phones, and the declining monthly connection charges for cell phone use. Moreover, as of 2008, Braguglia found in his survey of College of Business students that 45% of the students spend four or more hours daily on their cell phones, which gives a clear indication that students spend most of their daily time on cell phone as compared to other educational tools.

We agree with the suggestion of Markett et al. (2006) on more research on cell phone use in the classroom. Cell phone features like SMS and MMS are an area of further exploration in education such as, in-class discussions, two-way interactions, language learning vocabulary and study support, and learning support, among others.
References


School Reform: Why it Doesn’t Work

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Presentation Abstract:

In Why is it so hard to get good schools (2003) Larry Cuban states that “…administrators and policymakers, seeking improvement in students’ performance, view teachers, paradoxically, as both the problem and the solution to school defects.” Especially in the past twenty years teachers have been blamed for many of the ills that schools face. But why blame only teachers? What about the legislators that underfund education; the parents that don’t seem to care; the students who are not engaged; the school building administrators that don’t supervise; the school districts that appear to care more about test scores than student learning; the business and industry leaders that are only concerned about employability skills? Aren’t we all to blame?

Drawing on the literature and his own experience in Miami, Florida the author will describe why the major national, state and local school reform efforts fail. Billions of dollars and many years of effort have been expended and yet our national high school graduation rates are still less than 70% with some individual states reporting less than 60%. At its peak in 1969 the graduation rate was 77%, yet by 2007 it had dropped below 70%. Graduation rates of minorities in urban areas are even worse. In Florida, for example, the graduation rate of African American males was 37% in 2008 while in Miami Dade County the figure is 27%! With the plethora of national and state programs since the 1960’s why have we not yet seen more positive results? The author will provide examples and reasons for the failures and considerations for practice and policy.
Title: Confessions from the Chalkface: Māori teachers reflect upon their experiences in six monocultural New Zealand schools.

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Abstract:

This presentation outlines some key findings from a Masters thesis (Torepe, 2010), which examines the lived experiences of Māori teachers who recently completed and graduated with a Graduate diploma in Immersion and Bilingual Teaching and Learning from the University of Canterbury College of Education’s Hōaka Pounamu programme.

This research will explore how these indigenous graduates transition back into teaching, particularly mainstream primary schools. It will discuss the challenges they face as they attempt to incorporate kaupapa Māori (Māori knowledge that validates a Māori world view) into their teaching praxis, whilst working within English medium teaching environments reflecting the prevailing Eurocentric ethos of their schools. This presentation will also consider the strategies that they used to negotiate these challenges.
Title: The use of indigenous metaphor as pseudonyms for indigenous research participants in a Masters thesis project

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Abstract:

This presentation outlines a methodological issue related to the identification and use of culturally and contextually appropriate pseudonyms for research related to indigenous participants and communities. This will draw on a research project that formed the basis of a Masters thesis (Torepe, 2010). It will illustrate how this process was negotiated during the design and development of this thesis, guided by the principles of kaupapa Māori methodology (sourced from Māori philosophies), situated in Te Waipounamu (South Island) of New Zealand. Pounamu, New Zealand’s highly prized greenstone is a culturally valuable and spiritually significant taonga (treasure) to the indigenous peoples of Aotearoa, New Zealand. It has been used to affirm status, authority plus for adornment and peace-making purposes. This presentation will accordingly discuss why types of pounamu were used as pseudonyms for different participants and how pounamu is used as a simile to describe the participants (teacher educators) within the context of the New Zealand schooling system.
Title of the submission:
“A Proposed Computer Education Curriculum for Grade School Levels”

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Introduction

A computer is a machine that performs a specified sequence of operations as per the set of instructions (known as programs) given on a set of data (input) to generate desired information (output). Being a machine, it will not perform independently or creatively. It will do only, what it is instructed to do, in specific terms. It is based on a complex technology, but works on a simple Input – Process – Output principle (National Informatics Centre, Training Division, New Delhi retrieved from http://training.nic.in/courseware/PDF%20Files/ComputerBasics.pdf).

Over the past few years, computers have become a vastly popular household item. The luxury of emailing messages as opposed to charging up the phone bill is more appealing. Checking news, weather, and sports via the Internet is a convenience that many are taking advantage of. Computers are in use almost everywhere, whether we
go to reserve a plane ticket or to a bank or a grocery. This is because it is faster and helps us complete our work without mistakes/errors.

Children's lives are also getting influenced by technology – and this is just the beginning. Computers and Internet are here to stay and software titles targeting young children continue to increase. So parents too have realized the need to help their children develop strong computer skills.

Children are learning to read and write with computer games instead of homemade flash cards. They are reading their bedtime stories online instead of in bed with their parents. Many parents are buying computer learning games instead of board games and pop-up books.

One benefit of the computer age is that children are growing up computer literate and will have that as a huge advantage. Computer literacy is becoming a huge job qualification and feeling comfortable with one will put them a step ahead.

However, slowly, some traditions are being broken and the computer is becoming a child’s learning tool, reducing the child’s interaction with peers his / her age. Computer use also has its dangers. When children log on to the computer their innocence is noticeable. Children are an easy target for adults who pose to be other children with similar interests. Criminal offenders often chat online with children and then make plans to meet them or slowly filter information about them.

But overall, children can benefit from computers if they are used wisely. Parents that supervise their children when they are on the computer can ensure that everything is happening safely. Moreover, children need to be taught proper computer use through
formal computer education. The computer is a vital tool used by man in every field of life. It is projected to be increasingly more valuable in the times ahead. Hence, one important educational goal is to prepare students for a world in which the computer will continue to play a significant role.

In the Philippines, the Department of Education has recognized the significance of teaching and integrating computer subjects as early as in the elementary level. According to the directives of the Department of Education in the 2002 Basic Education Curriculum: “Information and Communication Technology (ICT) shall be used in every learning area, wherever hardware and software are available” (2002 BEC Executive Summary 6th Draft March 6, 2002).

ICT is introduced at the elementary level as part of the subject “Edukasyong Pantahanan at Pangkabuhayan” or EPP which is in turn covered under the subject Makabayan. However, computer education is only a part of EPP and not yet mandated by DepEd to be a separate subject. Also, the minimum learning competencies prescribed by DepEd for Computer Education are only for Grades 4, 5, and 6. This may be due to following reasons which were identified as key problem areas for implementing ICT in basic education during a Consultative Workshop for Developing Performance Indicators for ICT in Education held in the Philippines in August 2002: (1) teachers’ fear of the technology; (2) school principals’ closed mindset to and non-appreciation of ICT in education; (3) constraints of the annual Education Budget; (4) maintenance of ICT resources and lack of technical staff; (5) sustainability; and (6) limited availability of education software and courseware.
This study sought to assess the current status of computer education in private elementary schools in Angeles City as there is still a dearth of knowledge on this area and elementary school administrators and teachers, as well as pupils and their parents may benefit from the results of this particular endeavor.

**Conceptual Framework**

Computers offer substantial benefits to young children and their development, and to families as a whole. At the right age, a computer is a wonderful thing that every child deserves to have. Accordingly, if a family can afford a computer without sacrificing other important, traditional childhood experiences, then this environment should contain a computer set-up that can be accessed as easily as books and other playthings and integrated in the family's day-to-day activities in a natural way.

The actual benefit of a computer to a child depends primarily on: the quality of parental involvement, the quality of educational software that the child is using, following developmentally appropriate practices in the way the child uses the computer, achieving a balanced role for the computer in the child's life as one important element in the mix of quality learning and play opportunities, and proper computer education.

With proper computer education, parental guidance, quality software, and their own love of discovery and learning, young children can work wonders with computers & the internet. They can also gain and reap the benefits of computer literacy for the rest of their technology-filled lives.
This study was interested in assessing the current status of computer education in private elementary schools in Angeles City so as to make appropriate recommendations, particularly on the computer education curriculum. To do this, it was necessary to identify the variables that are relevant to the provision of computer education. These variables could either enable effective and efficient computer education or serve as barriers depending on their current state. These variables include curricular factors, namely the inclusion of Computer Education as a separate subject, time allotted for the subject per session, number of sessions per week, course objectives / desired learning competencies, and course contents. The study also assessed instructional factors, namely educational qualifications of teacher(s) handling the subject, methods of teaching used, instructional materials used including textbooks, hardware and software, and the presence of technical support. Data on these aforesaid variables as well as data on problems encountered in the subject that are perceived by Computer Education teachers laid the foundation for the drafting of curricular developments for Computer Education in the elementary level.

Two foundational works on curriculum development are by Ralph Tyler (1949) and the other by Jerome Bruner (1960). They provide the foundation for even the most current thinking in curriculum development. Jerome Bruner’s book, *The Process of Education* devotes a chapter on the importance of “structure”. The theme of structure refers to the importance of presenting the basic structures of the disciplines as the focal points of curricula. Basic structures consist of essential concepts, such as “supply and demand” in economics or “conflict” in history or “energy” in physics, and the relationships among them. Such concepts, when understood, enable students to
understand many of the phenomena in that discipline and similar phenomena that may be encountered elsewhere. As Bruner wrote, “Learning should not only take us somewhere; it should allow us later to go further more easily…The more fundamental or basic is the idea, the greater will be its breadth of applicability to new problems”. Bruner advocated that these fundamental ideas, once identified, should be constantly revisited and reexamined so that understanding deepens over time. This notion of revisiting and reexamining fundamental ideas over time is what has become known as a “spiral curriculum.” As time goes by, students return again and again to the basic concepts, building on them, making them more complex, and understanding them more fully.

A decade before the book that Jerome Bruner wrote, Ralph Tyler (1949) published his classic text on curriculum development. It was organized around four questions: (1) What educational purposes should the school seek to attain? (2) How can learning experiences that are likely to be useful in attaining these objectives be selected? (3) How can learning experiences be organized for effective instruction? (4) How can the effectiveness of learning experiences be evaluated? This book called for the application of four corresponding principles in the development of any curriculum: defining goals, establishing corresponding learning experiences, organizing learning experiences to have a cumulative effect, and evaluating outcomes. Tyler’s principles were the accepted approach to curriculum development for almost 30 years, and they guide the essential questions of curriculum development today, though they now are applied to newer ideas and considerations that extend or reinterpret his principles.
Probably the biggest objection to Tyler’s approach, and the cause of its demise in the 1970’s, was its perceived mechanistic orientation to curriculum. As the theory was implemented in the 1950’s and 60’s, behavioral objectives provided the underpinning of its design, and the success or failure of the curriculum was based on pre-defined changes in student behavior. The assumption was that student outcomes – at least those that matter – could and should be measured. The result was that in order to measure the behaviors, tasks were broken down into smaller and smaller parts, resulting in tasks that lost their authenticity or meaningfulness. Tyler was a product of his time, and his ideas were written and interpreted in light of current educational perspective, which was behavioral in nature. His theory of curriculum development was simple, logical, and rational, but it fell out of favor as educators began to view learning experiences more holistically and assess outcomes that are not so easily measured. In response to the curriculum approach advocated by Tyler, often called the *product approach*, came what is known as the *process approach*. This approach is most associated with the work of Lawrence Stenhouse (1974), who advocated principles for selecting content, developing teaching strategies, sequencing learning experiences, and assessing student strengths and weaknesses with an emphasis on empiricism. A process curriculum was designed to be not an outline to be followed but a proposal to be tested. Gone were the behavioral objectives and tight hierarchical learning tasks.

The process approach to curriculum development was extended after Stenhouse originally laid it out, morphing into the *praxis approach*, which added the element of commitment to curriculum development. This approach advocates a shared idea of the common good and the goal of informed and committed action to the model of curriculum
development. Even more recently there has been an emphasis on the context of curriculum and the notion of curriculum as a social process in which personal interactions within the learning environment take on considerable significance. Last, it should be mentioned that developmental theorists continue to have a strong influence on how curriculum should be structured. Wildman (2007), for example, advocates curriculum built around what is known about development and the Vygotskian concept of scaffolding, or what Wildman calls “assisted performance.”

An article by Knight (2001) provides a convincing argument for the superiority of a process approach to curriculum development in higher education by outlining the problems with an “outcomes-led rational approach” to curriculum planning. Knight’s major point, however, is not to advocate one approach over another, but to stress the necessity of coherence in a curriculum. He returns to Jerome Bruner’s concept of the spiral curriculum, saying “Bruner depicted good curriculum as a spiral of repeated engagements to improve and deepen skills, concepts, attitudes and values, and extend their reach. The spiral curriculum has coherence, progression and, I claim, value”. Contending that it is possible to provide coherence and progression in a process curriculum as well as in a product curriculum, he writes, “a good curriculum would plan for learning to take place through communities of practice in which group work and peer evaluation are normal, interpersonal contact is common and networks of engagement are extensive”.

Other curriculum writers, particularly those from the UK, have gone beyond thinking of curriculum as product or process or the more recent extensions of those
theories. Barnett, Parry, and Coate (2001) propose a model of curriculum that involves three domains: knowledge, action, and self. The knowledge component is comprised of discipline-specific subject matter; the action component includes the necessary skills of the discipline; and the self component includes identifying oneself with the competencies of the discipline. The authors give an example of a history major. For him or her, the knowledge domain would be the history specialty area, the action domain would include skills such as critical writing; the self domain would include a view of self as critical evaluator. They contend that the way the three domains are weighted and integrated differs depending on the subject matter and that curriculum development should take those different integration patterns into account.

Jan Parker (2003) argues for a “transformational curriculum.” Suggesting that the Barnett, et al. model be expanded and concentrate on the interaction of the three domains, Parker says that students should design their own interacting aspects of knowledge, action, and self. Such a curriculum “would engage the student’s love of knowledge, and use that to re-inspire the teacher’s, would develop a mature critical self, which was nevertheless sophisticatedly appreciative, would incorporate the Barnett value of dealing with supercomplex paradigms and value systems while understanding how and why to invest oneself”. This approach to curriculum centers on metacognition and self-direction, and as the author says, transformation.

The curriculum approaches outlined above are theoretical but for practical, simple approaches to curriculum development, works by Dee Fink, Grant Wiggins, and Jay McTighe are useful.
Fink (2007) writes about designing significant learning experiences in college courses using a process called integrated course design (ICD). His model includes the familiar triad of learning goals, teaching and learning activities and feedback/assessment. Learning goals identify what we want students to learn, learning activities identify how students will learn what it is we want them to learn, and the feedback/assessment identifies how we will know students have achieved the intended goals. Fink emphasizes, however, that these components are all influenced by “situational factors,” such as course context, professional expectations, and the nature of the subject, the students, and the teacher. He presents a taxonomy of significant learning that outlines six kinds of learning to consider when designing a course. The taxonomy, unlike Bloom's well-known cognitive taxonomy, is interactive rather than hierarchical. The identified kinds of learning include foundational knowledge, application, integration, human dimension, caring, and learning how to learn. Fink's book (2003) explores each aspect of the taxonomy and includes feedback from professors who have used this approach to curriculum design and have found it helpful.

Currently, one of the most influential books on curriculum development is Wiggins and McTighe’s (1998, 2005) *Understanding by Design*. The authors call their approach “backward design” and, sure enough, they cite Ralph Tyler's (1949) model as providing the logic behind their “new” idea. However, the backwards design model avoids the mechanistic predisposition of behaviorism and offers a major advantage by featuring the latest thinking in assessment. The principles put forth by the authors are relevant to curricula at any level. Wiggins and McTighe say their design is backward because it starts with the end, the desired results, first and then works backward to a
curriculum based on acceptable evidence of learning. The stages in the backward design process are (1) Identify desired results; (2) Determine acceptable evidence and (3) Plan learning experiences and instruction. In stage 1, consideration is given to what students should know, understand, and be able to do, and here is where it becomes clear that the orientation to curriculum design is more constructivist than behaviorist. The authors suggest a framework for establishing curriculum content by considering three levels of knowledge: that which is worth being familiar with, that which is important to know and do, and that which represents an “enduring” understanding. Third level knowledge, enduring understandings, refers to essential principles of disciplinary and/or interdisciplinary thought. Here, as you might expect, they reference Bruner (1960), reiterating his idea that these essential concepts and principles are what should anchor the curriculum, whether it be a unit of study, a course, or a major field comprised of a number of courses. The authors offer four criteria for determining essential understandings: (1) To what extent does the idea, topic, or process represent a “big idea” having enduring value beyond the classroom? (2) To what extent does the idea, topic, or process reside at the heart of the discipline? (3) To what extent does the idea, topic, or process require uncoverage? (4) To what extent does the idea, topic, or process offer potential for engaging students? (Wiggins & McTighe, 1998, 10-11)

Stage 2 asks how we will know if students have achieved the desired understandings and skills. At this point, thought is given to what assessment evidence will document that the desired learning has taken place. The authors advocate considering a wide range of evidence and assessment methods ranging from informal checks for understanding to complex performance tasks and projects. It is this stage
that is probably the most “backward” for instructors. There is a strong tendency not to think about assessment until toward the end of a topic or unit or course. Considering assessment as evidence of learning, and considering it before teaching, puts assessment not only in a new place, but in a new light. It is not until stage 3 that the learning experiences (instructional strategies) are planned. Since acceptable evidence has already been considered, the learning experiences are designed to enable students to produce the desired results. Teaching is viewed as a means to an end, not an end in itself. Wiggins and McTighe suggest asking the following questions during this stage: (1) What enabling knowledge and skills will students need to perform effectively and achieve desired results? (2) What activities will equip students with the needed knowledge and skills? (3) What will need to be taught and coached, and how should it best be taught, in light of performance goals? (4) What materials and resources are best suited to accomplish these goals? (5) Is the overall design and effective? (Wiggins & McTighe, 1998, 13)

In this study, the researcher was guided by the foregoing principles in curriculum development in coming up with proposed computer education curricula for the various grade levels in the elementary school.

The research paradigm is presented in Figure 1.
Figure 1. Research Paradigm
Statement of the Problem

This study generally aimed to describe the current status of Computer Education among private elementary schools in Angeles City and to propose curricular enhancements based on the findings.

Specifically, the study sought to answer the following research questions:

1. What is the current status of Computer Education among different grade levels in private elementary schools in Angeles City in terms of:

1.1. Curricular factors

1.1.1. Inclusion of Computer Education as a separate subject
1.1.2. Time allotted for the subject per session
1.1.3. Number of sessions per week
1.1.4. Course objectives / Desired learning competencies
1.1.5. Course contents

1.2. Instructional factors

1.2.1. Qualifications of teacher(s) handling the subject
1.2.2. Methods of teaching used
1.2.3. Instructional materials used

1.2.3.1. Textbooks
1.2.3.2. Hardware
1.2.3.3. Software

1.2.4. Technical support
2. What problems, as perceived by Computer Education teachers, are commonly encountered in the subject?

3. What curricular developments may be proposed for Computer Education per grade level based on the findings of the study?

**Significance of the Study**

Evaluating the status of Computer Education among private elementary schools in Angeles City will basically serve as bases for drafting recommendations, particularly on possible curricular developments for computer education in the grade school level.

Results of the study may benefit:

**The Department of Education** as this study may provide a picture of the present scenario of computer education in the grade school level which they can use to draft and implement department orders / policies for more efficient and effective computer education programs.

**The private elementary schools** as they would have an idea on how to improve their offering of computer education. Furthermore, this study serves as a challenge to the said elementary schools to improve computer education - to update, upgrade and even develop their interests in computer education.

This study would also benefit **private elementary school teachers** as they would be guided on how to handle the computer education subject, particularly, in terms of course contents and objectives.
This study would ultimately benefit the **private elementary school pupils**, (and perhaps even those from the public schools given the appropriate provisions for hardware, software and peopleware) as they would be educated towards more effective and more efficient performance with the aid of computers since the computer is considered the brain, the eyes and the ears or the future.

Lastly, this study would be useful to **future researchers** who would want to further investigate the various aspects of computer education for elementary school pupils.

**Scope and Delimitation of the Study**

This study attempted to determine the status of Computer Education among private elementary schools in Angeles City as of Academic Year 2009-2010. Computer education in all grade levels was assessed based on identified curricular factors, namely inclusion of Computer Education as a separate subject, time allotted for the subject per session, number of sessions per week, course objectives / desired learning competencies, and course contents as well as instructional factors namely, educational qualifications of teacher(s) handling the subject, methods of teaching used, instructional materials used, including textbooks, hardware and software, and technical support. Based on the findings of the study, curricular developments were proposed for Computer Education per grade level.

The respondents were computer education teachers in private elementary schools in Angeles City as of Academic Year 2009-2010. Data obtained on the
curricular and instructional factors were factual information, supported by pertinent documents such as the syllabus/course outline, subject schedules, etc and by ocular inspection of private elementary schools in Angeles City. Perception-based data were also obtained, but only in terms of perceived problems in the teaching of Computer Education.

As mentioned, this study focus only on private elementary schools for purposes of uniformity and applicability of recommendations. Computer education in public elementary schools may be regarded as another possible topic for scientific investigation.

**Definition of Terms**

For clarity of use, the following terms are hereby defined in this section:

Computer – This refers to an electronic device, operating under the control of instructions stored in its own memory that can accept data, process the data according to specific rules, procedure results, and store the results for future use (Shelly, Gary B., et.al, *Discovering Computers*. Boston MA 02210: Thomson Course Technology, 2005)

Computer Education – This refers to the subject designed to introduce Information and Communication Technology at the elementary level. It is presently mandated by the Department of Education to be offered under the
subject “Edukasyong Pantahanan at Pangkabuhayan” or EPP which is in turn covered under the subject Makabayan.

Curricular developments – In this study, this refers to possible improvements in the Computer Education subject in terms of time allotment / number of session, course objectives / desired learning competencies, and course contents.

Curricular factors – In this study, this refers to the Inclusion of Computer Education as a separate subject; the time allotted for the subject per session, the number of sessions per week, the course objectives / desired learning competencies, and the course contents.

Grade Level – This refers to the various levels in the elementary school, that is, from Grades 1 to 6.

Hardware – This refers to all physical parts of the computer.

Information and Communication Technology – This is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them.

Instructional factors – In this study, this refers to the educational qualifications of teacher(s) handling Computer Education; methods of teaching used, instructional materials used including textbooks, hardware and software.
components; as well as the technical support available for the Computer
Education subject.

Instructional materials – These refer to materials used in teaching Computer Education
including textbooks, hardware devices as well as software

Methods of teaching – This refers to techniques / strategies used by teachers in
handling the Computer Education subject

Qualifications – This refers to the college and post-college degrees of the teachers of
Computer Education subjects in the private elementary schools; their
length of teaching experience in the subject and other related trainings

Software – This refers to a set of programs or electronic instructions that make the
hardware perform a particular set of tasks in a particular order.

Technical support – This refers to services provided by computer / laboratory
technicians

Textbooks – These refer to the regular reference materials prescribed to students for
use in the Computer Education subject
CHAPTER 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents various literature and studies about computer education, which provide ideas and relevant background information related to the present study.

RELATED LITERATURE

FOREIGN LITERATURE

History of the Computer

The "First Generation" of computers started in the very late 1930's. These computers were grotesquely slow, colossal in size, created much heat, used hundreds of kilowatts of power, and were about as reliable as a used up match. As time went on, these computers evolved from using vacuum tubes to transistors. Transistors mark the beginning of the "Second Generation" of computers in 1947. Unfortunately, the 2nd Generation did not advance as much as most people hoped, but eventually, the "Third Generation" was brought about by the invention of integrated circuits in 1958. Integrated circuits replaced transistors, and many computer languages came out in this time. Many more computer companies were born during this time, and eventually this led to personal computers for everyday use. Microprocessors introduced the beginning of the "Fourth Generation" and a time where computers were in almost every house (Kazeki, 2009).
Overview of a Computer System

The following overview of the computer system, classification of computers, and computing environments were based on the courseware on Computer Basics by the National Informatics Centre, Training Division, New Delhi (retrieved from http://training.nic.in/courseware/PDF%20%20Files/ComputerBasics.pdf).

Every computer system has two main units: (i) Hardware and (ii) Software. All physical parts of the computer (or everything that we can touch) are known as Hardware. Software gives intelligence to the computer. For example in a television the wires, switches etc. are the hardware while the programs, watched on TV, is the software. Although the hardware of a computer is capable of performing marvelous tasks, it can't actually accomplish any of them without the vital instructions that software provides.

A. Hardware

Hardware refers to the physical units of a computer, which includes electronic and electrical circuitry, components and devices. Regardless of its shape, size or capabilities, every computer that people use directly has same general design:

Computer Hardware = Processing Unit + Secondary Storage Devices + Peripheral Devices

i. Processing Unit

The complex procedure that transforms raw input data into useful information for output is called processing. To perform this transformation, the computer uses central
processing unit. The processor is the "brain" of the computer, the part that interprets and carries out instructions.

ii. Secondary Storage Devices

The CPU, however, does not have sufficient storage space for the entire program as well as for the data being manipulated by those programs. Therefore, the control unit stores the data and instructions received from input devices into primary memory called random access memory (RAM). Unlike human memory, which can store information indefinitely, RAM holds information only while the computer is ON. When the computer is turned off or reset, the information disappears unless it has been saved on a storage device. Hence RAM is often referred to as volatile or temporary memory.

Some of the data and instructions remain permanently stored into memory, which cannot be changed. This memory is called read-only memory (ROM). A computer needs ROM, mainly, so that it knows what to do when the power is first turned on. Among other things, ROM contains a set of start-up instructions that check to see whether the rest of memory is functioning properly, look for hardware devices, and look for an operating system. Since this memory never gets lost, it is sometimes referred to as permanent or non-volatile memory.

The performance of a computer very much depends upon the data transfer rate between CPU registers and memory. The computer is costlier if data transfer rate is faster. Therefore, to increase the transfer rate, economically, a cache memory (pronounced as CASH) is introduced in the computer that acts as a buffer between
primary memory and CPU registers. In the present day computers, cache can be either a section of main memory or an independent high-speed storage device.

Floppy diskettes, hard disk, and optical disks come under the category of external storage devices or ancillary storage devices. These devices are very sensitive to environmental conditions (humidity and temperature) as well as to external magnetic fields and need to be stored carefully.

Floppy disks are magnetic storage media, using flat circular platter. Information on a floppy disk is recorded in the magnetized states of particles of iron oxides evenly placed upon concentric circles known as tracks. On the other hand, hard disk is a non-removable enclosed magnetic disk included in most PCs. A hard disk holds much more information than a floppy disk and is used to store relatively large amounts of data. The physical size and storage capabilities of a hard disk vary.

The need for ever greater storage capacities has driven hardware manufacturers to use optical storage technology as the main alternative to magnetic storage. Optical storage techniques make use of the pinpoint precision possible with laser beams.

The most-popular optical storage medium is compact disk, read-only memory (CD-ROM). CD-ROM uses the same technology that is used in music CDs. One cannot write data to a CD-ROM but can always read it. The huge amounts of data, such as dictionaries, encyclopedias, medical, legal or other professional reference libraries etc., that normally would not change, is available on CDs nowadays. A single CD can hold up to 650 MB of data. Larger CDs can store up to 20GB.
Due to tremendous capacities of CDs, writable optical devices have been developed. This has resulted in the write once, read many (WORM) drive. As with the CD, once data has been written onto a WORM disk, it cannot be altered. For example, many banks use WORM disks to store a record of each day's transactions.

Compact Disk – Record able (CD-R) is similar to CD-ROM and can be produced by anyone who has a CD-Writer. Data can be recorded only once in a CD-R to produce an audio CD or CD-ROM.

Digital Versatile Disk or Digital Video Disc, is a type of CD-ROM that holds a minimum of 4.7 GB enough for a full length movie. The DVD specification supports disks with capacities from 4.7 GB to 17 GB and access rate of 600 Kbps to 1.3 Mbps (Mega Bits Per second).

A CD-Writer is a peripheral device that can record data on a CD-R disk.

iii. Peripheral Devices

Peripheral devices are devices connected to the computer externally. If a peripheral device is disconnected, the computer will still be able to work; only functions performed by this peripheral device will not be available. Mainly there are following types of peripheral devices: Input Devices, Output Devices, and Other Peripherals.

Input devices accept data and instructions from the user. Following are the examples of various input devices, which are connected to the computer to provide input. There are many input devices. Some important input devices are as follows: keyboard, mouse, joystick, and light pen. Other input devices are the optical scanner
such as the bar-code reader and optical character recognition (OCR) device; touch panel displays and pads which are now being offered as alternatives to keyboard input wherein input can be given through the computer screen, that is, users touch electronic buttons displayed on the screen or they may use light pen; the microphone which takes voice as input, and a track ball which is a pointing device, basically, a mouse lying on its back that is stationary so it does not require much space to use it and can be placed on any type of surface so they are popular pointing devices for portable computers.

Output devices return processed data that is information, back to the user. Some of the commonly used output devices are: monitor (visual display unit), printers, and speakers.

Out of all the output devices, monitor is perhaps the most important, because it is the output device that people interact with most intensively. Two basic types of monitors are used with microcomputers, which are as follows: Cathode Ray Tube (CRT) which is the first is the typical monitor that you see on a desktop computer; it looks a lot like a television screen, and works the same way; and Liquid Crystal Displays (LCD), a flat panel monitor.

On the other hand, after a document is created on the computer, it can be sent to a printer for a hard copy (printout). Some printers offer special features such as coloured and large page formats. Some of the most commonly used printers are: laser printer, dot matrix printer, ink jet printer and line printer.

Lastly, speakers are output device, which allow you to listen to voice like music, even conversation with people.
Other Peripherals include the floppy disk drive which is a device that reads and writes data to and from floppy disks and the hard disk drive, which includes the hard disk, the motor that spins the platters, and a number of read/write heads. Generally, one cannot remove the hard disk from its drive; the two terms are used interchangeably to mean the whole unit, both disk and drive. However, some manufacturers make removable hard disks that plug into a separate drive unit.

A modem is another peripheral device that enables your computer to receive/send data from/to remote places. Also, in the present day computer systems, FAX machines can be attached with a computer to send and receive documents created in the computer to distant places, bringing computers and communication together.

B. Software

Computer needs instructions to tell it what to do, how to do and when to do. Thus the electronic instructions well defined and well organized, that people write to tell the hardware what to do to get desired results, are called programs. Software refers to a set of programs that makes the hardware perform a particular set of tasks in a particular order. Software can be classified mainly in two categories as follows:

i. System software which is responsible for the running of the computer and management of computer resources. Operating System (OS) falls under this category. An operating system is system software that provides an interface for a user to communicate with the computer, manages hardware devices (disk drives, a keyboard, a monitor, and so on), manages and maintains disk
file systems, and supports application programs. Some of the popular operating systems are, DOS, Unix, UNIXWARE, Windows, OS/2 Warp, Windows NT, Windows 2000, Windows XP and LINUX etc. Although OS developers try to provide all the features users need to use and maintain their systems, inevitably, they do not meet everyone's expectations. This has led to another type of system software called **utilities**. These are programs that bridge the gap between the functionality of an OS and the needs of users. Utility programs are a broad category of software. They range from programs that can organize or compress the files on a disk to programs that provide a menu interface to a command-line OS. For example, Norton Utilities, Antivirus software, Network resources management etc.

ii. Application Software that include General Purpose Software for creation of files of various types and Computer languages for designing customized applications. General Purpose Application Software are user-friendly software to help the user write letters, analyze numbers, sort files, draw pictures and even play games. It is a group of programs that provide general-purpose tools to solve specific problems. Some of the application software are Word Processing software like: WordStar, WordPerfect, MS-Word; Data Analysis (Spreadsheets) like Lotus 1-2-3, SCO Professional, MS-Excel; Data Management software like DBase IV, Fox plus, FoxPro, MS-Access, Lotus Approach, Oracle, DB2, SQL Server; Desk Top Publishing software like Ventura, PageMaker, CorelDraw, Press Works etc.; Graphics Tool software like Adobe Photoshop, Paint Shop Pro; Presentation software like Microsoft
PowerPoint, Presentation Graphics; Internet Browsers like Microsoft Internet Explorer and Netscape Navigator. On the other hand, some of the popular high-level computer languages, that can be used to develop application software are, C, C++, Visual Basic, Visual C++, JAVA, and Smalltalk etc.

**Classification of Computers**

According to the purpose, computers can be divided into the following categories: Digital Computers, Analog Computers, and Hybrid Computers.

In a digital computer, the system works with digits. In other words, a digital computer is a counting device. All the expressions are coded into binary digits (0 and 1) inside the computers and it manipulates them at a very fast speed. The digital computer circuits are designed and fabricated by the manufactures and are quite complicated ones. A digital computer manipulates data according to the instructions (program) given to it in one of the computer languages. The instructions and data are fed to the computer in the form of discrete electrical signals. Most computers are digital. Unlike a digital computer, an analog computer works by measuring voltages and currents rather than by the process of counting.

An analog computer works on supply of continuous electrical signals and displays output continuously. The accuracy of these machines is quite low although they are faster in speed as compared to digital computers. The word "computer" is a synonym of a digital computer.
Lastly, Hybrid Computer is one, which combines best features of analog and digital computers. These machines are generally used for scientific applications and in industrial control processes.

According to size, computers can be divided into following categories: Supercomputers, mainframe computers, minicomputers, and personal computers.

A supercomputer is the most powerful computer available at a given time. These machines are built to process huge amounts of information and to do so very quickly. For example, scientists build models of complex processes and simulate the processes on a supercomputer.

On the other hand, the largest type of computer in common use is the mainframe. They are designed to handle tremendous amounts of input, output, and storage. For example, consider the airlines reservation system. One can get his/her air ticket booked at one of the various reservation counters, each of which has many employees working at computer terminals. A terminal is a special kind of computer that does not have its own CPU or storage; it is just an I/O device that acts as a window into another computer located somewhere else. The terminals are connected to a database residing in and controlled by a mainframe computer that can handle the input and output needs of all the terminals connected to it. A typical mainframe computer is characterized by vast amounts of memory with many hard disks in several gigabytes range, one or more tape drives, several line printers, a separate computer room, a false floor (for under-floor cabling) and tight security.
Still on the other hand, the best way to describe a minicomputer is that its capabilities lie somewhere between those of mainframes and those of personal computers. Like mainframes, minicomputers can handle a great deal of input and output than personal computers can. Minicomputers are relatively inexpensive and ideal for academic institutions and small business houses.

Finally, the terms personal computers and microcomputers are interchangeable and generally refer to the small computers that are commonly found in offices, classrooms and homes. Personal computers or PCs come in all shapes and sizes, although most models reside on desktops, others stand on the floor, and some are even portable. A desktop model is the most common style of PC and it is small enough to fit on a desk but a little too big to carry around with you. Among the portable computers, a notebook computer approximates the shape of an 8½ -by 11-inch notebook and can easily fit inside a briefcase. Laptops are the slightly larger predecessors of notebook computers. Notebooks and laptops are fully functional microcomputers and are used by those people who need the power of a full computer wherever they go. Personal digital assistants (PDAs) are the smallest of portable computers. No larger than a chequebook, PDAs are also called palmtops. They are much less powerful than notebook or desktop models and are generally used for displaying important telephone numbers and addresses or keeping track of dates and agendas. Many can be connected to larger computers to exchange data.

With the fast changing technology, present day computers have increasing capabilities. But of course, computers have limitations such as thinking limitations, computer crimes, computer virus, mismatch between technological advancements and
their implementation, standards enforcement problems, machine dependency problems, risk of equipment failure and equipment downtime and recovery.

**Computing Environments**

Computing environments can be single user (the complete PC family belongs to this category; at a time only one person can work on the computer); multi user (many users can simultaneously work on the computer and share its resources); and networked environment (networks are groups of computers and peripherals connected together to share data and information). Classification of networks include Local area network (LAN) which covers a small geographic area such as one office or a building; Wide area network (WAN): covers a large geographic area such as several cities or even countries; and Metropolitan area network (MAN): covers an area larger than LANs, but smaller than WANs; these networks are designed for a town or a city.

The advantages of networking include resource sharing (one computer in a network can access data and resources of another computer in the same network; the physical location of any computer has no effect on network's resource sharing property); reliability (one can store multiple copies of files and data on multiple nodes, so even if one computer goes off the data wouldn't be lost); cost effectiveness (we can use large number of small computers than small number of large computers; this helps in improving cost/performance ratio) and communication media (networks act as a strong communication media between distant placed employees of an organization).
Advantages of Computers Among Children

Computers help children to be in control of their experience, to set their own pace, and to select the level of challenge with which they feel comfortable.

Computers help children to use all of their senses to extract information. Computers fascinate kids and can draw their full attention, which often results in a deeper focus and concentration.

Computers enable children to learn through creating, just as they gain hands-on knowledge and understanding when they build forts, make up stories, and paint, increase their skills.

As they master computers, children build positive attitudes toward technology that will pay dividends for the rest of their lives.

Good educational software also enables children to develop and practice a broad range skills. It can help them learn, for example, about letters, numbers, shapes, colors, and rhythm. Good software can also help children develop their understanding of cause and effect, higher order problem solving, procedural thinking, and creative expression. Today, the wide range of multimedia available for kids is really amazing.

By using a computer children develop self-confidence and self-esteem as they master computer skills and use the computer to make things happen. This also gives them a reason to smile.
In the classroom setting or in the home when their friends or parents are available, children often prefer working with one or two partners over working alone, which leads to the development of social skills.

Computers have also proven extremely beneficial to kids with certain speech, audio, and motor limitations. Kids with special needs can use alternative input and output devices (assistive technologies) to interact with computers and do things that they normally could not accomplish independently. They benefit especially from having access to an on-demand, patient tutor that allows them to work at their own pace. What they achieve through using a computer enhances their self-esteem and provides them with a greater sense of control and engagement with the world. The internet provides them with the best of knowledge for their treatments and they can be in touch with doctors or friends through the internet. Also, the internet can later help them earn their means of livelihood.

**Disadvantages of Computers Among Children**

Computers are very engaging and can exercise a strong "holding power" on children as well as adults. They really seem to mesmerize children. Since we do not yet understand the impact of this power, we need to monitor the amount of time a child spends before a computer.

If the software is not age-appropriate, children are likely to become frustrated and associate a computer with failure.
Kids with access to software that is not age appropriate may be exposed to such negative influences as violence, strong language, and over-stimulation from fast-action graphics.

Frequent and prolonged computer sessions may pose physical health risks for children. The most frequently cited are visual strain, harmful effects of radiation, and posture and skeletal problems. In the case of normal usage and normal operating conditions, however, research has shown that computer monitors are safe and do not compromise the health of our eyes and that computer monitors emit little or no harmful radiation. What does seem to pose a hazard is the strain placed on a child’s posture and skeletal structure if he / she consistently uses a computer set-up designed for an adult.

**Advantages vs Disadvantages of Computers Among Children**

Overall, the benefits seem to outweigh the drawbacks. And, the fact is, actively involved parents can control most of the drawbacks. This puts even greater responsibility on parents to be vigilant and conservative in their judgment about their children's computer usage. A regular and constant watch is very necessary, especially regarding the internet. For Surfing the Internet, parental involvement & control is also a must. Because the Internet holds no barriers since it is a World Wide Web, parents could install parental control tools to prevent children from going to undesirable sites.

Given the important benefits of computers and parental ability to control many of their drawbacks, computers have a positive, useful role to play in the development of young children. However, this role must be carefully circumscribed, as computers can
be misused and cannot provide all of the kinds of experiences that are critical to a young child’s development.

Computers supplement and do not replace highly valued childhood activities and materials, such as art, blocks, sand, water, books, exploration with writing materials, and dramatic play.” In other words, the computer is an enrichment tool for enhancing readiness skills, problem-solving, and creative expression. It adds another dimension to concrete exploration and expression, like playing with sand, puzzles and crayons.

The good news is that most parents, teachers, and kids in particular seem to know this intuitively. Young children flit between blocks, dress-up, drawing, books, the computer, and other favorite activities according to their spontaneous interest..

**Computer Education for Children**

Years ago, computer literacy was defined in terms of specific knowledge of computer technology and terminology. Today, it is regarded more as a continuum of awareness, skills, experience, and attitudes based on the age and capabilities of the individual child - an awareness of what the computer can do – that it is a tool for learning and finding out about things, and for expressing and creating things; an awareness of ideas and behavior that are a part of the computer culture, such as knowledge of safe behavior on the Internet; basic operational skills learned by immersion in a variety of software programs; a body of successful experiences that over time develop within a child an intuitive feel for dealing with new things that he
encounters in a computer environment such as how to navigate a new program and how to "trouble-shoot" when something isn't working; and an attitude of discovery, mastery, purposefulness, and pleasure in using computers.

Children develop computer literacy by observing others at the computer and by diving in and actively exploring different software programs. As with learning to read, each child will progress at the rate appropriate to that child. By and large, children are curious and pick up fast. There are lots of computer classes which especially cater to young children.

**Stages of Computer Education for Children**

Rather than predicating an optimal age when to start computer education, it is best to allow the child to take the lead. As in the case of reading and writing, her own readiness should drive when she starts using a computer and at what pace she develops her computer skills. Since most children seem to "catch up" whenever they start using a computer, parents needn't worry that their child will fall behind on computer skills if she doesn't demonstrate an interest at an early age.

On way of looking at stages in computer education for children is described in this section:

**Exposure and observation:** A child's relationship with the computer typically begins with the child watching a sibling, parent or classmate busy at the computer. She
eventually crawls up on Daddy's lap, and through the so-called "Daddy Interface" has her first computer experiences, passive in nature.

**Active participation:** The child quickly moves from observer to active participant, grabbing at the mouse, banging on the keyboard, and pointing at things that excite her on the screen. The parent, however, still operates the software.

**Taking control:** Eventually, the child learns how to control a mouse or trackball and subsequently how to control what is happening on the computer screen. Using her newfound "point and click" and "click and drag" skills, she can now actively explore a software program.

**The computer is my tool:** With greater control, the child begins to see the computer more as her tool – something she can use to make and find things. Increasingly, she approaches the computer with a goal, for example to find dinosaurs or or click on something colorful or moving.

**Mastering skills:** As she plays with different software programs, a child develops a general sense of how to navigate through simple environments, how to start and quit an activity, and how to operate specific programs. Although she may still rely on a parent or sibling for many functions, she is rapidly mastering an impressive skill set.

**Independence:** Most children with consistent access to a computer over the period of a couple years are eventually able to power up the machine, start up a pre-loaded application either from the hard disk or a CD-ROM, quit an application, operate the printer and scanner, access the Internet from the desktop, and even send an email.
Another way of looking at stages in computer education for children is described as follows:

**Babies and Young Children: Passive Observers:** At this age, kids are able to sit on a parent's lap and watch the activity on a computer screen. They have the curiosity, attention span to track and enjoy the media experience. This relatively passive computer experience with the parents, however, is not very different from being read to or watching a TV program, with the parent making the effort to connect the child with the media.

**Three-Year-Olds: Ready, Set, Go:** A few essential skills are required for directly controlling a computer software program. Children must first have adequate fine motor skills and hand-eye coordination to operate a mouse or track ball. Second, they must possess the cognitive skills of causality and vertical/horizontal transfer in order to understand that what they are doing with the keyboard or mouse is making things happen on the computer screen. They also need to possess the related skill of knowing what is up, down, right and left, so that they can control which direction they want the cursor to move on the computer screen.

Typically, these capabilities are present in the three to three-and-a-half-year-old. This is when becoming proficient with a mouse is a quasi-effortless, rapidly acquired skill. Although many two's are able to control a mouse, for most younger children, it is a struggle and it is better to simply wait until they are ready rather than build up frustration and negative feelings toward the computer.
With basic mouse skills, three-year-olds can explore and experiment with cause and effect in simple environments like interactive stories and play rooms. They can also dabble with basic draw and paint programs and enjoy sing alongs, finding games and other activities that are simple to control.

**Preschoolers and Kindergartners: Computer Explorers:** As children move through pre-school into kindergarten, their insatiable curiosity, growing attention span, increasing memory, and developing cognitive skills make for an increasingly richer, more independent experience. They can stay with an activity longer, remember more about where things are and how to get where they want to go in a program, and they can enjoy a broader range of content and activities. They move from simple cause and effect experiences to acquiring readiness and problem-solving skills through structured activities, creating illustrated stories and multimedia pictures with graphics programs, and even using visual reference programs like Microsoft Encarta to answer their many "why's?" At this stage, four and five year olds become computer "explorers", never tiring of finding more things to do with a program and the computer.

**First and Second Graders: Computer Competency:** As children enter elementary school, their computer experience continues to broaden with their emerging reading and writing skills. Programs that require or revolve around some reading come within their reach, and they can supplement their learning in school with subject-specific software programs, from the three "Rs" to science and geography. Their more sophisticated logic and problem-solving skills enable them to enjoy puzzles, strategy games and building and simulation programs. Their ability to follow longer multi-step procedures allows
them to use more sophisticated creativity programs to make slide shows, theater productions, paper doll designs, even animations. The text-heavy Internet starts to become more comprehensible, and as their sense of the world broadens, email and correspondence with children from far away places becomes more comprehensible and exciting. Their facility with the printer and other input and output devices gives them control over a wide range of creative "productions."

**Teachers and Computer Education**

Despite global calls over the past decade for more technologically savvy teachers, efforts by teacher education programs to ensure technology competence among graduates can best be described as isolated, often uncoordinated, and in some cases, dysfunctional (Bober, 2003; Harland, 2001, Learning Point Associates, 2004). While some colleges of education are doing a commendable job of preparing classroom teachers to use technology to facilitate student learning in specific content areas (Francis-Pelton, Farragher, & Riecken, 2000; Whitworth & Berson, 2003); others are doing very little; and the majority are situated between the two extremes (Mehlinger & Powers, 2002).

Galligan (1997) emphasizes the role of individual teachers in implementation of computers and how teachers can affect the educational appropriateness of the technology: It is their [teachers'] choices of how, when, where, why and by whom computers are used that determine whether or not the "technological pull is educationally beneficial" (p. 1).
The versatility in the ways computers can be employed for instructional purposes is varied, sometimes within the context of the software itself. "Effective teachers" (p. 2) states Galligan are teachers who make effective choices "about why they are facilitating any particular computer-based learning experience" (p. 3). Becker (cited in Galligan, 1997) provides a number of variables that complicate the pedagogy of implementing the computer in instruction: although computer availability is important, the most important factors determining whether teachers use computers effectively are planning time and teacher attitudes, style and background (p. 3).

Drury (1995) states that changes surrounding pedagogy are necessary if teachers are to be successful in implementing technology to support learning. He states that the "lack of sound pedagogical basis for integration of technology within the school has led to a narrow and unimaginative usage" (p. 3). He argues that teachers and schools focus the use of computers on classes such as "computer studies" (p. 3) rather than in other subject areas and thus "most study is of the technology rather than with the technology" (p. 3). He contends that this practice has the "effect of marginalizing" (p. 1) computers in education. Drury predicts a change in pedagogy and teacher role: The emphasis in our classrooms will shift increasingly from the product of learning to the process of learning and good teachers will be regarded as those who instill in students the skills required to navigate successfully through an information rich world (p. 1).

Galligan expresses a similar view about teacher roles and the pedagogy of computer technology: The outcomes of computer use at the classroom level are shaped by the theoretical framework and beliefs of individual teachers; the range of their
pedagogical repertoire; and their sensitivity and responsiveness to the structure, potential and limitations of particular software programs (p. 4).

Teacher attitudes toward computer technology may be a significant factor in the implementation of computers in education. Griswold (1984), Stevens (1984) and Stephenson and deLandsheere (1985) cited in Madden (1989) express a concern that computer literate individuals will "reap greater benefits than their counterparts who lack that knowledge" (p. 16). Their concern is that the development of computer literate individuals is dependent on computer literate teachers who have "in general demonstrated a resistance to learning about computers" (p. 16).

Lidtke (cited in Madden, 1989) attribute the reluctance of teachers to embrace computer technology to a number of factors that include: anxiety from dealing with equipment, a sense of loss of control over the teaching situation, hardware and software availability, lack of technical support, time and effort for training, remaining current in the field, and appropriately implementing the technology in the classroom.

LOCAL LITERATURE

Offering of Computer Education as a Separate Subject

According to Ms. Marivic Abcede of the Department of Education the Philippines’ policies on the use of ICT in education state that technology must be studied first as a separate subject, then applied in other learning areas as a tool for learning how to learn. The application of computer skills to the other learning areas is a curriculum policy that
systems from the principle that teaching-learning must not be textbook-driven, and educational processes should take advantage of technological developments, including the application of ICT in teaching and learning, where appropriate. An education modernization program should equip schools with facilities, equipment, materials and skills and introduce new learning and delivery systems necessary to capitalize on recent technological developments.

**Qualifications of Computer Education Teachers**

Since year 2000, it has been the policy of the DepEd to give preference to the hiring of teachers who are computer literate; most teacher-training institutions offer computer education as a required course. Usually, public schools send a few teachers to computer literacy training, who would then pass on the training of peer teachers. Private schools usually hire ICT service providers to give training to their teachers. There has been some private sector support for teacher training. Intel and Microsoft have a current program called Intel Teach to the Future program which targets to teach 1,000 teachers on the condition that each teacher would train 20 others. Other training programs for teachers are funded by other private organizations.
RELATED STUDIES

FOREIGN STUDIES

Teachers and Computer Education

One of the earlier studies on teachers and computers which was done by Lidtke (1979) is cited and summarized by Madden (1989): Results indicated that while teachers did not feel that their own jobs were threatened by computers, they still saw them as dehumanizing, isolating, prone to error and possibly as a violation of the right to privacy. Similar results were reported by Tetenbaum and Mulkeen (1984) (p. 13). A more recent study by Newhouse (1995) found that some teachers do not believe that computers have "a useful educational objective" (p. 5) and that they are "nonessential and supplemental to their teaching and classrooms" (p. 4).

Dupagne and Krendal (cited in Morton, 1996) completed a review of literature on teacher attitudes towards computers. They are able to identify "twenty aspects related to teachers perceptions of computers, the impact of computer use and the impact of personal and learning environment characteristics affecting a teacher's intention to use computers as teaching learning strategies" (p. 5).

Drury (1995), in his reference to a study of the Canadian Ministry of Education and its attempt to implement IT in schools in Ontario, finds that: Canadian ministry officials estimate that only 20 percent of the teaching cohort are at least "moderately committed computer users" and even this 20 per cent may not be in favor of a dilution of the traditional curriculum model - "software integrates the curriculum. It can work
against a subject approach." However research indicated that the main factor leading to a high level of IT-usage was a school-wide consensus on the importance of IT use for students and the amount of teacher-teacher collaboration (p. 2).

Kazlauskas and Koop (1995), in their examination of the barriers to the implementation of computers, observe: A critical factor that all staff needed to recognize and understand that integrating computers into classroom practice is a complex innovation which requires change to the whole school's practices and culture, to the curriculum, and in teacher's attitudes and classroom practice. Such change is achieved incrementally over a long period of time (p. 2).

Understanding the factors related to the prediction of preservice teachers' perceptions of their technological competence remains unclear although much has been written about the need for modeling by instructors (Albee, 2003; Francis-Pelton et al.; Strudler & Wetzel, 1999) and for preservice teachers to apply technology in their teaching (Brush, 1998; Dexter & Riedel, 2003; Russell, Bebell, O'Dwyer, & O'Connor, 2003). While preservice teachers are provided with courses on computer literacy and offered examples of computer software packages, it is only recently that they are required to apply computer technology in their courses. In addition, they are rarely afforded faculty role models who demonstrate computer technology in the classroom (Albee), or cooperating teacher role models during student teaching (Dexter & Riedel), although modeling computer technology in the classroom may result in stronger beliefs about the value of technology for teaching (Russell et al). Wheatley (2003) stated "Observing highly influential models, learners think Oh, if s/he could do it (or learn to do it), I can do it (or can learn to do it)".
In support of this, Dexter and Riedel (2003) found that modeling predicted student teacher use of technology and that support from staff members at the student teaching site was the most common source of support.

In another study, Motamedi and Fleming (2003) examined the role of the training environment in the acquisition of preservice teachers' technological skills. The three training environments studied included practicum, student teaching, and the university where preservice teachers were enrolled. In this study, it was found that while university instructors were most likely to use technology, university instructor use was unrelated to preservice teachers' perceptions of their computer technology skills. However, when cooperating and practicum teachers used computer technology, preservice teachers' perception of their skills were greater than those preservice teachers who reported no computer technology use by their cooperating and practicing teachers. This supports the findings of Higgins and Russell (2003) who found that modeling by other classroom teachers had the most influence on technology use in new teacher classrooms.

A study by Morton (1996) draws some important conclusions surrounding teachers' personal familiarity with computers and how lack of personal familiarity and experience may act as a barrier: the acquisition of computer expertise and skills is generally left to teacher initiative high levels of anxiety in using computers is experienced by teachers wanting to use computers and have few role models to follow teachers view the use of computers as promoting learning in students teachers are aware that increasing the frequency of computer use will lead to changes in pedagogy teachers are critical of lack of computer resources to implement change administrators
have created a major barrier to implementation because they are focused on learning about the computer instead of using the computer for learning (p.1).

Van Lengen (cited in Morton, 1996) finds that for the most part all teachers are willing to implement the computer but "the problem was that many [teachers] were either infrequent users or they didn't know how to use them"(p. 8). Compounding this problem is the need for infrequent teacher users to have structured opportunities to develop and practice computer skills. In addition is the startling revelation that "those that do not know how to use them [computers] have successfully avoided the many basic staff development activities that have run over the years" (p. 8).

Appropriate role models are required for infrequent users to implement and manage computers. Morton (1996) presents a complicating factor to the role model situation: ...the situation is that those role models exist, are generally based on computing studies teachers using computers in laboratory situations...and the more subtle obstacle of computing being the domain of mathematics / computer studies [teachers] inhibits the spread of computers across the curriculum (p. 5).

Newhouse (1995) identifies teachers' lack of computer literacy as being an obstacle to their using computers in classrooms. Newhouse draws a conclusion about the number of years of experience with computers teachers have and the impact it makes on the implementation process: ...most teachers need two or three additional years of experience using computers to become significant users of computers in classrooms...teachers need up to five years solid experience in using computers to become proficient at integrating them [computers] in the curriculum (p. 5).
Newhouse’s findings are shared by Roszell (1995): The most commonly identified factor, in the literature affecting IT use by teachers, was their level of knowledge and skill in using computers. This factor was identified by Zammit (1991), Ely (1990), Pelgrum and Plomp (1991) and Brummelhuis (1991) (p. 151).

Seidman (1996) has conducted a study into issues surrounding teacher training and its relationship with the successful implementation of computers. Along with the statistical analysis, Seidman finds that the handwritten comments by teacher respondents "overwhelmingly expressed a need for teacher training on basic computer skills" (p. 145). Seidman also states that teacher training should not be limited to teachers who teach computing. Seidman refers to an international trend on the part of educators to train all teachers on the use of computers: This need for teacher training is explained by the fact that most of the presently hired teachers received little or no training in their formal education. It could also be a reflection of the need to update teachers' knowledge in the world of fast moving technology of communication. Training all teachers on the educational use of computers gains special importance when considering integrating the computer into regular curriculum. Teachers need to know how to use computers first before they can integrate [them] (p. 145).

Seidman states that subject matter teachers are reluctant to consider the implementation of computers in teaching: The relatively cautious position of the SM [subject matter] teachers is perhaps due first to their limited experience with software and hardware, and second to the uneasiness about changing their habits and techniques as some of them expressed in their written comments (p. 147).
Mintz (1997) echoes Seidmen's view that teachers are unprepared to use computers in their classrooms and they "lack support and educational guidance" (p. 3). Mintz points to professional development and training as a solution to successful implementation: "...the next crucial step [in successful computer implementation] is the professional development for teacher that will provide them with materials, strategies and new understanding to meet the learning goals (p. 4).

The Office of Technology Assessment Report (cited in Geisert and Futrell, 1995) was written for the U. S. Congress to provide federal policy-makers an information base for making long-term decisions about computers in education. The OTA Report states that technologies have the potential to enrich the teaching and learning process but only under certain related conditions: adequate teacher training in the skills needed to operate the technology a clear vision and understanding among educators of state-of-the-art development and applications support for experimentation and innovation time for learning and practice (p. 256). The OTA report lists adequate teacher training as one of the recommendations in the report: Provide adequate teacher training. Teachers will need continuing in-service programs as technology changes, as more effective uses of technology are developed, and as research provides a better understanding of how children learn. (p. 257). The teacher is central to the implementation of computers in the classroom. Adequate teacher training is necessary it that is occur. Essential to teacher training is drawing a link between pedagogy and technology (Solomon, 1995; Bennett, 1996; Holzberg, 1997; McKenzie, 1994).
Availability of Hardware for Computer Education

Ginsberg and McCormack (1998) conducted a survey of 1163 teachers to discern what barriers teachers encounter in using computers. The responses to their survey indicated that issues surrounding computer hardware were the most serious barriers affecting implementation: Regarding hardware, teachers in both highly and less effective schools reported "serious" to "very serious" concern with "too few computers" and "too few printers." Teachers in less effective schools also reported concerns about "computers being too limited" (p. 2).

Middleton, Flores and Knaupp (1997) view the hardware factor as an accessibility barrier. They contend that computer labs are an effective strategy for reducing the student-to-computer ratio in schools. However, the competition between teachers for blocks of time in the computer lab may result in some teachers giving up on scheduling time in the computer lab and thereby ceasing to implement computers in instruction. They also contend that the accessibility to computer hardware may also be dictated by the subject being taught. In some instances, the physical location of computers and the students needing access to them will act as a barrier to teachers implementing the technology: The most important issue, according to Middleton et al, involves limitations of computer labs and issues of scheduling computer time. Middleton et al argue that computers need to be situated in classrooms where they can be easily accessed by students and used in a meaningful and pragmatic way.

The barrier of poor or limited accessibility prevents true integration of the computer in the instructional process: When large numbers of computers are in a room
separate from classrooms, many students get hands-on experience occasionally, but no one gets to use the computer in a truly authentic way—that is, the way a scientist or mathematician might use it to solve a difficult, time consuming problem. In order to be true tools for learning, computers need to be on hand when the need arises, not next week when the lab is open (p. 2).

**Software Issues and Computer Education**

The computer is a tool and the software tells the computer what to do. Accordingly, the value of the computer for a child is as good as the experience provided by the software. Having access to a library of high-quality age appropriate titles spanning the product categories relevant to kids (e.g. creativity, storybooks, and reference) is essential for enjoying the full benefits of a computer.

Newhouse's (1997, p.2) evaluation of computer-saturated learning environments in part considers issues concerning teachers' implementation strategies for computers in the classroom. One factor that is identified by teacher respondents in Newhouse's study is the lack of availability and access to software that is subject content appropriate. This factor is perceived by teachers as being a serious barrier that has a negative effect on their using computers in their classrooms. Lockhart et al (cited in Mann, 1997) names the application of appropriate software and hardware to curricular specific computing, the process of "articulation"(p.30). Primary to the implementation of the software is its assessment in terms of its use and appropriateness in the context of specific learning outcomes. Part of this articulation process is having curricular software
and manuals catalogued and accessible for easy use by teachers (Mann, p.3). Ginsberg & McCormack (1998) list a number of teacher issues and potential barriers to implementation that are software resource related: matching courseware to curriculum evaluation, quality control acquisition, setting priorities security, placement appropriate use (p.253). Similar software issues that act as barriers to successful implementation can be found in Ginsberg & McCormack (1997) and Morton (1994).

**Problems in the Use of Computers in Education**

Roszell's (1995) studied one urban school district in Saskatchewan to determine the degree teachers and administrators used Information Technology [IT] to support the goals of education and to identify the factors affecting the level of IT usage. Roszell surveyed urban district teachers and school-based administrators to estimate their level of IT use, the effectiveness of the IT they employed, and the degree to which various organizational and personal characteristics affected the amount of IT they used.

To summarize, the most important factors, identified by Roszell in the study, shown to have an effect on the implementation and use of IT in schools are: access to computers; availability of software; self-motivation; confidence and skill; the amount of time available for software review and teacher preparation; priority of computer use in the school; availability of hardware; attitudes of administrators; and teacher education and training (p. 54).
From the list of ten factors which he saw as having the greatest impact on IT use, Roszell identified five factors: the availability of time for teachers to prepare to use computers in instruction; the availability of high quality software; the availability of hardware; personal knowledge about computers; and administrative support (p. 58). Though Roszell did not include it in his list of recurring factors, he identified "pedagogical factors" (p. 171) as those requiring further investigation and research. Roszell stated that the research would benefit software developers and persons responsible for implementing technology into school curricula. The integration of computer technology has tremendous potential to effect changes in traditional education in terms of pedagogy.

Individual teacher initiative accounts for much of the implementation of computer technology in schools. Lack of support by administrators is identified as a significant barrier toward implementation of computers in classrooms (Morton 1997; Brand 1998). Arzt, (1991) and Lockard et al (cited in Mann, 1997) argue that successful implementation of computers can only occur if administrators offer teachers support and leadership. Persky (cited in Brand, 1998) states that in addition to administrators developing a philosophy to guide the implementation of computer technology, they can support the technological professional development of teachers by: establishing flexible schedules so teachers can practice what they have learned (or to continue their learning); encouraging and facilitating team teaching and peer coaching allowing teachers to visit each other's classrooms to observe computer technology integration; and scheduling regular meetings among teachers using technology to plan and evaluate instruction (p.13).
LOCAL STUDIES

Dizon (2001) made a study on the assessment of the current status of computer education in the private elementary schools in the Division of Pampanga and Angeles City. The study focused on perceptions on computer education. Based on her findings, she found out that most students find satisfaction in learning the lessons and these are further reflected in their positive attitudes about the subject. Students also appreciate computer education subjects. This means that they value the practical application of having knowledge in their life. Furthermore, student like computer subjects as part of their curriculum in order to keep themselves updated regarding recent technology in their community and country as whole.
 CHAPTER 3

RESEARCH DESIGN AND PROCEDURES

This chapter presents the research design and procedures, which the researcher applied in the conduct of the study. It includes the research method, research locale, population and respondents of the study, research instruments, data analysis techniques and research procedures.

RESEARCH METHOD

The descriptive method of educational research was employed in this study with questionnaires and secondary data as the major sources of data for analysis. This was done to provide data and information on the status of computer education in private elementary schools in Angeles City.

From another vantage point, this research may also be looked at as employing both qualitative and quantitative methods of research based on the nature of data collected and the type of data analysis performed.

RESEARCH LOCALE

This study was conducted in ten (10) private elementary schools in Angeles City during Academic Year 2009-2010.
POPULATION AND RESPONDENTS OF THE STUDY

The target population of this study consists of administrators and computer education teachers from private elementary schools in Angeles City.

Ten consenting private elementary schools in Angeles City were included in the study. All the administrators and computer education teachers from the consenting schools were included as respondents of the study.

The number of respondents per school are as follows:

Table 1. Respondents of the Study

<table>
<thead>
<tr>
<th>School</th>
<th>No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrator</td>
</tr>
<tr>
<td>Angeles University Foundation –</td>
<td></td>
</tr>
<tr>
<td>Integrated School</td>
<td>1</td>
</tr>
<tr>
<td>Chevalier School</td>
<td>1</td>
</tr>
<tr>
<td>Holy Angel University</td>
<td>1</td>
</tr>
<tr>
<td>Holy Family Academy</td>
<td>1</td>
</tr>
<tr>
<td>JF Kuzma</td>
<td>1</td>
</tr>
<tr>
<td>Lip Lin School</td>
<td>1</td>
</tr>
<tr>
<td>Nazarene School</td>
<td>1</td>
</tr>
<tr>
<td>St. John Integrated School</td>
<td>1</td>
</tr>
<tr>
<td>Systems Plus College</td>
<td>1</td>
</tr>
<tr>
<td>Westfields International School</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>
RESEARCH INSTRUMENTS

The major instrument for gathering the desired data of this study was the questionnaire. Specifically, two sets of questionnaires were prepared – one for school administrators and one for computer education teachers from private elementary schools in Angeles City.

Some responses in the questionnaire were verified and validated with the data and information emanating from the respondents in unstructured interviews that were conducted. The interviews were informal in the sense that the respondents were just made to supplement or confirm results from the questionnaire.

DATA ANALYSIS

Qualitative as well as quantitative data analysis techniques were utilized in this study.

Qualitative data analysis techniques, particularly thematic organization, was used for the textual information collected on the course objectives / desired learning competencies and course contents in Computer Education.

On the other hand, quantitative data analysis techniques, namely, frequency and percent distribution were used for analyzing the inclusion of computer education as a separate subject, time allotted for the subject per session, number of sessions per week, educational qualifications of teacher(s) handling the subject, methods of teaching used, instructional materials used, technical support, and problems commonly encountered in the subject.
Descriptive statistics such as mean, standard deviation, minimum and maximum values were also obtained for the following variables: time allotted for the subject per session, number of sessions per week, number if trainings / seminars related to Computer Education, length of experience in teaching Computer Education, and Computer Education teacher-pupil ratio.

Mean ranks were also computed for the data on the problems met in Computer Education.

RESEARCH PROCEDURE

After securing the necessary permission to undertake the study from the AUF Graduate School and her Dissertation Adviser, the researcher visited the individual schools and distributed the questionnaire personally and requested the respondents to return the same. The respondents were assured of the confidentiality of their responses and assured that their responses would be used solely for the purposes of this research. After data collection, the researcher encoded the data gathered into a spreadsheet application (Microsoft Excel) and then applied the data analysis techniques mentioned in the preceding section.

CHAPTER 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the data gathered by the researcher in order to answer the research problems. The sequence of presentation is aligned with the order of the research questions as presented in Chapter 1.
Current Status of Computer Education among Different Grade Levels in Private Elementary Schools in Angeles City

The current status of computer education among different grade levels in private elementary schools was assessed based on curricular and instructional factors.

CURRICULAR FACTORS

Curricular factors, which are discussed in this portion of the manuscript, covers the inclusion of computer education as a separate subject, the time allotted for the subject per session, the number of sessions per week, the course objectives / desired learning competencies and the course contents.

Inclusion of Computer Education as a Separate Subject

All the 10 private elementary schools included in this study offer a subject for computer education. As shown in Figure 2. for 6 out of these 10 schools, the computer subject is integrated under the subject Makabayan. On the other hand, for 4 out of the 10 schools, the computer subject is an entirely separate subject.
As mentioned previously in this paper, Information and Communication Technology (ICT) is introduced in the elementary level as part of the subject “Edukasyong Pantahanan at Pangkabuhayan” or EPP which is in turn covered under the subject Makabayan. However, computer education is only a part of EPP and not yet mandated by DepEd to be a separate subject.

The computer subject is simply called “Computer” in 7 out of the 10 schools. The other 3 schools dub the subject as “Basic Computer,” “Computer Education,” and “Computer Studies,” respectively.
Figure 3 presents the number of schools with a computer subject per grade level. As seen in the graph, not all schools have a computer subject in the primary level (grades 1 to 3) while all 10 schools have a computer subject in the intermediate level (grades 4 to 6). Two schools do not have a computer subject for Grade 1, one (1) school does not have a computer subject for Grade 2 and one (1) does not have a computer subject for Grade 3. This may be because the minimum learning competencies prescribed by DepEd for Computer Education are only for Grades 4, 5, and 6, hence there are schools which do not include it among the subjects of grades 1 to 3 pupils.

![Figure 3](image_url)

**Figure 3**

**Number of Schools with Computer Subject Per Grade Level**

Among the schools with Computer Education subjects, the number of students and sections handled and number of computer teachers were obtained. Mean number of sections and students handled by each computer subject teacher per grade level were then computed along with other summary measures and these are presented in Tables 2 and 3.
As seen in Table 2, there is approximately 1 section or class to be handled per computer teacher for grades 1 to 2 while there are approximately 2 sections or classes to be handled per computer teacher for grades 3 to 6. Moreover, it can be seen from the table that there are teachers who handle up to 3 computer classes for Grades 1 to 3. On the other hand, there are teachers who handle up to 8 computer classes for Grades 4 and 5 and up to 7 classes for grade 6.

Table 2
Summary Statistics on Number of Sections Handled by Each Computer Teacher

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>
Congruent with the preceding results presented, for grades 4 to 6, the mean number of students handled by each computer teacher is about twice the values obtained for grades 1 to 3. The average number of students handled in the computer subject for grades 1 and 2 are only 32 and 31, respectively. For Grade 3, there is a slightly higher mean number of students handled, which is 39. This indicates that there are generally more students per computer teacher for the intermediate level.

Also, there are bigger standard deviations for the number of students per computer teacher for the intermediate level (102, 106 and 93 for grades 4, 5, and 6, respectively). This indicates that the individual number of students handled by each computer teacher in the intermediate level in the schools included in this study are generally far from the mean. The mean is affected by the extreme data as low as only 16, 13, and 14 students handled to as high as 335, 345, and 304 students handled for grades 4, 5, and 6, respectively.

Table 3
Summary Statistics on Number of Students Handled by Each Computer Teacher

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Students Handled by Each Computer Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>3</td>
<td>39</td>
</tr>
</tbody>
</table>
Data were also obtained on the number of grade levels handled by each computer teacher. Table 4 presents summary statistics on this variable.

As seen in the table, only one-fourth of the teacher-respondents (25%) handle only 1 grade level. The rest (75%) handle 2 or more grade levels. Looking at the actual frequencies, it can be seen that the most number of teacher-respondents (43.8%) indicated handling 6 grade levels.

<table>
<thead>
<tr>
<th>Number of Sections Handled by Each Computer Teacher</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>25.0%</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

Table 4
Summary Statistics on Number of Grade Levels Handled by Each Computer Teacher
To date, there is still no DepEd order to provide guidelines on the student:teacher ratio for computer subjects just like there is no clear guideline yet on the offering of the computer education subject in the primary grades. Therefore, these findings may serve as baseline data for drafting the aforesaid guidelines which are very much needed in order to regulate the teaching of Computer Education in the elementary school level. This is necessary considering that the computer subject entails laboratory work where hands-on activities and exercises are the bases for assessing performance. Such activities entail much more time to assess as compared to usual quizzes or tests.

### Time Allotted for the Subject per Session and Number of Sessions Per Week

Table 5 presents the time allotted for the computer subject per session and the number of sessions per week in the various schools surveyed by the researcher. The number of sessions per week for the computer subject for all grade levels range from 1 to 5. In other words, the computer subject is taken up as seldom as once a week to as often as everyday. In terms of amount of time allocated to the computer subject per session, the sessions for Grades 1 to 3 last from 30 minutes to 60 minutes. Overall, the total number
of minutes allotted to the computer subject per week for Grades 1 to 3 range from 40 minutes to 180 minutes.

On the other hand, the sessions for Grades 4 to 6 last from 30 minutes to 100 minutes (1 hour and 40 minutes). Overall, the total number of minutes allotted to the computer subject per week for Grades 4 to 6 range from 40 minutes to 200 minutes.

Since there is no fixed number of hours specified for Computer Education, the private elementary schools have the liberty to assign the time allocation for the subject as they deem appropriate. The primary consideration should be that the time allotted would be sufficient to achieve the minimum learning competencies in the subject. These learning competencies are discussed in the succeeding section.

Table 5
Time Allotted for the Computer Subject per Session and Number of Sessions Per Week

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>No. of Sessions Per Week</th>
<th>No. of Minutes Per Session</th>
<th>Total No. of Minutes Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2 and 3</td>
<td>1</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>60</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>30</td>
<td>150</td>
</tr>
<tr>
<td>4, 5 and 6</td>
<td>1</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>
Course Objectives / Desired Learning Competencies

In the Philippine Elementary Learning Competencies for Makabayan under the Basic Education Curriculum, minimum learning competencies for the Computer Education subject are specified only for Grades 4 to 6 (Appendix __ ). However, in most of the schools surveyed, computer education is offered from grades 1 to 6. The course objectives or desired learning competencies for the computer education subject in the various schools included in this study are presented as follows per grade level:

GRADE LEVEL:                   GRADE ONE

SUBJECT DESCRIPTION:

Computer education for grade one deals with the historical background of the computer as well as the safety rules when using the computer. It covers the basic functions of the operating system and the Microsoft Windows. It also includes keyboarding, word processing and Microsoft Paint.

GENERAL OBJECTIVES:

At the end of the course, pupils will learn:

- about the impact of Information Technology in their lives as creative, critical, and conscientious learners;
- how to determine which processes, tools, and techniques to use, and when to use them;
how to use and apply a variety of information and communication technologies in
effective, efficient, and ethical way;

learn to identify parts of the computer
use proper technology in the classroom
learn how to use and control the mouse
learn how to utilize the backspace, delete and return keys
learn how to open and close appropriate software
learn early keyboarding skills

GRADE LEVEL:  GRADE TWO

SUBJECT DESCRIPTION:

Computer education for grade two deals with the parts of the computer, what it
can do, its proper care, and how it works. It also covers the basic applications of
computer networks to give the pupils in depth knowledge of how the internet works. The
subject is also designed to develop the pupil's artistic skills in designing using the two
important software: Microsoft Word and Microsoft Paint.

GENERAL OBJECTIVES:

At the end of the course, the pupil is able to:

- describe the computer as an information tool
- show how to take care of the computer system
- tell the difference between MS Windows and windows
- define Word Processing and tell what it can do
identify the different tools in the MS Paint toolbox

GRADE LEVEL: GRADE THREE

SUBJECT DESCRIPTION:

Computer education for grade three deals with the fundamental concepts of Information Technology, MS Word, MS Excel, graphics and simple programming.

GENERAL OBJECTIVES:

At the end of the course, the pupil is able to:

- explain what is a Operating System
- explain how to rename, copy, move and delete a folder
- describe the advantages of representing data in the tabular format
- describe MS Excel
- List the application of Graphics software
- Describe MS Paint and its features

GRADE LEVEL: GRADE FOUR

SUBJECT DESCRIPTION:

Computer education for grade four teaches the pupils how to create near-typeset-quality copy of a printed materials using Desktop Publishing. The subject also includes adding graphics to text to produce nice looking flyers, bookmarks, brochures, newsletters, posters, greeting cards, invitations, and many others.
GENERAL OBJECTIVES:

At the end of the course, the pupil is able to:

- identify the different uses of computers in different environment
- identify the significance of creating documents using MS Word than using pencil and paper
- create flyers, bookmarks, brochures, newsletters, posters, greeting cards, invitations, and many others
- familiarize with the different slide layouts
- create a presentation from a Word document and vice versa

GRADE LEVEL: GRADE FIVE

SUBJECT DESCRIPTION:

Computer education for grade five starts with an overview of the Word Processing, Internet, and the manipulation of graphics. It then proceeds to creating basic Web site using Web page development tools. With this the pupils will be prepared in the fundamentals of internet as well as the MS Office FrontPage.

GENERAL OBJECTIVES:

At the end of the course, the pupil is able to:

- explain what an Internet is and can do
- distinguish the difference between Internet and World Wide Web
- use the standard toolbar of the Internet Explorer
identify the system requirements prior to creating Web pages

differentiate the concept of uploading and downloading

create a presentable Web page in MS Office FrontPage

GRADE LEVEL: GRADE SIX

SUBJECT DESCRIPTION:
Computer education for grade six deals with the basics of using electronic spreadsheet program called Microsoft Excel that will do computations on data and presents these data in a table. The subject also provides with a unique opportunity to think, express ideas, and learn the fundamental process of problem solving. It enable the pupils to create programs like designing a calculator, creating songs, or making a picture move (animation) using the computer language QBASIC.

GENERAL OBJECTIVES:
At the end of the course, the pupil is able to:

manifest knowledge on the great men in the field of computing, describe their inventions, and discuss the great help their machines have done to society

discover the different ways to navigate around the worksheet and workbook

name the different categories of programming language

identify the stages in program development process

save, run and load a simple QBASIC program

create and run programs that solve various problems

Course Contents
The schools surveyed in this study also vary in terms of course content in the computer education subject for grades 1 to 6. The course contents for the computer education subject in the various schools included in this study are presented as follows per grade level:

GRADE LEVEL: GRADE ONE
FIRST QUARTER: History of Computer
SECOND QUARTER: Introduction to Windows
THIRD QUARTER: Keyboarding and Word Processing
FOURTH QUARTER: Creative Drawing

GRADE LEVEL: GRADE TWO
FIRST QUARTER: Knowing Your Computer
SECOND QUARTER: Windows and the Internet
THIRD QUARTER: Keyboarding and Word Processing
FOURTH QUARTER: Graphics and Creative Drawing

GRADE LEVEL: GRADE THREE
FIRST QUARTER: Introduction to Windows Basics
SECOND QUARTER: Exploring Windows Desktop
THIRD QUARTER: Introduction to MS Word 2007
FOURTH QUARTER: Introduction to Excel 2007

GRADE LEVEL: GRADE FOUR
FIRST QUARTER: The Computer System
SECOND QUARTER: Word Processing with MS Word
THIRD QUARTER: Desktop Publishing with MS Publisher
FOURTH QUARTER: Creating Presentations Using MS PowerPoint

GRADE LEVEL: GRADE FIVE
FIRST QUARTER: The Computer: Then and Now
SECOND QUARTER: The Internet and the World Wide Web
THIRD QUARTER: Web Design Using HTML
FOURTH QUARTER: Designing Web Pages Using MS Office Front Page

GRADE LEVEL: GRADE SIX
FIRST QUARTER: The Computer System: How It Works
SECOND QUARTER: Creating Spreadsheets with MS Excel
THIRD QUARTER: Introduction to Programming
FOURTH QUARTER: QBasic Programming
INSTRUCTIONAL FACTORS

Instructional factors, which are discussed in this portion of the manuscript, covers the qualifications of teacher(s) handling the subject, methods of teaching used, instructional materials used including textbooks, hardware, and software, and technical support.

Qualifications of Computer Teachers

Table 6 shows the educational qualifications of computer subject teachers in private elementary schools in Angeles City.

As seen in the table, most of the computer subject teachers are graduates of either Bachelor of Secondary Education (43.8%) or Bachelor of Elementary Education (25.0%). These teachers mostly majored in English, Filipino or Math although there were 2 out of the 7 BSE graduates who majored in Computer Education. The other 25% of the teachers are graduates of computer related courses, namely BS Computer Science and BS Information Technology.

Several of the computer education teachers (37.5%) did not yet pursue a master’s degree but the same number (37.5%) have earned units in a master’s degree program, specifically Master of Arts in Education, Master of Arts in Special Education or Master in Business Administration.

One-fourth of the teachers (25%) have actually completed their master’s degree particularly Master of Arts in Education, Master of Arts in Teaching and Master of Science in Mathematics. Among the graduates of the master’s degree programs, only one computer education teacher has pursued doctorate education in Educational Management.
Based on these data, it can be said that majority of the computer education teachers lack the formal academic preparation for teaching computer education. The computer education teachers are mostly graduates of education courses but did not specialize in computer education. This may be because teacher education institutions or schools offering graduate programs do not yet offer computer education majors or because the teachers do not want to specialize just in computer education but also in other fields.

Table 6

Educational Qualifications of Computer Subject Teachers

in Private Elementary Schools In Angeles City

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Elementary Education (BEEd)</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>Bachelor of Secondary Education (BSE)</td>
<td>7</td>
<td>43.8</td>
</tr>
<tr>
<td>BS Child Development and Education</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>BS Computer Science</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>BS Information Technology</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>
The lack of formal academic preparation of the computer subject teachers may not be an issue or a problem for as long as the teachers seek other forms of training for handling the computer education subject. Figure 4 shows the distribution of computer education teachers according to attendance to trainings / seminars related to computer education. Eleven (11) or 69% of the teachers do attend professional development activities to enhance their knowledge and skills for teaching computer education. However, 5 teachers (31%) have not attended such activities for the past three years. Therefore, school administrators have to devote more attention to faculty development efforts for these teachers in order to ensure that they are able to teach the computer education subject competently.
Further scrutiny of which computer subject teachers have not attended faculty development activities related to teaching computer education subjects showed that 3 out of the 5 teachers who have not attended faculty development activities related to teaching computer education are computer science or computer education majors. Hence, their superiors may have deemed it unnecessary for them to attend such activities. However, 2 teachers were non-computer majors and have not attended the needed trainings related to teaching computer education subjects.

For those who attended faculty development activities related to teaching computer education subjects, the number of trainings attended are presented in Table 7. Number of trainings attended by each teacher for the last three years range from 1 to 6.
Table 7

Numbers of Trainings Attended by Computer Subject Teachers

Related to Computer Education

<table>
<thead>
<tr>
<th>No. of Trainings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>

On the other hand, Table 8 presents data on the number of years that the teacher-respondents have been teaching computer education. One-fourth of the teachers have been handling computer education for only 1 year. There are two teachers who have been teaching computer education for 10 years and 13 years, respectively. The mean number of years of teaching the subject is 4.4 years, still indicative of a relatively short teaching experience as far as computer education is concerned.

Table 8
Summary Statistics on Number of Years Teaching Computer Education

<table>
<thead>
<tr>
<th>Number of Years Teaching Computer Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>25.0</td>
</tr>
</tbody>
</table>
Overall, data on the teacher qualifications show that the computer education teachers in private elementary schools in Angeles City mostly strive to develop competencies for teaching the subject in the absence of the appropriate degree for computer education. However, efforts still have to be improved in terms of faculty development to ensure that the computer teachers are able to handle the subject effectively.

### Methods of Teaching Used

Table 9 presents data on the methods of teaching used in computer education by the teacher-respondents.
As seen in the table, almost all of the teachers indicated the hands-on method for teaching the computer subject. This involves making pupils implement the lessons learned in lectures in actual computer units. Lectures are another method mentioned by 56.3% of the respondents.

Some teachers (31.3%) also use the collaborative method while others (31.3%) use the discovery method.

Table 9
Methods of Teaching Used in Computer Education

<table>
<thead>
<tr>
<th>Methods of Teaching Used</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands-On</td>
<td>15</td>
<td>93.8</td>
</tr>
<tr>
<td>Lecture</td>
<td>9</td>
<td>56.3</td>
</tr>
<tr>
<td>Collaborative Method</td>
<td>5</td>
<td>31.3</td>
</tr>
<tr>
<td>Discovery Method</td>
<td>5</td>
<td>31.3</td>
</tr>
</tbody>
</table>

Instructional Materials

Instructional materials needed for teaching computer education include textbooks, hardware and software components. Data on these are presented in this part of this chapter.

Textbooks
Reference or text books are important tools in the teaching-learning process for computer education. They serve as the main material that will guide the pupils as they go through the lessons in computer education.

For Grades 1 to 3 in the private elementary schools in Angeles City, the textbooks used are Computer Literacy, IT Learning Series, and The Amazing World of Computers. Publishers of the said books are the Phoenix and the Rex Publishing Company. The books were published in 2002, 2004 and 2006.

For Grades 4 to 6 in the private elementary schools in Angeles City, the textbooks used are Computer @ Work, Computer Literacy, Computing for Life, IT Learning Series, and The Amazing World of Computers. Publishers of the said books are the FNB Educational Inc., Jemma Inc., Neo Asia Publishing, Phoenix and Rex Publishing Company. The books were published in 2002, 2004, 2006 and 2008.

Although the years of publication are fairly recent, it is important that books be kept up to date with the most recent advancements in computer technology because technology changes very fast. Some contents may no longer be applicable these days such as the use of floppy drives which have been replaced by flash disks. Software versions also change rather frequently. Hence the textbooks to be used have to be breast with the developments in both hardware and software technology.

**Hardware**

All 10 schools hold computer education classes in a computer laboratory. The computer to student ratio in the said schools is 1 is to 1 except for one school where there is only one computer for every two pupils.
Given this information, it can be surmised that the private elementary schools included in this study have the physical facilities necessary to support the teaching-learning process in computer education.

**Software**

Table 10 presents the software available and taught to private elementary school pupils in Angeles City. Software are a set of programs or electronic instructions that make the hardware perform a particular set of tasks in a particular order.

For Grade 1, pupils are taught MS Word, MS Paint and Internet Explorer. The same are taught to Grade 2 pupils with the addition of MS Excel. For Grade 3, the same software as those taught in Grade 2 are taught along with MS Access and MS Powerpoint.

Grades 4, 5, and 6 pupils are taught MS Word, MS Excel, MS Access, MS PowerPoint, MS Publisher, MS Paint and Internet Explorer. Grade 6 pupils are also taught Movie Maker.

**Table 10**

**Software Taught in Computer Education Subjects**

<table>
<thead>
<tr>
<th>SOFTWARE</th>
<th>GRADE LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>MS Word</td>
<td>4 25.0 7 43.8 7 43.8 9 56.3 8 50.0 7 43.8</td>
</tr>
<tr>
<td>MS Excel</td>
<td>1 6.3 2 12.5 7 43.8 9 56.3 9 56.3</td>
</tr>
<tr>
<td>MS Access</td>
<td>1 6.3 2 12.5 2 12.5 2 12.5</td>
</tr>
<tr>
<td>MS PowerPoint</td>
<td>1 6.3 6 37.5 9 56.3 10 62.5</td>
</tr>
<tr>
<td>MS Publisher</td>
<td>4 25.0 3 18.8 4 25.0</td>
</tr>
<tr>
<td>MS Paint</td>
<td>6 37.5 8 50.0 6 37.5 2 12.5 2 12.5 1 6.3</td>
</tr>
<tr>
<td>Internet Explorer</td>
<td>1 6.3 1 6.3 1 6.3 1 6.3 3 18.8 1 6.3</td>
</tr>
</tbody>
</table>
Technical Support

Figure 5 presents data on technical support available when teaching Computer Education classes (presence of a computer technician(s) who assist in computer education classes).

As seen in the graph, eight out of the 10 schools included in this study have a computer technician(s) who assist in computer education classes. The technical support staff help in ensuring that functional hardware and software are available for the teaching-learning process in Computer Education.

Figure 5
Availability of Technical Support in the Private Elementary Schools
PROBLEMS PERCEIVED BY COMPUTER EDUCATION TEACHERS TO BE COMMONLY ENCOUNTERED IN THE COMPUTER SUBJECT

During a Consultative Workshop for Developing Performance Indicators for ICT in Education held in the Philippines in August 2002, the following key problem areas for implementing ICT in basic education were identified: (1) teachers’ fear of the technology; (2) school principals’ closed mindset to and non-appreciation of ICT in education; (3) constraints of the annual Education Budget; (4) maintenance of ICT resources and lack of technical staff; (5) sustainability; and (6) limited availability of education software and courseware.

In the case of the schools included in the study, the problems encountered are mostly in terms of the available computer units being outdated in terms of processing capability. This obtained a mean rank of 2.88. This is also related to computers malfunctioning or being defective which was pointed out as the second top problem (mean rank = 3.22). Some students intentionally destroying the computer facilities and not having an adequate number of functional computer units are the 3rd and 4th top problems. Although the problem “there is not enough time allotted for the Computer subject” obtained a mean rank of 2.45, only 5 teachers chose this as a problem so it had the lowest overall rank among the given problems.

Table 11
Problems Encountered in the Computer Education Subject

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Mean Rank</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROPOSED CURRICULAR DEVELOPMENTS FOR COMPUTER EDUCATION PER GRADE LEVEL

Since there is no DepEd order that outlines the contents and objectives for the computer, the researcher proposes the following course contents and objectives for Computer Education per grade level. These are referred to as curricular developments or enhancements because as shown in the earlier parts of this chapter, the private elementary schools have their own course contents and objectives. The following are intended to provide a comprehensive and logical series of contents and objectives for the offering of computer education from grades 1 to 6.

GRADE ONE

Subject Title: COMPUTER 1

Time Allotment: 1 hour a week

First Quarter: Your Friendly Computer

The Story of Computers
Computers in Different Places

Parts of a Computer

How a Computer Works

Components of a Computer System

How to Operate a Computer

Caring for Your Computer

General Objectives:

At the end of the first quarter the pupils are expected to:

1. describe how a computer helps you and tell the things that a computer can and cannot do;

2. tell how computing devices have developed and name the different inventors of computing devices;

3. identify the different places where computers are used and tell how computers are used in these places;

4. name the different parts of a computer at the same time describe the function of each part of the computer and group the different computer parts according to their uses;

5. explain how a computer works and tell the steps in information processing;

6. name the different components of a computer system and compare a hardware and a software;

7. switch the computer on and off, insert a floppy disk and a compact disk in their respective compartments properly and use the mouse properly; and
8. share ways of caring for your computer and explain the importance of caring for your computer and your diskette.

Second Quarter: Operating System and MS Windows

Windows Desktop
Parts of a Window
Working with Windows
Introduction to the Internet
What the Internet Offers
Getting Connected to the Internet
Opening the Internet Explorer

General Objectives:

At the end of the second quarter the pupils are expected to:

1. define an operating system and describe MS Windows as an operating system;
2. name and describe the different parts of a Windows desktop;
3. name the parts of a window and describe the function of each part of the window;
4. open and close a window and change the size of a window;
5. describe the Internet and tell why the Internet is called the information superhighway;
6. describe the things that you can do on the Internet and list topics that you would like to look for on the Internet;
7. name the different things needed to get connected to the Internet and describe each of the equipment and programs needed to get Internet access; and
8. open and describe the Internet Explorer window.

Third Grading: Parts of the Keyboard

Proper Keyboarding Posture

Locating Letters, Numbers, and Symbols on the Keyboard

Word Pad and the Home Row Keys

Proper Finger Placement

Using the Space Bar, Enter, Backspace, and Delete Keys

Using the Shift and the Caps Lock Keys

Typing Words and Sentences

General Objectives:

At the end of the third quarter the pupils are expected to:

1. name the different parts of the keyboard and describe the function of each part;

2. show correct keyboarding posture and finger placement;

3. identify and locate the different letters, numbers, and punctuation marks on the keyboard;

4. open the Word Pad program;

5. use the left and right hands correctly to locate and type letters;

6. use the space bar, enter, backspace, and delete keys;

7. type using the home row keys; and

8. type words and sentences.

Fourth Grading: Getting Started with MS Paint
The Toolbox

Drawing Straight and Curved Lines

Drawing Different Shapes

Freehand Drawing

Using the Color Box

Adding Text

Saving and Printing a Picture

General Objectives:

At the end of the fourth quarter the pupils are expected to:

1. open and name the different parts of the MS Paint window;

2. name and describe the functions of each tool in the toolbox;

3. draw vertical, circles, rectangles, polygons and curved lines of different
   thicknesses;

4. create different freehand drawings using the pencil tool and eraser tool;

5. fill a drawing area with appropriate color using brush, fill with color, and airbrush
   tools;

6. type words inside the text frame using different fonts, sizes, colors, and styles;

   and

7. save, preview, and print drawings.

GRADE TWO

Subject Title: COMPUTER 2

Time Allotment: 1 hour a week
First Quarter: The Amazing Computer

Computer Around Us

History of Computers

Input Devices

Output Devices

Central Processing Unit

Storage Devices

General Objectives:

At the end of the first quarter the pupils are expected to:

1. describe and enumerate the things it can and cannot do;
2. identify and describe the places where computers are used;
3. explain how computing devices have changed through the years;
4. explain and describe the information processing cycle;
5. identify and explain the different input devices;
6. describe the different output devices and compare a hard copy and a soft copy;
7. compare a RAM and a ROM; and
8. determine the capacity of storage devices.

Second Quarter: Exploring Windows

Windows Start Menu

Opening, Closing, Moving, and Resizing a Window

Using Menus and Dialog Boxes

Using the Search or Find Command
The Internet

Opening the Internet Explorer

Moving Through Web Pages

General Objectives:

At the end of the second quarter the pupils are expected to:

1. enumerate the parts of a window;
2. identify some of the programs under the Accessories menu;
3. change the size of a window;
4. describe a dialog box;
5. explain the use of the Search command;
6. identify some of the features of the Internet;
7. demonstrate the different toolbars in an Internet Explorer window; and
8. move through different web pages using the address box, hyperlinks, and back and forward buttons.

Third Grading: Parts of the Keyboard

Proper Keyboarding

Home Row Keys

Keyboarding Drills

Word Processing

Getting Started with MS Word

Creating a Document

Saving, Opening, Closing, and Printing a Document
General Objectives:

At the end of the third quarter the pupils are expected to:

1. identify the different characters on the keyboard;
2. demonstrate proper keyboarding position and finger placement;
3. practice typing using the home row keys;
4. type using correct finger position;
5. explain the advantages of using a word processor;
6. name the different parts of MS Word window;
7. create and change the format of a document; and
8. open, close, save, preview and print a document.

Fourth Grading: Graphics and MS Paint

Drawing Lines and Curves
Drawing Different Shapes
Freehand Drawing
Adding Color
The Brush and Airbrush Tools
Using the Cutout Tools
Adding Text

General Objectives:

At the end of the fourth quarter the pupils are expected to:

1. define graphics and identify the different MS Paint tools;
2. draw lines and curves;
3. draw different shapes using the shape tools and save your drawing;
4. use the magnify tool to zoom in on a part of a drawing;
5. choose appropriate colors for your drawing;
6. use the brush and airbrush tools;
7. describe a cutout; and
8. add text and format text to MS Paint.

GRADE THREE

Subject Title: COMPUTER 3
Time Allotment: 1 hour a week

First Quarter: Computers in a Changing World
Applications of Computers
History of Computers
Hardware
Software
Information Processing Cycle
The Binary System
Safety and Security

General Objectives:

At the end of the first quarter the pupils are expected to:
1. explain how computers affect people’s daily lives;
2. list places where you can see people using computers;
3. name the earliest computing devices and their inventors;
4. name the different computer hardware;
5. describe the different available software;
6. enumerate the steps in an information processing cycle;
7. convert simple words using the binary system; and
8. describe ways on how to protect data.

Second Quarter: The MS Word Windows

Creating a New Document
Editing Typing Mistakes
Cut, Copy, and Paste
Changing Font Type, Style, and Size
Bulleted and Numbered Lists
Indenting and Aligning Text
Using the Spell Checker

General Objectives:

At the end of the second quarter the pupils are expected to:

1. describe the functions of a word processor;
2. open, close, and save a document;
3. use the delete and backspace keys to edit typing mistakes;
4. select text and cut, copy, and paste text;
5. insert symbols and special characters into a document;
6. add bullets or numbers to an existing text;
7. use different text alignment; and
8. use the spell checker to correct misspelled words.

Third Grading: Parts of the Keyboard
Accessing the Internet
Browsing the Web
Searching the Internet
Barrowing Searches
Creating Electronic Bookmarks
Copying Web Text and Images
Using an Electronic Encyclopedia
Using Electronic Resources Properly

General Objectives:

At the end of the third quarter the pupils are expected to:

1. discuss the functions of the different toolbars of Internet Explorer;
2. move around the web using the address bar, hyperlinks, and navigation buttons;
3. use search engines to locate information;
4. use AND and OR to narrow searches;
5. explain the importance of using bookmarks;
6. copy web text and images;
7. cite electronic sources properly; and
8. discuss the importance of using the Internet Properly.
Fourth Grading: Inserting Shapes and Word Art
Searching and Inserting Graphics
Moving and Resizing Graphics
Copying and Pasting Graphics
Rotating, Aligning, and Stacking Graphics
Modifying Graphics
Listening to Audio
Watching Video

General Objectives:

At the end of the fourth quarter the pupils are expected to:

1. add colors and fill effects to shapes and other objects;
2. insert graphics into a document;
3. move clip arts in a designated part of a document;
4. copy and paste clip arts;
5. stack clip arts to create different effects;
6. ungroup and regroup clip arts;
7. use the different commands of Windows Media Player; and
8. access the different commands of a Windows Media Player.

GRADE FOUR

Subject Title: COMPUTER 4

Time Allotment: 1 hour and 40 minutes a week

40 mins. Lecture
1 hr. Laboratory

First Quarter: The Amazing Computer
How It All Started
Computers Inside and Out
Bits and Bytes
Computer Programs
Windows Basics
Taking Care of Your Computer
Computers and Your Health

General Objectives:

At the end of the first quarter the pupils are expected to:

1. explain the capabilities and limitations of computers;
2. describe how computers developed through the years;
3. name the different parts of a computer;
4. compare a bit from a byte;
5. give examples of programs and the specific tasks they perform;
6. identify the different parts of a window;
7. discuss ways of taking care of computer; and
8. list health hazards related to computer use.

Second Quarter: The Internet
Using Search Engines
Advanced Searching Techniques

Searching for Multimedia on the Web

Web Sites for Kids

Evaluating Web Pages

Copying Not Allowed

That’s Private

General Objectives:

At the end of the second quarter the pupils are expected to:

1. discuss how the Internet started;
2. explain how search engines work;
3. use keywords in searching for information on the web;
4. search for multimedia files on the Internet;
5. explore web sites for kids;
6. evaluate selected web pages;
7. define the term copyright; and
8. classify private and personal information.

Third Grading: Creating a Document

Formatting Text

Spacing, Aligning, and Indenting Paragraph

Using Bullets and Tabs

Drawing and Inserting Objects

Creating Columns and Tables
Margins, Headers, Footers, and Page Breaks

Using the Spellchecker and the Thesaurus

General Objectives:

At the end of the third quarter the pupils are expected to:

1. describe what word processing can do;
2. compare a serif and a sans-serif font;
3. set the line spacing of a document;
4. create bulleted and numbered lists;
5. format an object;
6. resize the columns of a table;
7. change the margins of a document; and
8. use the thesaurus tool to look for synonyms.

Fourth Grading: Introduction to Desktop Publishing

Exploring MS Publisher

Creating a One-Page Publishing

Working with Frames

Making Changes in Your Publication

The Building Blocks of Design

Effective Page Design and Layout

Putting the Finishing Touches

General Objectives:

At the end of the fourth quarter the pupils are expected to:
1. define desktop publishing;
2. identify the parts of the MS publisher window;
3. save and print a publication;
4. select a frame and modify its contents;
5. format text in a publication;
6. describe the meanings associated with the different elements of design;
7. enumerate the steps in designing a publication; and
8. proofread a document using proofreader's marks.

GRADE FIVE

Subject Title: COMPUTER 5

Time Allotment: 1 hour and 40 minutes a week

40 mins. Lecture

1 hr. Laboratory

First Quarter: A World of Computers

Computers Then, Today, and Beyond

The World Wide Web

Information Please

Exploring Web Sites

You be the Judge

Viruses, Worms, and Trojan Horses

Computers and Your Health

General Objectives:
At the end of the first quarter the pupils are expected to:

1. describe how computers are used in different places;
2. trace the development of computers through the years;
3. explain how to navigate the web;
4. use advanced searching techniques to look for information online;
5. classify web sites;
6. use these guidelines in evaluating web pages;
7. enumerate ways of preventing viruses from infecting computer; and
8. describe the symptoms of computer-related health risks.

Second Quarter: Computers and Communications Technology

E-mail Basics
Sending an E-mail
Junk Mails
Mailing Lists
Let’s Chat
Mind Your Manners
Online Safety and Security

General Objectives:

At the end of the second quarter the pupils are expected to:

1. identify the different ways by which people communicate in cyberspace;
2. create an e-mail account;
3. compose and send an e-mail;
4. explain ways to avoid spam;
5. subscribe to a mailing list;
6. enumerate the dos and the don’ts in writing e-mails;
7. discuss ways on how to deal with online; and
8. explain ways on how to stay safe online.

Third Grading: Introduction to Spreadsheet

Creating a Worksheet
Filling and Sorting Data
Formatting Worksheets
Using Formulas
Using Functions
Creating Graphs
Previewing and Printing a Worksheet

General Objectives:

At the end of the third quarter the pupils are expected to:

1. describe the different uses of spreadsheets;
2. enter data into a worksheet;
3. perform basic and complex sorting;
4. format cells using the formatting tools;
5. describe the order of operations in a formula;
6. solve mathematical problems using functions;
7. create a graph to visually display a set of data; and
8. change the page setup of a worksheet.

Fourth Grading:

General Objectives:

At the end of the fourth quarter the pupils are expected to:

1. explain what a database is;
2. describe the different types of data and field properties;
3. add, edit, and delete data in a table;
4. sort data alphanumerically;
5. explain what a query is for;
6. create a form;
7. add records to a form; and
8. describe the function of a report.

GRADE SIX

Subject Title: COMPUTER 6

Time Allotment: 1 hour and 40 minutes a week

40 mins. Lecture
1 hr. Laboratory

First Quarter: Living with Computers
The Evolution of Computers
Communications and Networks
Exploring Cyberspace

Searching the Net

Netiquettes for Netizens

Computer Security Risks

Computers and Your Health

General Objectives:

At the end of the first quarter the pupils are expected to:

1. describe several ways computers play an important role in modern life;

2. identify the different people who made significant contributions to the development of modern-day computers;

3. cite examples of communication devices;

4. access web pages using different navigation tools;

5. evaluate materials on the web;

6. discuss some netiquettes;

7. describe the different computer security risks; and

8. identify the different computer-related health risks.

Second Quarter: Introduction to Multimedia

Text and Typography

Graphics

Sound and Music

Animations and Video Technology

Virtual Reality
Downloading Multimedia Files

Videoconferencing Technology

General Objectives:

At the end of the second quarter the pupils are expected to:

1. define the terms multimedia and interactive media;
2. use different typefaces to convey a message;
3. save images from the web;
4. discuss how sound data is manipulated by a sound-editing software;
5. search the web for free animations;
6. explain the practical uses of VR;
7. download multimedia files from the internet; and
8. conduct a videoconference with another person at a remote site.

Third Grading: Getting Started with MS PowerPoint

Creating a Basic Presentation

Adding Objects to Slides

Enhancing a Presentation

Working with Graphics

Fine Tuning a Presentation

Effective Slide Design

On with the Show

General Objectives:

At the end of the third quarter the pupils are expected to:
1. identify the parts of an MS PowerPoint window;

2. add text to a placeholder;

3. add AutoShapes, WordArts, and media clips to a slide;

4. animate objects in a slide;

5. change the brightness and contrast of a picture;

6. rearrange the slides in a presentation;

7. evaluate a slide presentation; and

8. discuss the ways of effective presentation.

Fourth Grading: Planning Your Web Site

MS FrontPage Basic

Formatting Web Pages

Adding Images

Creating Links

Creating Tables

Creating Frames

Basic Web Designing Principles

General Objectives:

At the end of the fourth quarter the pupils are expected to:

1. create a sketch of the structure of web site;

2. identify the different parts of the MS FrontPage window;

3. change the background color of a web page;

4. add images to a web page
5. create, format, add text to a table;

6. create, resize, add an existing web page to a frame;

7. explain the different web design principles; and

8. follow the design principles in designing a web page.
CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the major parts of this research in brief.

This study sought to assess the current status of computer education in private elementary schools in Angeles City as there is still a dearth of knowledge on this area and elementary school administrators and teachers, as well as pupils and their parents may benefit from the results of this particular endeavor.

Specifically, the study sought to answer the following research questions:

4. What is the current status of Computer Education among different grade levels in private elementary schools in Angeles City in terms of:

4.1. Curricular factors

4.1.1. Inclusion of Computer Education as a separate subject

4.1.2. Time allotted for the subject per session

4.1.3. Number of sessions per week

4.1.4. Course objectives / Desired learning competencies

4.1.5. Course contents
4.2. Instructional factors

4.2.1. Qualifications of teacher(s) handling the subject

4.2.2. Methods of teaching used

4.2.3. Instructional materials used

4.2.3.1. Textbooks

4.2.3.2. Hardware

4.2.3.3. Software

4.2.4. Technical support

5. What problems, as perceived by Computer Education teachers, are commonly encountered in the subject?

6. What curricular developments may be proposed for Computer Education per grade level based on the findings of the study?

The descriptive method of educational research was employed in this study with questionnaires and secondary data as the major sources of data for analysis. From another vantage point, this research may also be looked at as employing both qualitative and quantitative methods of research based on the nature of data collected and the type of data analysis performed.
Ten consenting private elementary schools in Angeles City were included in the study. Administrators and computer education teachers from the consenting schools were included as respondents of the study.

The major instrument for gathering the desired data of this study was the questionnaire. Specifically, two sets of questionnaires were prepared – one for school administrators and one for computer education teachers from private elementary schools in Angeles City.

Qualitative as well as quantitative data analysis techniques were utilized in this study.

Qualitative data analysis techniques, particularly thematic organization, was used for the textual information collected on the course objectives / desired learning competencies and course contents in Computer Education.

On the other hand, quantitative data analysis techniques, namely, frequency and percent distribution were used for analyzing the inclusion of computer education as a separate subject, time allotted for the subject per session, number of sessions per week, educational qualifications of teacher(s) handling the subject, methods of teaching used, instructional materials used, technical support, and problems commonly encountered in the subject.

Descriptive statistics such as mean, standard deviation, minimum and maximum values were also obtained for the following variables: time allotted for the subject per session, number of sessions per week, number if trainings / seminars related to Computer Education, length of experience in teaching Computer Education, and Computer Education teacher-pupil ratio.
Mean ranks were also computed for the data on the problems met in Computer Education.

After securing the necessary permission to undertake the study from the AUF Graduate School and her Dissertation Adviser, the researcher visited the individual schools and distributed the questionnaire personally and requested the respondents to return the same. The respondents were assured of the confidentiality of their responses and assured that their responses would be used solely for the purposes of this research. After data collection, the researcher encoded the data gathered into a spreadsheet application (Microsoft Excel) and then applied the data analysis techniques mentioned in the preceding section.

MAJOR FINDINGS

The succeeding portion enumerates the major findings of this study:

1. Current Status of Computer Education among Different Grade Levels in Private Elementary Schools in Angeles City in terms of Curricular Factors

   a. Inclusion of Computer Education as a Separate Subject

      i. All the 10 private elementary schools included in this study offer a subject for computer education.

      ii. For 6 out of these 10 schools, the computer subject is integrated under the subject Makabayan. On the other hand, for 4 out of the 10 schools, the computer subject is an entirely separate subject.
iii. The computer subject is simply called “Computer” in 7 out of the 10 schools. The other 3 schools dub the subject as “Basic Computer,” “Computer Education,” and “Computer Studies,” respectively.

iv. Not all schools have a computer subject in the primary level (grades 1 to 3) while all 10 schools have a computer subject in the intermediate level (grades 4 to 6). Two schools do not have a computer subject for Grade 1, one (1) school does not have a computer subject for Grade 2 and one (1) does not have a computer subject for Grade 3.

v. There is approximately 1 section or class to be handled per computer teacher for grades 1 to 2 while there are approximately 2 sections or classes to be handled per computer teacher for grades 3 to 6.

vi. There are teachers who handle up to 3 computer classes for Grades 1 to 3. On the other hand, there are teachers who handle up to 8 computer classes for Grades 4 and 5 and up to 7 classes for grade 6.

vii. For grades 4 to 6, the mean number of students handled by each computer teacher is about twice the values obtained for grades 1 to 3. The average number of students handled in the computer subject for grades 1 and 2 are only 32 and 31, respectively. For
Grade 3, there is a slightly higher mean number of students handled, which is 39.

viii. Only one-fourth of the teacher-respondents (25%) handle only 1 grade level. The rest (75%) handle 2 or more grade levels. The most number of teacher-respondents (43.8%) indicated handling 6 grade levels.

b. **Time Allotted for the Subject per Session and Number of Sessions Per Week**

i. The number of sessions per week for the computer subject for all grade levels range from 1 to 5.

ii. In terms of amount of time allocated to the computer subject per session, the sessions for Grades 1 to 3 last from 30 minutes to 60 minutes. Overall, the total number of minutes allotted to the computer subject per week for Grades 1 to 3 range from 40 minutes to 180 minutes.

iii. The sessions for Grades 4 to 6 last from 30 minutes to 100 minutes (1 hour and 40 minutes). Overall, the total number of minutes allotted to the computer subject per week for Grades 4 to 6 range from 40 minutes to 200 minutes.

c. **Course Objectives / Desired Learning Competencies**
The course objectives or desired learning competencies for the computer education subject in the various schools included in this study are presented as follows per grade level:

i. For Grade 1

At the end of the course, pupils will learn:

- about the impact of Information Technology in their lives as creative, critical, and conscientious learners;
- how to determine which processes, tools, and techniques to use, and when to use them;
- how to use and apply a variety of information and communication technologies in effective, efficient, and ethical way;
- learn to identify parts of the computer
- use proper technology in the classroom
- learn how to use and control the mouse
- learn how to utilize the backspace, delete and return keys
- learn how to open and close appropriate software
- learn early keyboarding skills

ii. For Grade 2

At the end of the course, the pupil is able to:

- describe the computer as an information tool
- show how to take care of the computer system
- tell the difference between MS Windows and windows
- define Word Processing and tell what it can do
- identify the different tools in the MS Paint toolbox

iii. For Grade 3

At the end of the course, the pupil is able to:

- explain what is a Operating System
- explain how to rename, copy, move and delete a folder
- describe the advantages of representing data in the tabular format
- describe MS Excel
- List the application of Graphics software
- Describe MS Paint and its features

iv. For Grade 4

At the end of the course, the pupil is able to:

- identify the different uses of computers in different environment
- identify the significance of creating documents using MS Word than using pencil and paper
- create flyers, bookmarks, brochures, newsletters, posters, greeting cards, invitations, and many others
- familiarize with the different slide layouts
- create a presentation from a Word document and vice versa
v. For Grade 5

At the end of the course, the pupil is able to:

- explain what an Internet is and can do
- distinguish the difference between Internet and World Wide Web
- use the standard toolbar of the Internet Explorer
- identify the system requirements prior to creating Web pages
- differentiate the concept of uploading and downloading
- create a presentable Web page in MS Office FrontPage

vi. For Grade 6

At the end of the course, the pupil is able to:

- manifest knowledge on the great men in the field of computing, describe their inventions, and discuss the great help their machines have done to society
- discover the different ways to navigate around the worksheet and workbook
- name the different categories of programming language
- identify the stages in program development process
- save, run and load a simple QBasic program
- create and run programs that solve various problems
d. **Course Contents**

The course contents for the computer education subject in the various schools included in this study are presented as follows per grade level:

i. **GRADE LEVEL:** GRADE ONE

   **FIRST QUARTER:** History of Computer
   
   **SECOND QUARTER:** Introduction to Windows
   
   **THIRD QUARTER:** Keyboarding and Word Processing
   
   **FOURTH QUARTER:** Creative Drawing

ii. **GRADE LEVEL:** GRADE TWO

   **FIRST QUARTER:** Knowing Your Computer
   
   **SECOND QUARTER:** Windows and the Internet
   
   **THIRD QUARTER:** Keyboarding and Word Processing
   
   **FOURTH QUARTER:** Graphics and Creative Drawing

iii. **GRADE LEVEL:** GRADE THREE

   **FIRST QUARTER:** Introduction to Windows Basics
   
   **SECOND QUARTER:** Exploring Windows Desktop
   
   **THIRD QUARTER:** Introduction to MS Word 2007
   
   **FOURTH QUARTER:** Introduction to Excel 2007
iv. GRADE LEVEL: GRADE FOUR

FIRST QUARTER: The Computer System
SECOND QUARTER: Word Processing with MS Word
THIRD QUARTER: Desktop Publishing with MS Publisher
FOURTH QUARTER: Creating Presentations Using MS PowerPoint

v. GRADE LEVEL: GRADE FIVE

FIRST QUARTER: The Computer: Then and Now
SECOND QUARTER: The Internet and the World Wide Web
THIRD QUARTER: Web Design Using HTML
FOURTH QUARTER: Designing Web Pages Using MS Office

vi. GRADE LEVEL: GRADE SIX

FIRST QUARTER: The Computer System: How It Works
SECOND QUARTER: Creating Spreadsheets with MS Excel
THIRD QUARTER: Introduction to Programming
FOURTH QUARTER: QBASIC Programming
2. Current Status of Computer Education among Different Grade Levels in Private Elementary Schools in Angeles City in terms of Instructional Factors

a. Qualifications of Computer Teachers

i. Most of the computer subject teachers are graduates of either Bachelor of Secondary Education (43.8%) or Bachelor of Elementary Education (25.0%). These teachers mostly majored in English, Filipino or Math although there were 2 out of the 7 BSE graduates who majored in Computer Education.

ii. The other 25% of the teachers are graduates of computer related courses, namely BS Computer Science and BS Information Technology.

iii. Several of the computer education teachers (37.5%) did not yet pursue a master’s degree but the same number (37.5%) have earned units in a master's degree program, specifically Master of Arts in Education, Master of Arts in Special Education or Master in Business Administration.

iv. One-fourth of the teachers (25%) have actually completed their master's degree particularly Master of Arts in Education, Master of Arts in Teaching and Master of Science in Mathematics. Among the graduates of the master’s degree programs, only one computer
education teacher has pursued doctorate education in Educational Management.

v. Eleven (11) or 69% of the teachers do attend professional development activities to enhance their knowledge and skills for teaching computer education. However, 5 teachers (31%) have not attended such activities for the past three years.

vi. Three (3) out of the 5 teachers who have not attended faculty development activities related to teaching computer education are computer science or computer education majors. However, 2 teachers were non-computer majors and have not attended the needed trainings related to teaching computer education subjects.

vii. Number of trainings attended by each teacher for the last three years range from 1 to 6.

viii. One-fourth of the teachers have been handling computer education for only 1 year. There are two teachers who have been teaching computer education for 10 years and 13 years, respectively. The mean number of years of teaching the subject is 4.4 years, still indicative of a relatively short teaching experience as far as computer education is concerned.

b. **Methods of Teaching Used**
i. Almost all of the teachers indicated the hands-on method for teaching the computer subject. This involves making pupils implement the lessons learned in lectures in actual computer units.

ii. Lectures are another method mentioned by 56.3% of the respondents.

iii. Some teachers (31.3%) also use the collaborative method while others (31.3%) use the discovery method.

c. Instructional Materials

i. For Grades 1 to 3 in the private elementary schools in Angeles City, the textbooks used are Computer Literacy, IT Learning Series, and The Amazing World of Computers. Publishers of the said books are the Phoenix and the Rex Publishing Company. The books were published in 2002, 2004 and 2006.

ii. For Grades 4 to 6 in the private elementary schools in Angeles City, the textbooks used are Computer @ Work, Computer Literacy, Computing for Life, IT Learning Series, and The Amazing World of Computers. Publishers of the said books are the FNB Educational Inc., Jemma Inc., Neo Asia Publishing, Phoenix and Rex Publishing Company. The books were published in 2002, 2004, 2006 and 2008.
iii. All 10 schools hold computer education classes in a computer laboratory.

iv. The computer to student ratio in the said schools is 1 is to 1 except for one school where there is only one computer for every two pupils.

v. For Grade 1, pupils are taught MS Word, MS Paint and Internet Explorer. The same are taught to Grade 2 pupils with the addition of MS Excel. For Grade 3, the same software as those taught in Grade 2 are taught along with MS Access and MS Powerpoint.

vi. Grades 4, 5, and 6 pupils are taught MS Word, MS Excel, MS Access, MS PowerPoint, MS Publisher, MS Paint and Internet Explorer. Grade 6 pupils are also taught Movie Maker.

vii. Eight out of the 10 schools included in this study have a computer technician(s) who assist in computer education classes.

3. Problems Perceived By Computer Education Teachers To Be Commonly Encountered In The Computer Subject

   a. In the case of the schools included in the study, the problems encountered are mostly in terms of the available computer units being outdated in terms of processing capability. This obtained a mean rank of 2.88.
b. This is also related to computers malfunctioning or being defective which was pointed out as the second top problem (mean rank = 3.22).

c. Some students intentionally destroying the computer facilities and not having an adequate number of functional computer units are the 3rd and 4th top problems.

d. Although the problem “there is not enough time allotted for the Computer subject” obtained a mean rank of 2.45, only 5 teachers chose this as a problem so it had the lowest overall rank among the given problems.

4. Proposed Curricular Developments For Computer Education Per Grade Level

a. Since there is no DepEd order that outlines the contents and objectives for the computer, the researcher proposes course contents and objectives for Computer Education per grade level. These are referred to as curricular developments or enhancements because as shown in the earlier parts of this chapter, the private elementary schools have their own course contents and objectives. The proposed curricular developments are intended to provide a comprehensive and logical series of contents and objectives for the offering of computer education from grades 1 to 6.

CONCLUSIONS
Based on the highlights of the findings of the study presented in the previous section, the researcher reached the following conclusions:

1. Private elementary schools in Angeles City recognize the value of computer education as they included the computer subject in their curriculum as early as Grade 1.

2. The number of sections and students handled by computer teachers in the primary level is generally acceptable whereas the number of sections and students handled by computer teachers in the intermediate level is approximately twice that in the primary level.

3. The computer subject is taken up as seldom as once a week to as often as everyday in sessions last from 30 minutes to 60 minutes for Grades 1 to 3 and sessions lasting from 30 minutes to 100 minutes (1 hour and 40 minutes).

4. Majority of the computer education teachers lack the formal academic preparation for teaching computer education. The computer education teachers are mostly graduates of education courses but did not specialize in computer education.

5. The computer education teachers in private elementary schools in Angeles City mostly strive to develop competencies for teaching the subject in the absence of the appropriate degree for computer education through attendance to trainings / seminars related to teaching computer education.

6. The computer education teachers have relatively short teaching experience as far as computer education is concerned.
7. Teaching methods used in computer education are mostly hands-on activities and lecture method.

8. Different textbooks are being used by private elementary schools in Angeles City for the computer education subject. The years of publication of the said books are fairly recent but some still contain information which are already obsolete given the very fast pace of technological developments.

9. Private elementary schools included in this study have adequate physical facilities necessary to support the teaching-learning process in computer education. However, these computer facilities, like any other equipment, are subject to wear and tear.

10. Pupils in the Private elementary schools are taught Microsoft Office applications. Primary level pupils are taught MS Word, MS Paint, Internet Explorer, MS Excel, and MS PowerPoint while intermediate level pupils are taught the same software with the addition of MS Access, Publisher and Movie Maker.

11. Technical support staffs are present in most schools to help ensure that functional hardware and software are available for the teaching-learning process in Computer Education.

12. Private elementary schools included in the study have problems mostly with the available computer units being outdated in terms of processing capability, or computers malfunctioning or being defective, some students intentionally destroying the computer facilities and not having an adequate number of
functional computer units. For some schools, the time allotted for the computer subject is deemed to be too short.

13. In the absence of guidelines from the Department of Education for minimum learning competencies for computer education for Grades 1 to 3, curricular developments are needed to provide a comprehensive and logical series of contents and objectives for the offering of computer education from grades 1 to 6.

RECOMMENDATIONS

In view of the foregoing conclusions, the researcher came up with the following recommendations:

1. DepEd may consider formulating guidelines for the:

   a. Minimum learning competencies for computer education for Grades 1 to 3

   b. Appropriate student : teacher ratio for computer subjects

   c. Appropriate number of hours for Computer Education

2. Private elementary school administrators have to devote more attention to faculty development efforts given the relatively short teaching stint of the computer education teachers and their non-alignment to computer education.
3. Private elementary school administrators also have to devise ways on how to be able to address the problem on outdating and defectiveness of computer units.

4. Teacher education institutions and schools offering graduate education programs may consider offering computer education majors.

5. Prospects for future studies include:
   a. Gauging the computer skills of elementary school pupils and correlating these with the kind of curriculum their school adopted
   b. Evaluating the implementation of the proposed curricular developments
TITLE: DON’T CALL IT “MERIT PAY”: THE POLITICS OF IMPLEMENTING A STATEWIDE PERFORMANCE-BASED PAY STRUCTURE FOR EDUCATORS AND ADMINISTRATORS

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Abstract:

This research investigates and identifies the major points of contention for the implementation of a performance-based pay structure for educators and administrators in the context of the statewide implementation scenario introduced in Georgia by Senate Bill 386 during the 2010 Legislative Session of the Georgia General Assembly. A multi-faceted analysis of the legislative tracking elements of the debate innovatively serve as research methodology for identifying and answering those questions that proved critical to the success or failure of implementation of reform via the legislative process. Whereas a great deal of research has been conducted on the potential efficacy of various performance-based pay systems, this analysis seeks to frame that data and debate within the context of an actual, and necessarily political, attempt at statewide implementation.

A unique feature of this research is its insider vantage point from within the legislative debate as it played out in Georgia during the 2010 session. Analysis of Georgia’s performance pay debate, when viewed from the perspective of both policy makers and education interest groups, demonstrates that very often the success of education reform hinges not merely on the presence of scholarly research, but on politics and persuasion. Accordingly, implications of this analysis include providing practical insight for future policymakers who may take up the construction and implementation of performance-based pay structures for educators and administrators. This analysis is also useful as an illustration of the politics of education reform on the state level and illuminates ways in which reform may be more effectively addressed at the legislative level.

Introduction

On the 2nd day of 2010 legislative session, Governor Perdue announced in his speech at the Georgia Chamber of Commerce’s annual “Eggs and Issues” breakfast that he would propose legislation to “create a merit pay program that will identify and reward teachers who increase student achievement.” The merit pay proposal was part of a three-piece set of education reform legislation that also included a principal incentive pay bonus and an incentive program to address Georgia’s need for math and science teachers. Perdue went on to say:

"It has long been one of the chief fallacies of government to focus on inputs, usually on how much you’re spending, instead of outputs – on
performance and achievement. I know this business crowd understands the importance of being accountable for results. That’s the culture change we’ve tried to make in state government, focusing our investment on generating measurable outcomes.

This research seeks to evaluate which groups opposed and/or supported the legislation and to identify the major points of contention. Major voices in the debate included support from the Governor’s Office, certain legislators and some individual educators and superintendents. Major opposition came from both individual teachers and larger professional educator organizations—Georgia Association of Educators (GAE) and the Professional Association of Georgia Educators (PAGE).

The proposed solution: Performance-Based Pay for Educators and Administrators

Based on the recommendations of Georgia’s Race to the Top Great Teachers working group, Senate Bill 386 would have required that some measure of student achievement account for 50 percent of Georgia educators and administrators’ effectiveness evaluations and that those evaluations be utilized for the purpose of salary increases. In December 2009, Georgia’s Race to the Top Task Force executed a survey of Georgia’s educators, via The Parthenon Group, to evaluate teachers’ views on effectiveness evaluations. Based on the input of the over 20,000 teachers and school leaders who responded, the Governor’s Office concludes that 80% said they would like to be evaluated on classroom observation and the degree to which they have helped students learn (Parthenon Group).

The resulting legislation states:

No later than July 1, 2011, the State Board of Education shall establish a state-wide common evaluation instrument that takes student achievement into account when assessing teachers, assistant principals, and principals. Such instrument shall be used to determine the Teacher Effectiveness Measure (TEM) for teachers and the Leader Effectiveness Measure (LEM) for assistant principals and principals. Fifty percent of the calculation for the TEM and the LEM shall be based on student achievement, as defined by the State Board of Education. The remaining 50 percent of the calculation shall be based on one or more factors as determined by the State Board of Education.

The idea of compensating educators based on some sort of measure of teacher effectiveness isn’t really new—neither are failed attempts at education reform. As one Georgia educator put it: “If education in Georgia were a football team, it would lose every game because it keeps changing its offense.” This educator and high school football coach was expressing a common sentiment from Georgia’s. Frequently over the past few decades, education in the United States has been the subject of large federal and state reform movements and experiments, of which educators have often found themselves to be the guinea pigs of right along with students.
A brief history of recent education reform in Georgia includes efforts to unite the state’s elementary, secondary and post-secondary education facets through the P-16 initiative. Some Georgia counties have also participated in the KEYS program, which also seeks to build a more comprehensive way to track and improve student achievement. Today, the program can be credited with the compilation of a P-16 database to track individual student achievement from pre-school to college (Venezia et.al).

The role of teacher performance in student achievement

A fundamental assumption behind the argument for performance pay in education is that there is a significant, positive link between teacher performance and student achievement. Research by Gordon, Kane, and Staiger in support of this link is cited by the Governor’s Office of Student Achievement as a major influence in the development of Georgia’s proposal via The Hamilton Project recommendations. A report by the Hamilton Project summarized this research, stating that “[t]eachers have a substantial impact on student performance. After a single year, students assigned to the best quarter of teachers ended up about 10 percentile points ahead of students assigned to the worst quarter of teachers” (Hamilton Project 2006).

Currently, the state of Georgia follows a common salary schedule for educators—increases in salary are given based on years of experience and for attaining advanced degrees. The research basis used to develop SB 386 rejects the assumption that earning an advanced degree or time in the classroom significantly and consistently increases teacher effectiveness and leads to higher student achievement. If these qualifications are not sufficiently accurate measures of teacher effectiveness, then proponents of adapting the current salary schedule have to provide a better way of measuring teaching quality. As a result, advocates of performance pay found themselves arguing the potential efficacy of longitudinal student data systems as required by SB 386.

Observations and implications

This research ultimately seeks to evaluate why SB 386 was unsuccessful and to identify which arguments were more successful than others during the debate.

3 major factors in the failure of Senate Bill 386

1. The Budget

One large factor seemed to be the budget, as the state faced a $4.2 billion revenue shortfall for the fiscal year 2010. This gap represented a 26.2% revenue shortfall and big budget cuts to keep Georgia within its constitutionally required zero-based budget structure. While legislators deliberated over unpopular reductions to close the gap between the projected and actual revenue numbers, it was hard to separate the ominous “budget” from the discussion of any other legislative attempt. Educators were understandably concerned that the proposed change to the salary schedule was a covert attempt to cut education funding at their expense. According to the Governor’s office,
implementing SB 386 was not projected to decrease teacher salaries overall. Still, lawmakers were unable to convince educators that SB 386 was not a tool to fill the budget hole. But it was difficult to make that claim while simultaneously conveying the severity of the revenue situation in order to explain why huge budget cuts were required across departments.

2. The Election

A second significant factor was that 2010 is an even-numbered year—which in Georgia means the entire legislature was up for re-election in November 2010. Opposition from groups such as GAE and PAGE did not go unnoticed by legislators, presumably more so by incumbents with opposition in the November election. However, some lawmakers disagreed that push back from educators was the primary reason the legislation failed. It should be noted that a majority of Georgia’s incumbent legislators faced no primary or general election opposition in 2010—55.6 percent running unopposed in the general election and 79.3 percent having no primary challenger (Pallay 2010).

3. Lack of Communication Between Legislators and Educators

The debate continually illuminated the frustrations that teachers have with the government meddling in education. This skepticism was evident when even attempts to set up framework for evaluation were treated as suspect.

Successful Selling Points:

Amid the opposition, there were some selling points that were better received by educators. For instance, SB 386’s requirement that administrators also be paid based on student achievement seemed to hold merit with educators as a means of increased accountability. More than one educator indicated that there was sometimes at least the perception that a principal could or would make classroom assignments based on his or her personal like or dislike of a particular teacher. Some might dismiss this claim as attributable to a hierarchal issue or a problem of “teachers vs. administrators.” However, the results of the Educator Survey demonstrate that educators were more concerned with accountability than shifting power away from administrators. 63 percent of respondents agreed that “[h]igh performing principals should have more autonomy over hiring and firing staff” (Parthenon Group).

Generally, the debate also revealed that:

- Educators were more willing to engage in the discussion of performance pay so long as the discourse was non-binding, i.e. via study committee
- Educators supported performance-based bonuses to supplement standard pay schedule—but wanted assurance that the money would be budgeted for future years
- Educators were more willing to consider if a performance-based pay structure could replace other required testing and increase local school autonomy
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Abstract for Presentation 1463

Reading to Compute: Integrating Literacy and Literacy Skills into the Middle Grades Mathematics Classroom.

At all levels of formal schooling, mathematics and literacy are the two most tested areas of the curriculum. Often students and teachers view these two areas as polar opposites and are rarely grouped together in a strand. Communicating the incorporation of literacy skills and activities into formal middle grades mathematics courses serves to strengthen the connections necessary for student success in both disciplines.

Mathematics teachers realize how students’ interest and attitudes affect their success in both reading and mathematics classes. Using young adolescent trade books as the source for integrating literacy and mathematics provides the opportunity for success in both disciplines through connections to real life experiences and the increase of students’ ability to communicate.
PREDICTORS OF ACADEMIC SUCCESS FOR CONDITIONALLY ADMITTED FIRST-TIME FRESHMEN AT A FOUR-YEAR PUBLIC UNIVERSITY

by

ROBERT S. HORNBERGER

MAY 2010
Heck (2004) stated, “Policy analysis is an important, but problematic, window on the educational world because it may illuminate or obscure what it views” (p. 318). A student’s potential entrance to a four-year university is initially affected by an admission policy. However, often the policy, and resultant process, lacks an integral correlation with significant predictors of academic success and retention. Policy is instead set by political agendas and at decision levels that expand beyond the university. While formal procedures are therefore created at the university level and higher, informal practices become unclear and inconsistent to the practitioners (Fowler, 2009). Kretchmar (2006) suggested an inconsistency within these informal practices and lack of reliability in the process. Therefore, practitioners do not have dependable and credible processes to follow. Reliant processes are dependent upon solid policy, established through authentic leadership.

Various arenas understand policy and its related concepts differently. Fowler (2009) recognized at least seven different interpretations of the term policy. Within the context of policy are several key themes, including process (Hannah, 1997), politics (Morgan, 2006), power (Bryson & Crosby, 1992), and evaluation (Cook, 2002). Each of these characteristics significantly affects college and universities in regard to setting admission policies. For instance, some influence over admission policy is from the governing state, while other pressures come from both internal and external university constituents. Additionally, policies within universities are established to help achieve enrollment and retention goals set by the institution (Kretchmar, 2006). And a by-product of admission policies being influenced by these many factors is the event of a student not meeting the criteria and consideration of conditional admittance.
Additionally, college retention and academic success are topics of broad discussion throughout the American landscape (Carey, 2005; Heldman, 2008; Lederman, 2009). Over the past 50 decades, public funding for education has dramatically decreased, while competition for students has increased (Spillane, Reiser, & Reimer, 2002). Therefore, universities seek to retain students for economic purposes while also striving to produce healthy environments for learning. Because of the strong emphasis on college retention, colleges and universities seek to find reliable indicators collected at the time of application that will predict student academic success and retention.

While studying various predictors of academic success and retention, colleges and universities recognized the existence of a shared responsibility between the student and the institution in attaining this goal. While students provided their acquired characteristics developed prior to college, universities also affected a student’s likelihood of succeeding by contributing an environment conducive to learning (Astin, 1993; Tinto, 1994). To fully understand the magnitude of this matter, analyses of both individual and organizational learning, a student’s reacculturation to a new learning community, and the associated risk factors have also been conducted (Bruffee, 1999; DeBerard, Spielmans, & Julka, 2004; Nonaka, 1994).

Within the literature review of this study, three components were carefully examined. First, policy was reviewed, from a broad to narrow perspective, including the influences of politics and power, and ramifications in regard to educational policy. Second, retention and student academic success were evaluated according to three key theories, Astin’s (1993) Input-Environment-Output Model, Scholssbert, Waters, and Goodman’s (1995), study of Transition Theory, and Tinto’s (1993) Theory of Student Departure, and five studies about predictors of college retention and student academic success. These examples appropriately connect the
subjects of university admission policies, and college retention and student academic success. Third, a review of student risk factors, organizational learning, Nonaka’s (1994) theoretical framework of organizational knowledge creation, and Bruffee’s (1999) explanation of reacculturation, was provided, allowing for a deeper study of inputs and environmental factors related to the analysis. These three combined frameworks create a synergistic lens from which to view the study in its entirety.

Leadership was viewed through the lenses of politics and power. As Bolman and Deal (2003) noted, leaders in organizations need coalitions to build support and cooperation from others. This is accomplished through cultivated relationships. Herington, Scott, and Johnson in their study of firm-employee relationship strength noted that “firms need to establish ‘strong positive relationships’ with employees” and “the strengthening of relationships with internal constituents as being critical to a firm’s success” (Herington, Scott, & Johnson, 2005, p. 261). Moreover, Alderson and Alderson McDonnell (1994) asserted that a strong organization can be found when it is comprised of healthy, satisfying relationships between all levels of employees.

Furthermore, political cultures are comprised of constituents with political motives that energize particular behaviors within organizations. Frictions between individual and organizational concerns present a consideration for individuals to function politically. Inherent in this is the desire and need for power among individuals within organizations. In addition to the structural phenomenon of power, political systems also include personalities and incentives behind both individual and organizational actions (Shafritz & Ott, 2001).

Bolman and Deal (2003) asserted that power is the most valuable resource within organizations. Morgan (2006) supported this claim by stating that, “power is the medium through which conflicts of interest are ultimately resolved” (p. 170). The fact that behavioral dynamics of
individuals within organizations are derived through political motivations and power is an inevitable by-product.

Within the context of this study, the following research questions were addressed:

1. What academic admission factors of conditionally admitted students best predict first year academic success?

2. Are there differences between groups of conditionally admitted students based on demographic factors in their first year academic success and college retention?

3. Based on the student demographic factors that most significantly differentiate first year academic success, what academic admission factors of conditionally admitted students best predict first year academic success?

4. For conditionally admitted students, are there differences in first year academic success between students who are and are not retained from the first to the second year?

This quantitative study examined a sample of 249 conditionally admitted first-time freshman at a four year public university to answer four research questions pertaining to the potential prediction of academic success and college retention for conditional admits. The single-stage, convenience sample (Creswell, 2003) included students admitted during the three semesters of fall 2006, fall 2007, and fall 2008. Variables related to student demographic, academic admission, first year academic success, and college admission factors were included in the study.

The findings of the study revealed that an emphasis on core curriculum classes taken during high school, especially the senior year, and the core curriculum coursework GPA should be emphasized by policymakers as determinants for admission exceptions. The results also highlighted the ACT English sub score for the full sample, and the high school GPA for the male
sub group, as significant predictors of academic success and college retention. Other factors analyzed in the study, including the type of high school, whether a student earned college credit prior to college, whether a student participated in high school athletics, whether a student was an athlete at the college of study, ethnicity and race, whether the student received an application for admission fee waiver, and the type of conditional admit, did not qualify as significant predictors in the final statistical model.

In addition to the study’s focus on predictors of academic success and college retention, further study should also examine those factors that contain low correlations with academic success and college retention, allowing for possible implications regarding identified risk factors and recommendations for improvements to the services and support provided to students.
REFERENCES


Kindergarten Entrance Age and Gender: Short and Long-term Literacy Effects

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Kindergarten Entrance Age and Gender: Short and Long-term Literacy Effects

Educators, parents, and policy-makers have for decades wrestled with identifying appropriate kindergarten entry age for children. Since the 1970s many school boards in Canada and the United States have debated the merits of raising and of lowering “cut-off” dates for children to enter kindergarten. Over a 25 year period starting in the early 1970s, De Cos (1997) found increasing numbers of school jurisdictions across the United States had raised the minimum entry age to kindergarten by three months or more (i.e., implementing a September 1st birthday cut-off date for admission rather than a December 1st cut-off date). Even in school jurisdictions where kindergarten entry age remains low relative to other provinces or states, parents are often encouraged by teachers or school administrators to “hold back” (i.e., “red-shirting” as described by Graue & DiPerna, 2000) their children to provide them with opportunities to gain additional experience and maturity.

The question of “what is the best age for entry to kindergarten?” has many responses. These are primarily dependent on the theoretical perspective taken with respect to child development and growth and what is considered to be the purpose of kindergarten (i.e., behaviourist/environmentalist – e.g., Bandura, Skinner; constructivist – e.g., Montessori, Piaget, Vygotsky; or maturationalist – e.g., Gesell). Given the variety of orientations, it is not surprising that a variety of studies (e.g., positive effects as a result of delaying entry: Datar, 2006; negative or no effects as a result of delaying entry: Lincove & Painter, 2006) conducted over the last decade have not found agreement over the effects of entry age to kindergarten.

Research Question

The present research will serve to add evidence to the debate over the academic effects of early and late entry age to kindergarten. Specifically, the authors address the question: What are the short and long term literacy effects of entry age to kindergarten.

Review of the Literature

Much of the literature suggests that there exist age and gender differences in children’s cognitive and behavioral school outcomes in kindergarten. Where there are gender differences with academic achievement, girls are more likely to attain higher performance scores in literacy (Below et al., 2010; Naglieri & Rojahn, 2001; Naour, 2001; Witelson, 1976). In a study performed by Below et al. (2010), from kindergarten to grade five, children were tested on four out of six early reading skills: phonemic awareness, phonics, orthography, and fluency. The findings revealed that female students tended to score significantly higher than their male peers on the four skills. However, when the students were re-evaluated on three out of the four kindergarten measures in the first grade, there were no longer any significant differences between the girls and boys. Overall, Below et al. (2010) conclude that there do exist “male deficits in early reading skill development . . . [but] these differences are small, temporary, and surmountable” (p. 254). Since the girls in this study scored a substantial amount higher than the boys, it provides evidence confirming girls’ possession of stronger literacy skills upon school entry. However, Below et al. (2010) observed that their “results failed to support findings that these [gender] differences grow larger as students’ progress through school” (p. 251). Since this study assumes a cross-sectional approach, Below et al. (2010) note that limitations do exist.
Instead, a longitudinal approach should be taken; this would minimize the effects of pertinent disregarded factors which influence a child’s reading performance, such as the implementation of different curricula in each classroom.

Gender discrepancies are also evident in children’s overall experiences of kindergarten upon entry. According to Fantuzzo et al. (2005), boys were identified as being more at risk for developing or suffering from “poor social knowledge outcomes” (p. 579). The research confirmed that children who were both younger of age and male were most at risk for developing poor work habits in the classroom. In their research, Fantuzzo et al. (2005) also discovered that a child’s gender combines with other influential factors, such as ethnicity, age, familial socio-economic status, and maternal education, to collectively affect a child’s performance in Language Arts at the start of kindergarten. Although gender does exhibit influential outcomes on a child’s performance on literacy assessments, it is critical to consider the complex interaction of other factors which also affect a child’s literacy performance.

Early et al. (2010) conducted a study which investigated how pre-kindergarten students spend their time in class. Their conclusions reveal that male students spent less time than girls in language/literacy, art, and fine motor activities while the female students spend less time than boys in science, social studies, and gross motor activities. Within the classroom, Early et al. (2010) discovered that teachers did not usually encourage different activities or use different kinds of instruction for girls and boys, but children tended to choose gender-stereotyped activities when they had free-time for classroom activities, and depending on what activities these children decided to spend their free-time doing, it could facilitate the development of foundational skills. Ruble et al. (2006) explain that boys and girls demonstrate different interests and behavioral preferences at early stages in their development. Boys tend to partake in play consisting of gross motor, blocks, sports, and action figures, while girls’ play is characterized by activities which gear towards fine motor skills development (e.g. drawing) and verbal skills development. Early et al. (2010) note that this could result in boys being less experienced for school readiness due to the specific skills they develop from the activities they are involved with, which do not encourage the same amount of cognitive development as the activities of girls’ play.

There has been debate as to whether retaining children for one year before kindergarten entry will provide them with opportunities to grow and develop, thus increasing the likelihood that children will develop foundational skills such as literacy. Current research presents conflicting evidence regarding whether delaying kindergarten entry truly benefits young children.

The results from a collection of studies demonstrate the advantageous effects of delaying a child from entering school by at least one year. Some researchers have discovered a correlation between enrollment age and academic performance during kindergarten, where the older children who were delayed entry had higher scores on academic performance evaluations (Baer, 1958; Bickel, Zigmond, & Strayhorn, 1991; DiPasquale, Moule, & Flewelling, 1980; Green & Simmons, 1962; Lin et al., 2009; Robinson, 1986; Shepard & Smith, 1986; Warder, 1999). However, this academic advantage which the older children possess diminishes with the progression of time (Baer, 1958; Bickel, Zigmond, & Strayhorn, 1991; Lin et al., 2009; Shepard & Smith, 1986; Stipek & Byler, 2001). Lin et al. (2009) explained that as older students progress through elementary school, “their academic gains gradually become smaller than the
younger groups” (p. 52) and the researchers suggest that younger groups of students may even outperform their older counterparts in the future. A possible explanation for the benefits of kindergarten delay rest in the “gift of time,” where children who delay a year before school enrollment are given opportunities to mature and prepare for the start of their educational careers (DiPasquale, Moule, & Flewelling, 1980; Robinson, 1986; Warder, 1999). In a longitudinal study conducted by Stipek and Byler (2001), the effects of age upon kindergarten entry on “children’s academic achievement, social skills, academic engagement, relationship with teachers, and self ratings of academic skills” (p. 175) were investigated. Children were categorized into three cohorts: the oldest consisting of children who turned six by December 31 of the year they entered kindergarten; the intermediate including children who turned five by May 31, prior to entering kindergarten; and the youngest group consisting of children who turned five after May 31 and before they entered kindergarten or in the fall after they have entered kindergarten. Results determined that the oldest cohort of children had higher literacy scores than the youngest cohort, but this disparity between literacy test scores disappeared by the third grade. Stipek and Byler (2001) also discovered that when children were matched for age, and not grade level, results concluded that “children who entered a year younger . . . were achieving at a significantly higher level in math . . . but not in literacy . . . than children who entered school a year older” (p. 184). Therefore, when discussing the likelihood of academic achievements in correlation with increasing age, it is essential to investigate what academic subject is being examined.

Academic curricula for kindergarten is becoming more demanding and challenging, thus more American states and school districts are increasing the age for kindergarten entry (Meisels, 1992). By raising the average entrance age, the goal is to increase test scores, since there is the assumption that older children outperform their younger classmates on academic performance tests (Meisels, 1992). Lin et al. (2009) support this argument by stating that the trend of delaying kindergarten entrance has contributed to substantial changes in the kindergarten curriculum. According to Lin et al. (2009), “with more children entering kindergarten with higher cognitive readiness, teachers must increase curriculum expectations to meet their needs” (p. 46). This poses problems for children who are already academically and developmentally disadvantaged, since curriculum alterations are exacerbating the gap between their achievement levels and the expectations that the kindergarten curriculum has of students.

Although some research unveils that there are benefits to delaying kindergarten entry on academic achievement, Graue (1993) argues that the social effects of delayed kindergarten entry do not present any advantages for children. In fact, children who have been “red-shirted” often worry about failing or being held back, and thus, they develop poor attitudes toward school. In a study performed to observe the effects of multiple factors on academic success, Hirst (1970) concluded that age was less of an influential factor in predicting a child’s academic success than gender and socioeconomic status. DeMeis and Stearns (1992) even argue that younger kindergarteners are able to outperform their older classmates. In their collection of studies, DeMeis and Stearns (1992) discovered that children who entered school at a younger age did not have more academic or social challenges, like many researchers had concluded. In fact, DeMeis and Stearns (1992) found that some of these younger students in their studies were even qualified for gifted education programs based on kindergarten teachers’ assessments. Therefore, DeMeis and Stearns (1992) do not suggest academic red-shirting as a
solution for giving a child time to mature and develop before kindergarten entry, especially since “present results indicate that a sizable population of the youngest entrants not only succeed but also excel” (p. 27) in classroom settings. The belief that academic red-shirting provides developmental benefits for children has caused kindergarten entry to be postponed for many students. Whether the delay of kindergarten entry truly does produce developmental benefits is still ambiguous. Even though there are contradictory research results determining whether there is an optimal age for school entry and whether this affects a child’s academic achievement and skill development, it is critical to note that “regardless the enrollment age, all children [gain a] significant amount of knowledge over time” (Lin et al., 2009, p. 51).

Context
Corter and Park (1993) found agreement among teachers, principals, consultants, and parents regarding what constituted exemplary kindergarten practice; they noted six principles exhibited in exemplary programs:

1. underpinning the kindergarten program of studies should be a play-based child-centred philosophy;
2. the focus of the program should be on the whole child;
3. the child should be placed in the social context;
4. parents and administrators should recognize and support the teacher;
5. all interest groups should work towards structured and balanced programs; and
6. schools and society in general should provide support for kindergarten.

These principles are often evident in kindergarten programs offered by a large variety of school jurisdictions. The province of Alberta is similar in this respect. In fact the Alberta Children and Youth Initiative (ACYI) highlights the importance of ensuring “that Alberta’s children and youth are well cared for, safe, successful at learning, and healthy” (Alberta Education, 2007a, p. 1). From a philosophical perspective, the Alberta recommended program of study for kindergarten is based on the premise that the program will meet the needs of every child in attendance, regardless of age (Alberta Education, 2005). Again, this is not unique.

A critical difference does, however, exist between this Alberta context, and the data collected in it, and those contexts often drawn on by researchers in other settings which makes this paper particularly interesting and insightful; the Province of Alberta admits children of younger age to kindergarten than virtually all other jurisdictions in North America. In this province all children whose fifth birthdays fall before March 1st are eligible to attend kindergarten the previous September. This means that a large proportion of children are actually as much as three months younger than what is normally seen in most North American jurisdictions having December 1st cut-off dates and six months younger than those jurisdictions having September 1st cut-off dates. Thus an excellent opportunity exists to examine the relationship between particularly young kindergarten entry age and literacy effects.

Method
In the 2000/01 school year, the 2001/02 school year, and then again in the 2002/03 school year, 15 schools, predominantly situated in low SES communities were identified by
Edmonton Public Schools to offer full-day kindergarten programming to their students. Additionally, a comparison group of schools offering half-day kindergarten were also identified for the three school years. Schools offering half-day kindergarten programming were chosen randomly and asked to volunteer by the school jurisdiction to form the comparison group. In total, for the 2000/01 cohort, 20 schools participated in the study, for the 2001/02 year there were 19 participant schools, while the 2002/03 cohort drew on kindergarten classes in 17 schools (some schools had more than one kindergarten class). Total original numbers of students in cohorts 1, 2, and 3 were 554, 532, and 554 respectively. The current data set includes data through to grade six for all students, boys and girls, whose birthdays occurred prior to September 1 of their kindergarten year (n = 602, average age = 240.6 days on September 1, s.d. = 82.9) or after December 1 of their kindergarten year (n = 84, average age = 1798.3 days on September 1, s.d. = 17.2).

These children’s progress (except those who have moved out of the jurisdiction and are no longer part of the study) has been tracked every year since they first entered kindergarten using a variety of literacy test instruments including Clay’s Observation Survey (Letter Recognition and Western Concepts About Print) administered at the beginning of the kindergarten year and again at the end of the kindergarten year and the Alberta Language Arts Provincial Achievement Tests (PAT) administered in grades three and six. Data from the Clay’s Observation Survey Letter Recognition and Western Concepts About Print were standardized (i.e., mean of “0.0” and standard deviation of “1.0”) and combined in equal weights to create aggregate pre-test and post-test literacy variables for the analyses. Using two-way ANOVAs to explore group differences, including interaction effects, the authors examined the relationships between kindergarten entry age, gender and literacy achievement at each point of data collection.

Findings

The literacy effects of kindergarten entry age and gender differences, including interaction effects were analyzed. A two-way ANOVA was conducted at each point of data collection. Findings are reported below.

**Pre-test kindergarten literacy comparisons.** The results presented below suggest that age of entry to kindergarten is significantly related to initial kindergarten literacy achievement (i.e., as measured in October of the school year after a September start date) level literacy skills with older children demonstrating greater abilities in understanding Western concepts of print and identification of letters (see tables 1 and 2). However, no differences in literacy levels at the beginning of the kindergarten year were found to exist between girls and boys. Similarly, no interaction effects were found to exist between age and gender in the data collected at the beginning of the kindergarten year from the children.
Table 1
Pre-test kindergarten literacy descriptive statistics (equally weighted composite of standardized Letter Recognition and standardized Western Concepts About Print variables).

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older</td>
<td>Male</td>
<td>.14773</td>
<td>1.775474</td>
<td>313</td>
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<tr>
<td></td>
<td>Female</td>
<td>.07341</td>
<td>1.779944</td>
<td>289</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.11205*</td>
<td>1.776530</td>
<td>602</td>
</tr>
<tr>
<td>Younger</td>
<td>Male</td>
<td>-.75922</td>
<td>1.675145</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>-.85597</td>
<td>1.589892</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-.80299*</td>
<td>1.628055</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>.03152</td>
<td>1.786655</td>
<td>359</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>-.03459</td>
<td>1.781790</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.00001</td>
<td>1.783341</td>
<td>686</td>
</tr>
</tbody>
</table>

* denotes means with significant difference

Table 2
Tests of between-subjects effects on the pre-test kindergarten literacy data (equally weighted composite of standardized Letter Recognition and standardized Western Concepts About Print variables).

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<td>35.521</td>
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<tr>
<td>Age</td>
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<td>19.868</td>
<td>.000*</td>
</tr>
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<td>Gender</td>
<td>.535</td>
<td>1</td>
<td>.535</td>
<td>.172</td>
<td>.678</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>.009</td>
<td>1</td>
<td>.009</td>
<td>.003</td>
<td>.957</td>
</tr>
<tr>
<td>Error</td>
<td>2115.764</td>
<td>682</td>
<td>3.102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2178.510</td>
<td>686</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the 0.05 alpha level

**Post-test kindergarten literacy comparisons.** By the end of the kindergarten year, the gap between the younger children and the older children narrowed enough that no significant difference in literacy ability was found to exist between older and younger children (see tables 3 and 4). Again, as was the case with the kindergarten entry literacy data, there was no significant difference between boys and girls at the end of the school year, nor was there an interaction effect between age and gender.
Table 3
Post-test kindergarten literacy descriptive statistics (equally weighted composite of standardized Letter Recognition and standardized Western Concepts About Print variables).

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
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<th>Std. Deviation</th>
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<td>289</td>
</tr>
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<td></td>
<td>Total</td>
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<td>1.748135</td>
<td>602</td>
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<td>1.939602</td>
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</tr>
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<td></td>
<td>Female</td>
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<td>1.222054</td>
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<td>Total</td>
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<td>84</td>
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<tr>
<td>Total</td>
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<tr>
<td></td>
<td>Female</td>
<td>.01886</td>
<td>1.713101</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.00002</td>
<td>1.739902</td>
<td>686</td>
</tr>
</tbody>
</table>

Table 4
Tests of between-subjects effects on the post-test kindergarten literacy data (equally weighted composite of standardized Letter Recognition and standardized Western Concepts About Print variables).

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.089</td>
<td>1</td>
<td>2.089</td>
<td>.691</td>
<td>.406</td>
</tr>
<tr>
<td>Age</td>
<td>3.903</td>
<td>1</td>
<td>3.903</td>
<td>1.291</td>
<td>.256</td>
</tr>
<tr>
<td>Gender</td>
<td>5.610</td>
<td>1</td>
<td>5.610</td>
<td>1.857</td>
<td>.173</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>7.608</td>
<td>1</td>
<td>7.608</td>
<td>2.518</td>
<td>.113</td>
</tr>
<tr>
<td>Error</td>
<td>2060.877</td>
<td>682</td>
<td>3.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2073.673</td>
<td>686</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grade 3 and 6 PAT literacy comparisons.** Comparisons drawn on PAT data collected from the group of children at the end of grade three and the end of grade six on English Language Arts show no significant differences between younger and older children (see tables 5, 6, 7, and 8). These same data show no significant differences between boys and girls and they do not show any interaction effects between age and gender.
### Table 5
*Grade 3 PAT of English Language Arts descriptive statistics*

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older</td>
<td>Male</td>
<td>69.67</td>
<td>13.097</td>
<td>313</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>70.12</td>
<td>13.286</td>
<td>289</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>69.89</td>
<td>13.179</td>
<td>602</td>
</tr>
<tr>
<td>Younger</td>
<td>Male</td>
<td>68.22</td>
<td>12.506</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>70.21</td>
<td>12.641</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>69.12</td>
<td>12.531</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>69.48</td>
<td>13.015</td>
<td>359</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>70.13</td>
<td>13.194</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>69.79</td>
<td>13.095</td>
<td>686</td>
</tr>
</tbody>
</table>

### Table 6
*Tests of between-subjects effects on the Grade 3 PAT of English Language Arts*

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1414812.534</td>
<td>1</td>
<td>1414812.534</td>
<td>8225.567</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>33.840</td>
<td>1</td>
<td>33.840</td>
<td>.197</td>
<td>.658</td>
</tr>
<tr>
<td>Gender</td>
<td>108.808</td>
<td>1</td>
<td>108.808</td>
<td>.633</td>
<td>.427</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>43.710</td>
<td>1</td>
<td>43.710</td>
<td>.254</td>
<td>.614</td>
</tr>
<tr>
<td>Error</td>
<td>117305.247</td>
<td>682</td>
<td>172.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3458871.000</td>
<td>686</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7
Grade 6 PAT of English Language Arts descriptive statistics

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older</td>
<td>Male</td>
<td>66.56</td>
<td>13.631</td>
<td>313</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67.08</td>
<td>12.871</td>
<td>289</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>66.81</td>
<td>13.263</td>
<td>602</td>
</tr>
<tr>
<td>Younger</td>
<td>Male</td>
<td>66.87</td>
<td>14.658</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>66.87</td>
<td>13.915</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>66.87</td>
<td>14.241</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>66.60</td>
<td>13.746</td>
<td>359</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67.06</td>
<td>12.974</td>
<td>327</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>66.82</td>
<td>13.376</td>
<td>686</td>
</tr>
</tbody>
</table>

Table 8
Tests of between-subjects effects on the Grade 6 PAT of English Language Arts

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1306744.198</td>
<td>1</td>
<td>1306744.198</td>
<td>7274.281</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.169</td>
<td>1</td>
<td>.169</td>
<td>.001</td>
<td>.976</td>
</tr>
<tr>
<td>Gender</td>
<td>4.869</td>
<td>1</td>
<td>4.869</td>
<td>.027</td>
<td>.869</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>4.913</td>
<td>1</td>
<td>4.913</td>
<td>.027</td>
<td>.869</td>
</tr>
<tr>
<td>Error</td>
<td>122513.764</td>
<td>682</td>
<td>179.639</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3185281.000</td>
<td>686</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary. As described above, significant literacy differences found in the entry to kindergarten data examined by age grouping disappeared by the end of the kindergarten year and remained absent in grades three and six. This trend is best seen in figure 1 in which all of the data have been standardized (mean of 0.0 and s.d. of 1.0) for comparison purposes. At all data collection points, girls performed similarly to boys. While this finding partially supports Below’s et al. (2010) finding that younger students enter kindergarten with fewer literacy skills,
evidence from the present study contradicted their finding that younger girls entered kindergarten with greater literacy skills.¹

Figure 1
Comparisons of standardized literacy data at the beginning of kindergarten, the end of kindergarten, grade three, and grade six.

Discussion and Conclusions
Our analysis supports Below’s et al. (2010) observation that their “results failed to support findings that these [gender] differences grow larger as students’ progress through school” (p. 251); in fact, we were unable to find significant gender differences in any of our four literacy measure points from kindergarten through to the end of grade six. This study contradicts Fantuzzo’s research which confirmed that children who were both younger of age and male were most at risk; even when age gender interactions were considered. Given the common belief held by many educators that girls out-perform boys with respect to literacy, particularly during the early years of schooling, this finding was very surprising. It is possible that teachers addressed this issue by providing more support to boys in order to bolster their

¹ As part of data analysis for other related work, also found no significant differences on age and gender comparisons using two-way ANOVA conducted on grade 3 mathematics, grade 6 mathematics, grade 6 science, and grade 6 social studies PAT data.
literacy levels to match those of girls; this does make sense in the light of the fact that the jurisdiction provides additional supports through schools to children falling behind in their literacy achievement.

Wading in on the retention debate, given the results of this study, it makes very little sense to hold back children who do not have special needs requiring additional educational supports. By the end of the kindergarten year we found no significant differences in measures of literacy between groups of children whose average ages differed by more than eight months. The younger children continued to keep any literacy gap closed right through to the end of grade six. The present study specifically contradicts the earlier findings of Baer (1958), Bickel, Zigmond, & Strayhorn (1991), DiPasquale, Moule, and Flewelling (1980), Green and Simmons (1962), Lin et al. (2009), Robinson (1986), Shepard and Smith (1986), and Warder (1999).

Meisels’ (1992) and Lin’s et al. (2009) assertion that as more children are held back to enter kindergarten a full year older the “academic curricula for kindergarten is becoming more demanding and challenging” (Meisels, 1992) and how policy makers are taking this up must be questioned. An argument put forward by Meisels (1992) for holding children back is that older, more mature children will outperform their younger classmates on academic performance tests. Lin et al. (2009) add that these older, more cognitively ready children must have increased curriculum expectations to meet their needs. This is particularly puzzling and clearly not playing out in the Alberta context generally since Alberta not only has one of the youngest entrance ages to kindergarten in North America (and has for decades), it also has among the very highest performance of its children on various international measures of literacy and numeracy achievement. For example, on the 2006 Progress in the International Reading Literacy Study (PIRLS), Alberta’s grade four students scored third highest in the world with very little difference in the performance among the top five participants (Russia, Hong Kong-China, Alberta, Singapore and British Columbia). Alberta students excelled in reading for literacy and in the higher level of comprehension processes such as interpreting, integrating and evaluation. (Alberta Education, 2007b)

It is noteworthy that the other Canadian province mentioned in the list of top five achievers on the 2006 PIRLS was British Columbia which requires its children to be a minimum of five years of age by December 31st of the academic year in which the child begins kindergarten, only two months older than Alberta’s cutoff date for admission. Other international measures such as the 2007 Trends in International Mathematics and Science Study (TIMSS) and the 2006 Programme for International Student Assessment (PISA) show similarly high international performance for Alberta students. For example, Alberta students aged 15 years of age placed 4th in the world in reading, 2nd in science, and 6th in mathematics in the 2006 PISA (Alberta Education, 2007c).

Given these international indicators and the findings of this study, policy makers must question the belief that raising average school entrance age will, in fact, lead to increased test scores on tests of academic performance in upper elementary school as well as junior high school. Educators and parents must also consider carefully their decisions to hold back children and they must question the true benefits to those children. It appears that DeMeis and Stearns’ (1992) view that “a sizable population of the youngest entrants not only succeed but also excel” (p. 27) in school is also supported in the present study. Of course, this, and the other recommendations made in this paper, only hold true if downward curriculum creep is
prevented. Learning objectives in early learning settings *must* be developmentally appropriate and in line with the six principles of exemplary kindergarten programs as outlined by Corter and Park (1993). An examination of the recommended kindergarten program of study in Alberta reveals consistency with these principles.
References


Distance Education of Public Schools Principals:  
The ICeXCELS Experience in Bicol, Philippines

Rebecca Rosario O. Bercasio*  
Helen M. Llenaresas**

The advances of technology have paved the way to a non-traditional mode of education. In the Philippines, the South East Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO-INNOTECH) offers a short course to school heads, potential school heads or teachers of the Department of Education (DepEd) through a non-traditional or flexible course delivery mode as a response to their needs for continuing education amidst geographical, time and even occupational barriers. This flexible learning course is called Instructional and Curricular Excellence in School Leadership and Management or ICeXCELS. An innovation in the continuing education of public schools principals, the course aims to address the need to develop and strengthen the school head’s role as an instructional leader in promoting the quality of teaching and learning in his school. This paper intends to document the experiences of an e-learning community, that is, a class in DepEd ICeXCELS from the Bicol Region, Philippines. This action research particularly aims to describe the experiences of the DepEd principals as online learners and the on-line tutor including their problems and coping mechanisms, and propose solutions to these problems.

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**Dr. Helen M. Llenaresas is a Professor VI of Bicol University, Legazpi City Philippines. She is currently the Vice President for Academic Affairs.
Factors Influencing the Attitudes of University Faculty toward Research

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University of the East
normsramirez@yahoo.com

The study determined the factors influencing the attitudes of University of the East (UE) college faculty toward research. A researcher-developed instrument was used to collect data from 203 regular faculty members across all colleges in Manila and Caloocan campuses of UE. The results indicated that the respondents considered need for competence as the most important research motive; and time as the greatest barrier to faculty research engagement. While faculty members held favorable general attitudes toward and personal interest in research, they were ambivalent towards the value of research training, and the value of research in enhancing their function of instruction. The hypothesis is partially upheld since only some factors considered in this study significantly influence the research attitudes. A mixture of extrinsic and intrinsic reward strategies is recommended to promote faculty participation in the university’s research function.

Introduction

Higher education institutions are the primary source of research-generated knowledge in many academic fields for achieving economic progress and social well-being. However, Sanyal and Varghese (2007) found out that research is not yet an integral part of the responsibilities of universities in the developing world. This finding has also been observed in the Philippines. Bernardo and Sarmiento (1997) investigated whether the various researches give attention to the four goals of the Commission on Higher Education (CHED): (1) quality and excellence, (2) relevance and responsiveness, (3) access and equity, and (4) efficiency and effectiveness. They discovered that there were very few researches which dealt with these goals. Other local studies (Deza, 1999; de Jesus, 2000; Fetalver, 2002; de Guzman, et al., 2006) also indicated that research productivity level in the higher educational institutions was low in terms of both quantity and quality. The launching of the National Higher Education Research Agenda (NHERA) in 1998 provided the policies, priorities, procedures and guidelines on the research environment required to promote, and support research in Philippine colleges and universities.

In the University of the East (UE), its president, Dr. Ester Albano-Garcia, acknowledged the value of research as one of the trifocal functions of the university together with teaching and community extension. She also emphasized that the research experiences of the faculty members make their teaching more vibrant. Dr. Olivia C. Caolli, director of UE Office of Research Coordination (UE-ORC), pointed out that the office has since school year 2005-2006, facilitated several seminar workshops to help faculty members develop and strengthen their capability to conduct research projects and publish the results of their research. Academic Circular No. 1 Series of 2004 (as amended August 8, 2006) stipulates the attractive incentives for doing research. However, only a few faculty members have actively participated in the university’s research program.

It is in the light of the foregoing data that this study was undertaken. It aimed to provide a deeper understanding of the college faculty members’ attitudes toward the challenge of research work by investigating the (1) faculty respondents’ personal, teaching and research profile; (2) factors which motivate and hinder faculty research engagement; (3) faculty attitudes toward research; and (4) relationships among them.

Theoretical Framework

This study assumes that faculty attitudes toward research may be inferred from their cognitive, affective and behavioral inclination responses indicating positive, negative or undecided evaluations of research as an important academic responsibility. Such attitudes are influenced by personal and environmental factors. This view agrees with Herzberg’s
theory which considers the two factors that affect people’s relation to their work: intrinsic and extrinsic. Intrinsic factors in this study pertain to personal characteristics such as need for autonomy and competence; research skills; research productivity and experience; educational attainment and teaching rank.

The theory of planned behavior predicts that the college faculty members with higher degrees of perceived behavioral control tend to have both stronger intentions to engage in research and more likelihood to perform their research roles in appropriate conditions. Expectancy-value theories also propose that workers are inclined to do a task when they are certain that they can execute the task. This idea is also maintained by the self-determination theory which explains that the more autonomous the faculty members in engaging in research the more positive are the outcomes which, consequently, influence them to have positive attitudes toward research.

It is clear based on the above mentioned theories that intrinsic factors such as self-perception of one’s ability to successfully perform research are related with positive research attitudes.

Highlighting the person-environment dialectic, organismic theories support the assumption of this study that the research attitudes of the faculty are affected by external factors such as institutional research policies and reward structure, opportunities for research training, working conditions, and time for research. In this dialectic, there is a two-way relationship: (1) the person acts on the environment out of an intrinsic motivation to search for and influence changes in it, (2) the environment pushes the person to adjust and accommodate to it. This results to a consistently-changing synthesis in which the person’s needs are satisfied by the environment, and which generates in the person new types of motivation (Reeve, 2005).

Organismic theories provide the present study with a framework on how to explain why faculty members need environmental resources such as facilities and rewards to actualize their latent research capabilities. Thus, nurturing an environment conducive for research is necessary to motivate academic personnel to do research.  

Relerated Literature

Research Attitudes

According to de Jesus (2000), research is a highly demanding undertaking whose excellent execution relies not only on cognitive and psychomotor abilities but also on attitudes. Hence, the present study focuses on the attitudes of faculty members toward research.

Tang and Chamberlain (1997) investigated differences between administration and faculty members on six distinctive factors of attitudes toward research and teaching: (1) research orientation, (2) teaching orientation, (3) rewards influence research, (4) rewards influence teaching, (5) personal interest, and (6) mission of the university. They found out that administrators tend to think that research and teaching are mutually interdependent and that both research and teaching is the mission of their university. On the other hand, faculty members are less likely to agree with the mission of their institution that both teaching and research are essential parts of their work in the university. They believe that teaching is pleasurable, that research interferes with teaching, and that they should be required to do either teaching or research, but not both. Based on these differences, administrators and faculty members may develop different behavioral patterns in an educational institution. It is postulated that administrators may persist to expect professors to be more productive in terms of research, while carrying many teaching loads. Thus, it is concluded that university professors should spend more time in research and publication than to instructional activities so that they will be regarded positively by administrators when they are aiming for tenure and promotions.

In the Philippine higher education institutions, faculty members value research not only for knowledge sake, but also the importance of research for reform and development, and as an instrument of producing ideas for improving education in colleges and universities. For instance, Banaag (1994) indicated that the faculty members in a state college in Indang Cavite value research positively. De Jesus (2000) also found out that attitude wise, the faculty members are in general, have positive consideration about research.

Salazar-Clemena and Almonte-Acosta (2007) indicated the characteristics of a research culture that would improve research productivity in Philippine Higher Education
Institutions. These are: “time, strong belief in research endeavor, faculty involvement, positive group climate, working conditions and organizational communication, decentralized research policy, research funding, and clear institutional policies about research benefits and incentives.” Furthermore, their faculty respondents who are actively engaged in research disclosed that their productivity was enhanced by the graduate training program they had attended.

**Relationship between Demographic Characteristics and Research Attitudes**

The research attitudes of purposively selected college teachers in the University of Santo Tomas were investigated by Catalan (1997) through correlation and comparative analyses. The study disclosed that educational attainment, college affiliation, nature of employment, academic rank, sex, age, status of employment, and length of service, in this order of importance, were significantly correlated with the teachers’ research attitudes. Additionally, civil status and teaching load were not associated with the teachers’ attitudes. The comparative analysis result suggests that: (1) the positive research attitudes of the teachers with higher levels of education and teaching rank are marked by their perception that doing research is a rewarding activity; feeling that research contributes to school policy decisions; and predisposition to recognize the value of competent researchers, and to support the school’s encouragement for teachers’ research engagement; (2) the lack of the following: motivation, adaptation resources, and awareness of the benefits that can be derived from research, appear to be the reasons why engaging in research is a less-preferred activity among faculty members who are older and have lower educational level attained and teaching rank; and (3) the discomfort experienced by faculty members who are younger, who have not completed their graduate studies and who have not earned higher academic ranks may be caused by their anticipation of difficulties in meeting the demands of research, doubts about one’s research competence, and unwillingness to give up their leisure time.

**Relationship between Contextual Variables and Research Attitudes**

The study made by de Guzman et al. (2006) sought to ascertain the research psychographic characteristics of a select group of nurse professoriate in a comprehensive university in the Philippines. Results of the quantitative and qualitative analyses of this study revealed that the overall attitudes of the nurse professoriate are favorable. Though the respondents hold a strong positive interest in research, issues such as research incompetence and time constraints prevent them from being involved in research undertakings. Through the use of multiple correlation and regression analyses, the results indicate that teaching status, research know-how, educational attainment, and civil status greatly influence the nurse professoriate’s positive research psychographics. The results further revealed that the respondents’ training and exposure to research and attitudes toward research engagement, benefits and payoffs, research utilization and availability and overall attitudes toward research are negatively correlated.

**Relationship between Research Attitudes and Research Productivity**

The study made by de Jesus (2000) reveals that positive attitudes toward research do not necessarily lead to a higher level of research productivity. To a certain extent, the relationship between research attitude and productivity, either assessed in terms of output or publication, appears to be negative. For instance, faculty members with “highly positive” regard for research have fewer research outputs as well as published research works, compared with those holding “moderately positive” research attitudes.

In summary, the findings reviewed thus far indicate that the important correlates of research attitudes are gender, age, civil status, and highest educational attainment, teaching status, teaching rank, length of teaching service, research training and research productivity. Aside from these aforementioned variables, this study considers other factors that may somehow influence research attitudes. These are teaching assignment, research interests, and length of professional research experience, awareness of the university policy on faculty research, research motivating factors and research hindering factors.
Methodology

The study used the descriptive survey technique. It was conducted during the first semester of school year 2009-2010. The respondents were 203 regular faculty members of UE.

The instrument used for gathering data is a researcher-made questionnaire composed of four parts: Faculty Profile; Research Motivating Factors Inventory (RMFI); Research Hindering Factors Inventory (RHFI); and Research Attitude Scale for Teachers (RAS-T). The research instrument has been pilot tested to establish its validity and reliability.

In describing the respondents' personal profile, teaching profile, and research profile, descriptive statistics such as the computation of frequency distribution, percentages, mean and standard deviation are employed. The weighted mean are computed to determine the level of importance of the motivating factors, the extent of the hindering factors, and the degree of the favorability of the attitudes of the respondents toward research. Inferential statistics such as correlation analysis and regression analysis are used to ascertain how the respondents' profile and other factors, singly and collectively influence their attitudes toward research.

Findings

It can be described that in UE, female faculty (52.2%) slightly exceeds the number of the male faculty (47.8%). As to their age, the majority (39.4%) belongs to the age bracket of 40-49 years. One hundred forty (69%) of the faculty are married. Eighty-two (40.4%) of the respondents have doctorate units. Majority (40.9%) are presently at the associate professor level teaching on a full-time basis (94.6%) and handle four or more subject preparations and stayed in the teaching profession for 11-20 years (52.7%).

In regard to the respondents research characteristics, Table 2 indicates that eighty-one (39.9%) have only one research field of interest which is the field of education (32.5%). Majority (62.1%) has one to five years of research experience and participated in not more than five research trainings (75.4%) during the past five years. One hundred sixty-five (81.3%) are aware of the university policy on faculty research. In terms of their research-related productivity, more than half (53.7%) are slightly productive as determined by the total score computed from the points affixed to each research output they indicated in the survey questionnaire.

Among the extrinsic factors, affiliation has the highest mean value of 3.76 while status and social recognition has the lowest mean value of 3.38. Looking at the intrinsic factors, the data disclose that competence is regarded the most important motive with a mean value of 4.13 while autonomy is the least important motive with a mean value of 3.83. On the whole, all the motivating factors are regarded as “very important” except for status and social recognition, which is perceived as “moderately important” by the respondents.

The data further reveal that intrinsic factors (M=3.99) tend to motivate the teachers to engage in research more than the extrinsic factors (M=3.58). In other words, the faculty members in the respondent institution may be more likely to engage in research because of the satisfaction, autonomy and competence the activity provides more than the benefits that are separate from the research work itself such as extrinsic rewards and incentives, affiliation, and status and social recognition.

In sum, both the extrinsic and the intrinsic factors are perceived to be “very important” research motives. It may be inferred that faculty members can simultaneously hold strong extrinsic and intrinsic motivations in relation to research. This supposition is in accord with the Amabile, et al. (1994) conclusion that one type of motivation does not necessarily undermine the other. Thus, it is clear that both types of motivation play an important role in faculty research activities.

The respondents consistently view all the hindering factors as “moderate barriers” to pursue one’s research activities. Interestingly, it appears that the institutional barriers (M=3.10) exert a greater hindering influence on the faculty members’ research endeavors compared with the personal barriers (M=3.05). It can be assumed that if the faculty members perceive that the institutional barriers hinder them more than the personal barriers, they may use this as an excuse for them not to be very active in research. In addition, they may blame it more to the institution why they are not becoming productive in terms of their research outputs.
Table 1 presents the summary of the average means for the research attitudes. Based on the results, the respondents hold ambivalent overall attitudes (M=3.40) toward research. This is because, although they have positive beliefs about research, and are disposed to act favorably to do research, they have ambivalent feelings about their general attitudes, the value they give to research training, and the value they attached to research in enhancing their function of instruction. These results also reveal that their research attitudes are more of a general attitudes toward and personal interest in research rather than attitudes toward the value of research training. It is not also seen as an attitude toward research as a prime mover to enhancing instruction. The actual scenario should be research for the value of research because it is only in the academe where new knowledge of man can be rooted upon. Faculty research attitudes therefore should be positively directed towards their research interests including the enhancement of research competence through appropriate training, and most importantly the contribution of research to their teaching function.

Table 1
Overall Computed Means of Indicators and Components of Research Attitudes

<table>
<thead>
<tr>
<th>Attitudes Toward Research Indicators and Components</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGNITIVE COMPONENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Attitudes Toward and Personal Interest in Research</td>
<td>3.77</td>
<td>0.75</td>
<td>Favorable Attitude</td>
</tr>
<tr>
<td>Value Given to Research Training</td>
<td>3.48</td>
<td>0.64</td>
<td>Ambivalent Attitude</td>
</tr>
<tr>
<td>Value Attached to Research in Enhancing Function of Instruction</td>
<td>3.55</td>
<td>0.83</td>
<td>Favorable Attitude</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>3.60</td>
<td>0.50</td>
<td>Favorable Attitude</td>
</tr>
<tr>
<td>AFFECTIVE COMPONENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Attitudes Toward and Personal Interest in Research</td>
<td>3.37</td>
<td>0.54</td>
<td>Ambivalent Attitude</td>
</tr>
<tr>
<td>Value Given to Research Training</td>
<td>2.99</td>
<td>0.58</td>
<td>Ambivalent Attitude</td>
</tr>
<tr>
<td>Value Attached to Research in Enhancing Function of Instruction</td>
<td>2.90</td>
<td>0.87</td>
<td>Ambivalent Attitude</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>3.09</td>
<td>0.44</td>
<td>Ambivalent Attitude</td>
</tr>
<tr>
<td>BEHAVIORAL TENDENCY COMPONENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Attitudes Toward and Personal Interest in Research</td>
<td>3.64</td>
<td>0.62</td>
<td>Favorable Attitude</td>
</tr>
<tr>
<td>Value Given to Research Training</td>
<td>3.62</td>
<td>0.76</td>
<td>Favorable Attitude</td>
</tr>
<tr>
<td>Value Attached to Research in Enhancing Function of Instruction</td>
<td>3.26</td>
<td>0.75</td>
<td>Ambivalent Attitude</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>3.51</td>
<td>0.57</td>
<td>Favorable Attitude</td>
</tr>
<tr>
<td>OVERALL ATTITUDE</td>
<td>3.40</td>
<td>0.42</td>
<td>Ambivalent Attitude</td>
</tr>
</tbody>
</table>

Table 2 presents the summary of the significant results of the correlation analyses. In regard to the correlation between highest educational attainment and value attached to research in enhancing the function of instruction ($X^2=30.78 \ p=.014<.05$), statistical analysis reveal that faculty members with higher levels of educational attainment are less ambivalent toward the value of research in enhancing their teaching function. This finding is supported by the research made by Catalan (1997) which concluded that faculty members with higher educational attainment seem to have a definite research orientation. The highest educational attainment also has a significant influence on the overall research attitudes ($X^2=27.33 \ p=.001<.01$) meaning that those faculty members with higher educational attainment tend to
have more favorable attitudes toward research. Catalan (1997) also pointed out that the favorable attitudes of the faculty members with higher educational attainment seem to indicate that they have a “greater confidence in their ability to read with ease journal articles, better comprehension of the language that statistics conveys, and an ability to translate meaningfully elicited information.”

Among the teaching profile indicators, only teaching rank is found to have significant correlations with the value faculty members attached to research in enhancing their function of instruction ($X^2 = 22.12 \ p = .036<.05$), and overall research attitudes ($X^2 = 20.20 \ p = .0036<.01$). These results reveal that the faculty members who are more ambivalent toward the value of research in enhancing their teaching function are the instructors. This finding is consistent with Catalan’s study which disclosed that faculty members with higher academic rank believed that including relevant research findings in classroom discussions enhance teaching. It also appears that, as faculty members move to a higher teaching rank, they become less ambivalent in their overall attitude toward research, and hold more favorable overall research attitudes. This finding is also supported by Catalan’s conclusion that faculty members with higher academic rank regard research as a rewarding activity and exhibit more inclination to support the school’s “prodding” for faculty members to engage in research.

The awareness of the university policy on faculty research ($X^2= 13.13 \ p = .004<.01$) and research-related productivity ($X^2= 24.39 \ p = .018<.05$) are significantly correlated with the general attitudes toward and personal interest in research. These results indicate that, the faculty members who are aware of Academic circular No.1 series of 2004 (As Amended August 8, 2006) have more favorable general attitudes toward and personal interest in research than those who are unaware of the said policy. It may be that, as faculty members become aware of the university research policy, to some degree, they become encouraged to conduct research. Indeed, according to UE president Garcia, the research policies adopted by the university since 2004 have begun to bear fruit. “There are now faculty members who have been able to publish their research in national and international refereed journals” (UE Research Bulletin, 2008).

Statistical results indicate that the faculty members who have higher levels of research-related productivity hold more favorable general attitudes toward and personal interest in research. Perhaps they become more active producers of research because their positive beliefs about research are somehow validated by their research experiences.

Surprisingly, the results indicated that the value faculty members give to research training and research profile variables are relatively independent. It appears that the research characteristics of the faculty respondents have nothing to do with the value they give to research training.

There are three research profile variables which significantly influence the respondents’ attitudes toward the value they attach to enhance their teaching function: (1) awareness of the university policy on faculty research ($X^2= 12.87 \ p = .012<.05$), (2) research-related productivity ($X^2= 29.06 \ p = .024<.05$), and (3) length of professional research experience ($X^2= 32.65 \ p = .037<.05$). These results indicate that, the faculty members who are not aware of Academic Circular No. 1 series of 2004 (As Amended August 8, 2006) are more ambivalent on the value they attach to research in enhancing their function of instruction. It appears that the recognition of the importance of research in teaching may depend on the information about research policies of the university. Statistical results also indicate that, the faculty members who have lower levels of research-related productivity are more ambivalent toward the value they attach to research in enhancing their function of instruction. It may be that, as faculty members become uninvolved with research activities, they become less certain about the value of research in their classroom teaching. On the other hand, those who are active producers of research may be undertaking research that is so closely linked to the subjects they are teaching, that is why their research work enhance and reinforce their teaching function. In the study of Fairweather (1997), he concluded that when the faculty member is confronted with a substantial classroom teaching assignment and the desire to publish, the deciding factor may be his own attitude and beliefs about the importance of research or teaching.

Statistical results also reveal that, the faculty members who have less number of years of professional research experience are more ambivalent toward the value of research in enhancing their function of instruction. It may be that, as faculty members spend fewer years in doing research, they may lack knowledge of the value of research in the teaching profession.
The results show that the research profile variables which have significant correlations with the value the teachers attach to research in enhancing their function of instruction are the same variables which have significant correlations with the overall research attitudes of the faculty respondents.

Correlations between extrinsic and intrinsic research motives and the research attitudes are all significant. Apparently, the need for affiliation is the strongest extrinsic motivation for faculty research engagement. It may be that their desire to be associated with expert researchers facilitates positive evaluation of research and interest to pursue such scholarly activity. Perhaps they perceive that being with distinguished researchers can provide them with adequate research exposure and eventually they can also become competent researcher. According to Salazar-Clemena and Almonte-Acosta (2007), opportunities for novice faculty to work together with expert researcher are essential for faculty involvement in research activities.

In terms of enjoyment/research satisfaction, it appears that, as faculty members seek more pleasure in doing every aspect of the research work, they become more interested to conduct research. This finding is supported by the expectancy-value theories which assume that the individual will choose to do a task that arouses the greatest feeling of pleasure (Franken, 2007). The data also reveal that autonomy has a significant influence on the general attitudes toward and personal interest in research. This finding conforms to Lindholm’s (2004) conclusion that the intrinsic interests in research of the faculty are associated with the strong need for autonomy.

All types of personal barriers are negatively correlated with the respondents' general attitudes toward and personal interest in research. It could be, therefore, that faculty members who are less preoccupied with family responsibilities and leisure/recreational activities are more likely to have favorable general attitudes toward and personal interest in research. Perhaps they become more focused on their roles in the university if they think less about personal concerns. Moreover, it could be inferred that as faculty members expect less about how time consuming research is and the difficulties they can experience in doing research, they are more likely to hold positive general attitudes toward and personal interest in research.

In regard to self-assessment of research competency, it appears that, as faculty members assess more about their research knowledge and skills, they are less likely to have favorable general attitudes toward and personal interest in research. Perhaps they are less confident about their research capabilities. As noted, the respondents of this study have attended only a maximum of 5 research seminars and workshops in the past 5 years, and have 5 years and below professional research experience. These factors may have contributed to their doubts about their research competency.

The aforementioned findings support the research by de Guzman et al. (2006) in which they found that though the faculty respondents have expressed a strong positive interest in research, issues such as lack of research capability and being preoccupied with other priorities hinder them from doing research activities.

As might be expected, the value given to research training is influenced by research culture which is defined as an institutional barrier pertaining to limited opportunities for research training. This means that if the faculty members strongly believe that the university provides limited opportunities for research training, seminars and workshops they tend to be more ambivalent as to the value of research training.
Table 2
Summary of Correlation Analyses of College Faculty Research Attitudes with Independent Variables

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>Indicators of Research Attitudes</th>
<th>Personal Profile</th>
<th>Teaching Profile</th>
<th>Research Profile</th>
<th>Research Motivating Factors</th>
<th>Research Hindering Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Attitudes Toward and Personal Interest in Research</td>
<td>None</td>
<td>None</td>
<td>Research-related Productivity (24.39*)</td>
<td>All Factors**</td>
<td>Preoccupations (-.269**) Expectancy of Research Demand (-.159*) Self-Assessment of Competency (-.183**)</td>
<td></td>
</tr>
<tr>
<td>Value Given to Research Training</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>All Factors**</td>
<td>Research Culture (.148*)</td>
<td></td>
</tr>
<tr>
<td>Value Attached to Research in Enhancing Function of Instruction</td>
<td>Highest Educational Attainment (30.78*)</td>
<td>Teaching Rank (22.12*)</td>
<td>Length of Professional Research Experience (32.65*) Awareness of the University Policy on Faculty Research (12.87*) Research-related Productivity (29.06*)</td>
<td>All Factors**</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Overall Attitude Towards Research</td>
<td>Highest Educational Attainment (27.33**)</td>
<td>Teaching Rank (20.20**)</td>
<td>Length of Professional Research Experience (26.24**) Awareness of the University Policy on Faculty Research (14.88**) Research-related Productivity (25.87**)</td>
<td>All Factors**</td>
<td>Preoccupations (-.163**)</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

The significant results of the regression analyses are summarized in Table 3. These results clearly indicate that the faculty research attitudes and attitude indicators are much affected by research profile variables and intrinsic research motivating factors. Moreover, the other explanatory variables for some indicators of research attitudes include highest educational attainment, gender, teaching rank, and research culture.
### Table 3
Summary of Regression Analyses of College Faculty Research Attitudes with Independent Variables as Predictors

<table>
<thead>
<tr>
<th>PREDICTORS</th>
<th>Indicators of Research Attitudes</th>
<th>Personal Profile</th>
<th>Teaching Profile</th>
<th>Research Profile</th>
<th>Research Motivating Factors</th>
<th>Research Hindering Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Attitudes Toward and Personal Interest in Research</td>
<td>Highest Educational Attainment (R²=.080)</td>
<td>Teaching Rank (R²=.090)</td>
<td>Research Fields of Interest: Education (R²=.047) and Law (R²=.042)</td>
<td></td>
<td>Intrinsic Factors-grouped (R²=.297)</td>
<td>None</td>
</tr>
<tr>
<td>Value Given to Research Training</td>
<td>None</td>
<td>None</td>
<td>Research Field of Interest: Education (R²=.047)</td>
<td>Research-related Productivity (R²=.030)</td>
<td></td>
<td>Autonomy (R²=.136)</td>
</tr>
<tr>
<td>Value Attached to Research in Enhancing Function of Instruction</td>
<td>Highest Educational Attainment (R²=.079)</td>
<td>Teaching Rank (R²=.062)</td>
<td>Research Field of Interest: Language (R²=.025)</td>
<td>Length of Professional Research Experience (R²=.091)</td>
<td></td>
<td>Competence (R²=.139)</td>
</tr>
<tr>
<td>Overall Attitudes Toward Research</td>
<td>Highest Educational Attainment (R²=.093) Gender (R²=.026)</td>
<td>Teaching Rank (R²=.087)</td>
<td>Education (R²=.056)</td>
<td>Research-related Productivity (R²=.120)</td>
<td></td>
<td>Intrinsic Factors-grouped (R²=.283)</td>
</tr>
</tbody>
</table>

**Summary of Findings**

1. In general, the college faculty members are concurrently extrinsically and intrinsically motivated to engage in research. However, personal and institutional factors hinder them to pursue research activities to a moderate extent.

2. The college faculty members have favorable general attitudes toward and personal interest in research. However, when it comes to the value they give to research training and the value they attach to research in enhancing their function of instruction, their attitudes are described to be ambivalent. In addition, although these faculty members hold positive beliefs about research and are inclined to engage in research-related activities, they have ambivalent feelings about research. Thus, their overall attitudes toward research are found to be ambivalent.

3. Based on a descending number of significant correlations, the independent variables namely: intrinsic research motives (enjoyment/research satisfaction, competence, autonomy) (4), extrinsic research motives (extrinsic rewards and incentives, affiliation, status and social recognition) (4), research-related productivity (3), awareness of the university policy on faculty research (R²=.046), length of professional research experience (R²=.031), and intrinsic factors-grouped (R²=.297) are the most significant predictors of research attitude.
policy on faculty research (3), length of professional research experience (2), highest educational attainment (2), teaching rank (2), preoccupations (2), self-assessment of research competency (1), expectations of research demands (1), and research culture (1) are the factors on which the college faculty members’ research attitudes depend. In addition, the predictors of faculty research attitudes are: research-related productivity (3), highest educational attainment (3), teaching rank (3), length of professional research experience (3), field of education (as a research interest) (3), awareness of the university policy on faculty research (3), intrinsic motivating factors (grouped) (2), gender (2), competence (1), autonomy (1), law (as a research field of interest) (1), language (as a research field of interest) (1) and research culture (1), in this order, based on a descending of significant proportions of the variances in their research attitudes that can be explained.

Conclusions
The significant findings of this study affirm that the attitudes of college faculty members toward research are influenced by both personal and environmental factors. As predicted by the theories guiding this study, favorable attitudes are associated with factors affecting one’s ability to successfully perform research and unfavorable environmental conditions affect one’s attitude to be ambivalent towards participating in research training as well as in recognizing the value of research in their teaching activities.

The hypothesis is partially upheld since only some factors considered in this study significantly influence the research attitudes.

References


1. Title of the submission. PERSONAL INVESTMENT AND SCHOOL ACHIEVEMENT AMONG ADOLESCENT STUDENTS IN THE PHILIPPINES

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6. Abstract and/or full paper. (second page)
ABSTRACT

Personal investment theory has three key components: facilitating conditions, sense of self, and achievement goals. The relationships of these components were explored with the end of clarifying their interface as they affect Filipino adolescent students’ achievement from public and private schools. Model 1 (serial model) and model 2 (parallel model) were proposed and tested through path analysis. The fit indices indicated that the data from 1,694 Filipino adolescent students (public schools, \( n = 823 \); private schools, \( n = 871 \)) fitted model 2 considerably well. The better fitting model (parallel model) captures the independent effects of external factor (facilitating conditions) and internal factor (sense of self) in influencing students’ achievement via their achievement goals. As captured by parallel model, results indicated that, in comparison with public school students, better facilitating conditions were provided to private school students which influenced the endorsement of achievement goals leading to their achievement. Further, higher level of sense of self of private school students influenced their achievement goals leading to their achievement. Discussions focused on the confluence of human agencies: social agency and personal agency in influencing the personal investment of the public and private school expected to impact students’ academic achievement.
Active Learning of Multiple Culture by Wide Rolled Ehon with Multiple 3D View Points

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Abstract. People can learn a lot from success stories and expand his / her ability. We propose an active learning of multi-culture by wide rolled ehon with multiple view points. The rolled ehon gives a vivid description of people and the town in old days. A wide display consists of several screens can show a panorama of scene and a long rolled ehon at the same time over human eye angle 68 degrees. Multiple views and multi-angle 3D images allow users to easily understand the structure and inner meaning of the target. Q&A interaction based on multiple views enables deeper understanding. We also discuss effectiveness of active learning and human characteristics based on these functions.

1 Introduction

A success story indicates major reasons for the great success with some parts of direct background. It also includes both lots of wonderful human activities and unpleasant stories. Even a success feels threat in an unfamiliar environment at the start point and usually takes some mistakes. Success stories indicate useful guidelines for a new success in future. Looking back upon both how the success has developed in a wonderful environments and its tough contexts in drastic change in global economy and political strategies by advanced nations enables us not only to enjoy a tour but also to develop new industry. The success stories by both immigrants and aborigines are also good teachers since they have directly developed industry and built infrastructure in the society. Some of them also became leaders of the society.

It is not easy for people to learn such a success story in multiple cultures although it includes valuable guidelines and great power for many purposes such as healing, symbiosis with nature, and developing new tourism. Different generation has different focuses and finds different meaning for a target based on his/her background and relation with it. Different fascinating story is often popular in each generation. Time flies, now Japan should learn the multiple cultures in order to accept immigrants in the super-aged society although Japanese had emigrated from Japan to Hawaii and Brazil etc.

People can learn a lot from such success stories and expand his / her ability in different environments. Easy and natural start of learning success stories is very impor-
tant for the beginners. We propose an active learning [2, 3] of multi-culture by wide rolled ehon with multiple view points. A rolled ehon gives a vivid description of people and the town in an old day (See Fig.1) [1]. A wide display consists of several screens [9] which can show a panorama of scene and a long rolled ehon at the same time over human eye angle 68 degrees. Multiple views and multi-angle 3D images allow users to easily understand the structure and inner meaning of the target. Q&A interaction based on multiple views enables deeper understanding. We also discuss effectiveness of active learning based on these functions.

2 Opportunity and Ability for learning

People usually get useful information from surroundings without intention. People have both strength and weakness in a field and feel some threat in the field. They encounter some chances for the success although they can not notice their weak points and have lots of problems. A person that has an interesting in a target can easily notice the chance and become happy. Therefore a person with strength usually notices more opportunities than that with weakness (See Fig. 2).

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat</td>
<td></td>
</tr>
<tr>
<td>Opportunity</td>
<td>A little opportunity</td>
</tr>
</tbody>
</table>

Fig. 2 Opportunity for a person with strength and weakness

Easy start for getting such opportunities is very important for a good discovery. A user naturally tries to discover some clues in given views based on his/her preferences. The clue in the entrance view plays an important role in order to choose the target and good access routes to some success. Therefore the entrance should prepare good clues both in a general view and in a variety of key views for the user.

Different generation has different sense of values and focuses in every country. The sense and the focus also change according to user’s life style and experiences. The user often has a bias for either an object or a field since he/she already knows about a part of them based on a relationship between them and him/her. The entrance should make the user be aware of the bias and show a variety of ideas for the bias.

Rapid and fun review of all success stories allows a person to discover a good focus. He/she should find and understand both the will for a success and messages from the success (See Fig. 3).
Active learning mainly consists of three phases (a) Warming up phase, (b) Learning phase, and (c) Refreshment phase. We think that stages of (1) Easy start, (2) Rapid & fun review, and (3) Find focus belong to (a) Warming up phase.

The user refreshes him/her after a cycle of active learning and comes back to the warming up phase. The warming up phase also plays a roll of restart of learning for a new discovery and improvement for the other successes in a spiral (See Fig. 4).

### 3 Active Learning of Multi-culture by Wide Rolled-ehon Display with Multiple 3D View Points

To find a good focus single-handed and to think of the target from his/her point of view are very important in active learning. Human enjoys mainly nine activities for functions of brain such as (a) recognition, (b) imagination, (c) perception/disillusion, (d) studying, (e) creation, (f) emotions, (g) reflection/introspection, (h) decision making, and (i) command for an action. Assists of these activities in the four stages for a success are important for active learning. We propose “wide rolled ehon type system with multiple screens” as a teaching tool in order to show not only general view but also vivid description of people and activities in a large canvas together. The digital large ehon can simultaneously show general historical views of several countries and the show relationships between the countries. The digital ehon easily shows a panoramic image of scene with an atmosphere in a target space. It also shows detailed explanations in front of user’s face for easy reading although it is very difficult for a user to read explanations in a long rolled ehon on either a desk or a floor. A story that has been handed down from generation to generation can be described in the wide ehon.

The digital information in a wide ehon can also show related information next to the target information and show the relationship between them. The wide display consists of multiple screens covers all the field of human vision in $68^\circ$ eye angle and show lots of vigorous autonomous activities in a wide area like those in a wide view in ICA in Boston [6].
The first target of the wide display is 620 meter rolled ehon of Japanese immigration in Hawaii that consists of 34 volumes of rolled ehons. The average length of them is about 20 meters. A user of four wide screens can review the whole information of a long ehon in real size by seven repetitions of sliding real size images in the wide display. Zooming function is also available for a quicker review.

The display can show not only the image in a focus but also relationships between multiple images. It is very important to show the reality by a set of 3D images from different angles and how to utilize a target object. The image shows a context with the surroundings. The user can automatically change the views of the target according to the direction of his/her face by face recognition functions. People with young mind can enjoy views from different angles and fan images. The angles are now six directions: front, upper front, right hand side, upper right hand side, left hand side and upper left hand side are available.

The user can enjoy rapid and fun review in his/her pace corresponding to his/her preferences. He/she can make mind models in the review by a simulation in his/her brain based on the observation.

The user can also find an interesting focus in some information media that give him/her a message in a success story. We suppose that there are sixteen kinds of information media that describe daily life and festivals etc. (1) photo, (2) rolled ehon, (3) newspaper, (4) a book (poetry and message), (5) video, (6) song and music, (7) physical object (lunch plate, lunch box, foods (chocolate, fruits, sea food), house, trunk, clothes and shoes), (8) dance, (9) sports (marathon, surfing), (10) festival (Aloha-festival, the hula, Bon-dance, Okinawan-festival), (11) Web-library (12) bridal, (13) transport (boat, train), (14) power spot and healing, (15) infrastructure and (16) teaching materials. The users can share the focus and think about the opinion by checking deeper knowledge and experiences in these information media (See Fig.5).

Users have their position and many kinds of relation with given information. For example five positions (a) to (d) can be found for the long ehon of immigration in Hawaii (a) immigrants in Hawaii, (b) employer of immigrants, (c) Returned immigrants, (c) descendants of returned immigrants, and (d) the other travelers. The value of Hawaii is different for people in different generation since customers of tourism in Hawaii has been changed from rich white people to the general public since the 1920s. Different generation in Japan has different views in Hawaii. Therefore lots kinds of focuses should be prepared as an entrance of success stories for such a variety of people. We think that a large canvas and simple slide operation system is suitable for showing a variety of focuses.

(1) Easy start (2) Rapid & fun review (3) Find focus (4) Find and understand

<table>
<thead>
<tr>
<th>Reality</th>
<th>Preference</th>
<th>Opinion</th>
<th>Will and Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure,</td>
<td>3D,</td>
<td>Mind model,</td>
<td>Teaching materials,</td>
</tr>
<tr>
<td>Simulation,</td>
<td>Think,</td>
<td>Deeper knowledge,</td>
<td>Strategy</td>
</tr>
<tr>
<td>Think,</td>
<td>Experience,</td>
<td>Action,</td>
<td>Idea</td>
</tr>
<tr>
<td>Experience,</td>
<td>Creativity</td>
<td>Skill,</td>
<td>Idea</td>
</tr>
<tr>
<td>Creativity</td>
<td>Q&amp;A,</td>
<td>Teaching materials,</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 5 An image of activities for understanding a will and messages from a success.
Question and Answer (Q&A) function shows the users the deeper knowledge with fun stories. Official approval of Kanji and Eco is very popular like a game in Japan. That of Aloha might be popular in Japan in near future.

The user can also enjoy experience with teaching materials in virtual world. For example he/she can know the structure of a work cloth and put it on him/her in the virtual world. He/she can also put the clothes in chronological order and check the improved parts according to the functions. The user can also understand a series of actions and important skills in the virtual experiences.

The user can find and understand wills and messages from the success based on study in the virtual experiences. Some of the users can create a useful idea and extend his/her creativity. He/she can also notice the effective success strategies done in a certain long time period for the great success.

4 A prototype of rolled ehon system

A prototype of rolled ehon system consists of mainly two sub-systems. One sub-system is a rolled ehon sub-system that has a large and long canvas with simple slide operation (See Fig. 6 - Fig. 9) and Q&A interaction. A user could read explanations in front of his/her face (See Fig. 7) and zoom out in order to effectively review wider contents (See Fig. 8). He/she could also easily access related information for the target besides it (See Fig. 9). A user could reorganize the relationships and meanings among important information in his/her brain with both the flow of scenes and relationships between the target and related information.

The user could watch history of improving work clothes with several images of work clothes in a wide display at the same time. He/she could easily notice and compare the
improved parts without sliding the images in the display (See Fig. 10) [4, 5, 10, 11].

The other subsystem automatically shows 3D information from six angles in order to easily understand the structure and roles of a target (See Fig. 11 and Fig. 12)

### Experimental Results.

We propose and built a basic teaching tool: a wide ehon system for active learning of success stories. We are making digital ehon media of 34 volumes long ehon. The total amount of length is about 620 meters and each volume is 20 meters. The 20 meter ehon could be easily reviewed and read in front of user’s face by simple operations of slide and zoom. We could confirm that a user could easily arrange lots of interesting scene and related objects on a wide display at the same time. This allowed the user to find a vivid daily life of challengers and to make a variety of imagination based on the related information. Typical four types of learning are (1) to (3). (1) Great success.
A user admire some ancestor as a great success in a foreign country and his/her brave, (2) Deep understanding by a physical tool. The user carefully used a lunch box that is made in Japan. A Japanese product is a long life one, (3) Good ides. People improved the work clothes step by step, and (4) People who learned a variety of trades had been building the city and its infrastructure like Roman water way. A user admires the flexibility and believed similar potential in him/her.

Relationship between Japanese lunch box and the invention of mixed plate enable the user to assume several stories about collaboration between people come from different countries.

A user could easily find the topics based on his/her preferences and could also learn deep knowledge in the wide ehon type system. Teaching materials are also digitalized by a simplified 3D image. The structure of a target and its roles could be automatically changed using face recognition from six angles. People with young mind were bubbling with expectation of something fresh in the target in a different angle and the way of using tools. A variety of people in different positions could understand not only the structure of target and deep knowledge but also make a variety of image of the usage and new evolving from the future point of views.

### Discussion

The person in different generation has a different interesting as an entrance for learning success stories. We found that how to make a link between a receiver and a sender in a different generation was very important since their entrances were different each other. We should find a kind of common interesting and a connection between them. We suppose that a direct connection might be in popular objects like ice cream and bridal.

Indirect connections between them via some basic object; health or some power in Nature; spirit might be useful in order to share the message from senders. We should also find a shared consciousness like PUFFY’s song “Nagisa ni matsuwaru etcetera” for Bon-dance that rouses every person in all generations to Bon-dance. Healing power in a power spot might be another shared consciousness [7] (See Fig. 2).

We should also find collective unconsciousness [8] for a natural phenomenon such as symbiosis with nature and ecology “Mottainai” as an entrance of the connection.

We should weave the many kinds of such links for mutual deep understanding and new collaboration between the users of the digital wide ehon system.

We expect that our system becomes a tool for active learning of transmission of multiple cultures since user easily utilized a variety of information both in rich multiple cultures and in wonderful nature with power of the spirit.

<table>
<thead>
<tr>
<th>Shared Consciousness (Evolved Knowledge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General knowledge &amp; Consciousness</td>
</tr>
<tr>
<td>Unconsciousness</td>
</tr>
<tr>
<td>Collective unconscious</td>
</tr>
</tbody>
</table>

Fig. 12 Common interesting and a connection by Shared Evolved Knowledge and Collective unconscious
6 Conclusions

We propose a wide ehon media with multiple viewpoints for active learning of success stories in multiple cultures. We confirmed the wide ehon media allows user to easily start learning by simple slide operation etc. We also confirmed that a wide display consists of four screens can show not only multiple culture in a long rolled ehon at the same time on a display over eye angle 68 degrees but also the transition of improvement of an objects like work clothes without stress for the comparison. Users also could easily understand deeper information of structure and embedded meaning of the target by simplified 3D images from six different angles. Q&A interaction anchored a deeper understanding at a user’s favorite point in a long ehon. We also discussed the connection between minds in different generations for effective active learning of success stories. We found that the wide digital ehon became an easy entrance of such mind connection.

References

6. ICA. The Institute of Contemporary Art. http://www.icaboston.org/about/
A comparison of the mathematics textbooks in different educational systems

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National Chiayi University, Taiwan

Abstract

This study is to compare mathematics textbooks in elementary school from Taiwan, Singapore and the United States to develop a clear picture of how similar or different they are in content and emphasis. The selection of “Taiwan and Singapore” for this study is based on the high performance of the TIMSS assessments and they have a centralized educational system. Meanwhile, the U.S.A. is selected because the research in math education related to math curriculum plays a key role and there is no national curriculum. Also, there are many different mathematics textbooks available in the U.S. market, including many standards-based and traditional textbooks.

Content analysis will be used for this study. The general strategy for the analysis is to use the “topic tracing” method and the “strand” of mathematics content. The following information will be compiled from the selected mathematics textbooks:
(1). What topics are provided and the grade(s) where each topic is intended to students.
(2). The composition and structure of each textbook
(3). The cognitive level of each topic based on the Survey of the Enacted Curriculum in literature. Furthermore, we examine the overall treatment of content in terms of how the textbooks are organized. We also check the coherence of content and the depth of mathematical understanding required to master the exercises and other dimensions such as technology involved.

Results of this study indicate that textbooks in Asian countries typically have more focused topics and fewer lessons. In addition, their organizations are generally consistent with mathematics curriculum frameworks and math teachers often cover all materials presented in each textbook during class session. In contrast to the U.S. textbooks that often pose real-world and less routine problems, but some topics may be skipped in the classroom.

Key words and phrases: Content analysis, Standards-based, Textbook, TIMSS
Reform of Teacher Education for Global Society: International Teaching Exchange Program

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Abstract
The UMD (University of Minnesota Duluth)-Ewha (Ewha Womans University) Teaching Exchange Program is a four-week visit to Korea. This program is designed to give the UMD pre-service teachers the opportunity to understand Korean Education and interact with Korean students and culture. The pre-and post-surveys with the UMD pre-service teachers indicate that
this program is helpful and meaningful for them to improve their world-view and teaching skills for future global classrooms.

I. Introduction
   A. Program Goals
       This program is to provide an opportunity for the pre-service teachers to understand the Korean education systems and increase their confidence, as well as develop appropriate instructional skills, strategies, and attitudes for teaching in globalized classrooms. The students participated in extensive field experiences in Korean schools, learned and applied recommended methods for instruction based on learning from this program, and reflected upon their personal development and theories from the field experiences.

   B. Program Background
       America faces an urgent challenge of preparing our children to compete in a global economy. President Barack Obama is committed to meeting this challenge with the leadership and judgment that has been sorely lacking for the last eight years. His vision for a 21st century education begins to carry out educational reform. Especially, when he called for reform of public education, Obama cited Korea as an example saying, “If they can do that in South Korea, we can do it right here in the United States of America.” (The White House, 2009)

       Korea is an educationally meaningful country. Korea is one of the fastest developing countries and the second highest scoring nation in the world in math and science on the TIMMS (Third International Math and Science Study) (TIMSS 2007).

       Also, Obama emphasized in his speech, "We need to make sure our students have the teacher they need to be successful”(The White House, 2009). That means
states and school districts taking steps to improve teachers’ quality and their professionalism.

In preparing global society, it is critical for pre-service teachers to pose meaningful multicultural preparation. The meaningful multicultural preparation can be made from direct meaningful interaction with different cultures for proper multicultural understanding (Cannella & Reiff, 1994; Fereshteh, 1995; Gay, 1993; Russo & Talbert-Johnson, 1997). Meaningful interaction entails sufficient exposure to other types of students, so that pre-service teachers gain an understanding that there are cultural differences and commonalities between themselves and other students in terms of general worldviews, how lives are lived and families are disciplined and organized. Having this knowledge of others can surely facilitate communication between teachers and students of other cultures, which might lead to healthy relationships, student satisfaction, and positive learning climates for both teachers and students.

In this regard, UMD initiated the UMD-Ewha Teaching Exchange Program. Through the program, UMD pre-service teachers visited Korea and experienced the Korean Education systems and their culture. In this program, the pre-service teachers were paired with Ewha pre-service teachers and worked on projects together. The projects were for teaching in their Korean schools. They also taught the Korean students as a team, sharing their teaching methods and culture, and developing teaching ideas.

C. Program Process

The process of this program includes the following:
a. Proposal: The proposal of the UMD-Ewha Teaching Exchange Program was first made for the global teacher preparation.

b. Fund: After the proposal was submitted, this program was funded by donors. The fund supported students financially and research studies for this program.

c. Courses: Two Education courses were open at UMD: Educ 4993 Teaching in Korea (2 credits) and Educ 5995 Special Topic (1 credit). Ewha also offered a course FST 4243 International Perspectives on Teaching Practice. The Ewha course was transferred to UMD credits. So, after this program, the UMD pre-service teachers had 6 credits.

d. Advertisement for recruiting students: Once the courses were approved, the program was advertised through the UMD website and Duluth News Tribune:

http://www.d.umn.edu/unirel/homepage/09/studentstokorea.html

http://m.duluthnewstribune.com/article.cfm?id=125173&tag=Faces

Also, the program coordinator visited each classroom and presented information about this program to the pre-service teachers. Besides, a website for the program was developed on: http://www.d.umn.edu/~jiyoon/project/UMD-EwhaWeb2/index.html

e. Orientations: The UMD pre-service teachers applied for this program through the UMD International Office. The pre-service teachers participated in two orientations to receive an overview of the program and to check program requirements before the program starts.

f. Pre-and Post Online Surveys: The modified Science Teaching Efficacy Belief Instrument-Preservice (STEBI-B) (Enochs & Riggs, 1990) and the Intercultural
Development Inventory (IDI, Hammer & Bennett, 1998, 2002) were used to assess the outcomes of the pre-service teachers through the UMD-Ewha Teaching Exchange Program in two components: teacher self-efficacy and worldview perspectives. Pre-and Post-tests of STEBI-B and IDI were taken by the pre-service teachers before and after UMD pre-service teachers experienced teaching in Korea.

g. Review Workshops: After the UMD pre-service teachers came back to UMD, they presented their learning from this program at the Freshmen Orientation Workshop, Alworth International Brown Bag, Education department meeting, and classes. Through the presentations, the UMD students and faculty discussed the importance of the program and shared their ideas for future teacher education programs.

III. Members of the Program

A. Universities:
   a. College of Education and Human Service Professions, University of Minnesota at Duluth
   b. Curriculum and Instruction Institute, School of Education, Ewha Womans University, Seoul Korea

B. Students
   a. Eight UMD pre-service teachers
   b. Nine Ewha Womans University Pre-service teachers

C. Participant Schools
   a. Ewha Elementary School
b. Ewha Middle School

c. Ewha High School

d. Myounghoon Elementary School

e. MyoungGee High School

IV. Program Schedule

This is the four-week program. In the first week, the UMD pre-service teachers took a course at Ewha Womans University to learn about Korean Education systems based on subject areas (science, math, English, Social studies, Korean, Educational Technology, and elementary education) working with Ewha pre-service teachers. In the second week, they visited schools and met Korean students and faculty. In the third week, they taught Korean students at Ewha Elementary school (1-6 graders) with their partners of Ewha pre-service teachers, experiencing Korean education and sharing teaching methods. In the fourth week, the UMD and the Ewha pre-service teachers came back to Ewha campus and presented together what they learned from the teaching practicum and the program. In weekend, they had field experiences to learn about Korean culture (see Table 1).

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>06/16 (Tue)</td>
<td>9:30 - 10:10 Orientation (Education B253)</td>
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<tr>
<td></td>
<td>10:30 - 11:50 Ewha Campus Tour</td>
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<tr>
<td></td>
<td>12:00 - 1:30 Lunch</td>
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<tr>
<td></td>
<td>2:00 - 4:30 Science Education in Korea</td>
</tr>
<tr>
<td>06/17 (Wed)</td>
<td>10:00 - 12:00 Overview of Korean-American Education System</td>
</tr>
<tr>
<td></td>
<td>2:00 - 4:30 English Education in Korea &amp;</td>
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<tr>
<td>Date</td>
<td>Time</td>
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<tr>
<td>06/18 (Thu)</td>
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<td>06/20 (Sat)</td>
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<td>06/22 (Mon)</td>
<td>10:00 - 2:00</td>
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<td></td>
<td>2:30 - 5:00</td>
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<td>06/23 (Tue)</td>
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<td>2:00 - 4:30</td>
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<td>06/24 (Wed)</td>
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<td>06/26 (Fri)</td>
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<td>06/27 (Sat)</td>
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<td>06/29 (Mon)</td>
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<td>07/04 (Sat)</td>
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<tr>
<td></td>
<td>6:00 - 8:00</td>
</tr>
</tbody>
</table>

Table 1. Schedule for the UMD-Ewha Teaching Exchange Program
V. Program Assessment

Each of the UMD pre-service teachers participated in two separate pre- and post-tests surveys, Teaching Self-Efficacy Test and IDI, before and after their teaching experiences in Korea. Also, the UMD pre-service teachers had online interviews with the Program Coordinator to give feedback about the program.

A. Self-Efficacy Test

The Science Teaching Efficacy Belief Instrument-Preservice (STEBI-B) (Enochs & Riggs, 1990) is a one-page, 23-item instrument. Preservice teachers indicated whether they either agree or disagree with statements by choosing from a 5-point Likert scale, ranging from strongly agree to strongly disagree. Their responses totaled over the 23 items provided a measure of their self-efficacy beliefs. The STEBI-B was modified based on the majors of the UMD pre-service teachers for this program.

The modified Science Teaching Efficacy Belief Instrument-Preservice (STEBI-B) measures the pre-service teacher self-efficacy. The Table 2 shows the comparison of the mean values of the pre-and the post-tests of the UMD pre-service teachers. The post-test shows the higher mean value than the pre-test.

<table>
<thead>
<tr>
<th></th>
<th>Mean Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>86.2</td>
</tr>
<tr>
<td>Post-Test</td>
<td>90.0</td>
</tr>
</tbody>
</table>

Table 2. Comparison of the Means of the Pre-and the Post-Tests

The comparison of the mean value of each question of the teaching self-efficacy test is shown in Table 3. Most of the post-test question had a higher mean value than the
pre-test. But the Questions 6 and 13 of the post-test had comparatively lower values than the pre-test:

Question 6. I will not be very effective in monitoring student activities in class.

Question 13. Increased effort in teaching your subject produces little change in some students' achievement.

Regarding these questions, the results indicate that the UMD pre-service teachers are not confident in communicating with their Korean students and making themselves fully understood. This may be related to the short school practicum period. The UMD pre-service teachers were placed in Ewha Elementary School and taught their students for one week. It might be too short for them to converse fully with the Korean students.

Table 3. The Comparison of Mean value of each question of the teaching self-efficacy test

B. IDI Survey

The Intercultural Development Inventory (IDI) is a 50-item, paper and pencil (or online) instrument which measures five of the six major stages of the Developmental
Model of Intercultural Sensitivity (DMIS) as well as a separate factor identified as Encapsulated Marginality (EM) (Hammer & Bennett, 1998; 2001). The IDI takes 15-20 minutes to complete and has been well established as a tool for teaching and training purposes (Hammer, in press; Paige, Jacobs-Cassuto & Yershova, 2003).

The Developmental Model of Intercultural Sensitivity (DMIS, Bennett, 1986; 1993; 2004) looks at “orientations toward cultural difference” as a progressive and developmental process. The DMIS includes three ethnocentric orientations (Denial, Defense, and Minimization), which identify individuals whose own culture is central to their understanding of reality, and three ethnorelative orientations (Acceptance, Adaptation, Integration), where one’s culture is experienced in the context of other cultures (Bennett, 1986; 1993; 2004). The model’s focus is not on culture specific information, but rather on the development of a broader and more complex worldview when approaching difference. Using grounded and constructivist theory, the DMIS is based on the premise that “as one’s experience of cultural difference becomes more complex and sophisticated, one’s potential competence in intercultural relations increases” (Bennett, 1986, p.423).

Seven of the 8 students completed the pre-IDI, while 6 out of 8 completed the post. Of these, 5 matched pre/post IDI scores were available for statistical analysis. Table 3 (below) indicates the mean pre/post scores for the 5 matched pairs of data. While the overall developmental score (DS) and subscale score changes were not statistically significant, an overall positive change score trend is seen in five of the seven IDI subscale categories.
While the students left and returned in the early stages of Minimization (a focus on similarities over differences), the IDI is a developmental model such that change is incremental and lifelong. The small but positive changes that are indicated reveal growth critical to the goals of this program. Students returned home: 1) more interested in and less defensive around the concept of “other.” 2) They identified a greater ability to comprehend and accommodate to complex cultural difference. 3) They reported an increased cultural self-awareness, and 4) a more accurate perception of their intercultural abilities.

A larger sample size and/or longer field experience might yield stronger positive results and add statistical significance to these findings (see Table 4).

<table>
<thead>
<tr>
<th>IDI</th>
<th>DS</th>
<th>DD</th>
<th>R</th>
<th>M</th>
<th>AA</th>
<th>EM</th>
<th>PSDS Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>+.88</td>
<td>+.184</td>
<td>-.089</td>
<td>-.289</td>
<td>+.514</td>
<td>+.54</td>
<td>+.42</td>
</tr>
<tr>
<td>Post-Test</td>
<td>92.22</td>
<td>4.308</td>
<td>3.400</td>
<td>2.867</td>
<td>3.329</td>
<td>3.580</td>
<td>28.79</td>
</tr>
</tbody>
</table>

Table 4. Results of Pre- and Pro-IDI (All scores are converted profile scores. Plus change score represent the direction of growth)

C. Interview

Through the conversations over the online interview with the pre-service teachers, the UMD pre-service teachers expressed the benefits and the problems of the program, found the solutions to the problems, and discussed their future teaching. The interview questions and their answers are following:

1. What was good during this program?
   a. The Kind and enthusiastic Ewha pre-service teachers, Ewha University faculty, and Ewha elementary faculty.
   b. Beautiful and convenient Ewha University campus and Korean schools
   c. Program organization
   d. Accommodations
e. Foods and culture

2. What needed to be improved?
   a. Longer student teaching
   b. Early student recruiting
   c. More information about the schedule
   d. More Funds

3. What solutions to the problems will be?
   a. More communication among Ewha and UMD faculty and students
   b. More advertisement about the program
   c. Modification in the program schedule – better balancing student private and group times

4. How will you use your learning from this program for your future teaching?
   a. Integrating globalized view into teaching
   b. Teaching with confidence
   c. Balancing American and Korean education system

D. Overall

The UMD-Ewha Teaching Exchange Program appeared to be beneficial to the UMD pre-service teachers in improving their teaching confidence and worldview. By experiencing the Korean education systems and culture, the UMD pre-service teachers found their best ways of how they can provide a better education for their future students. This program also furthered their understanding of the pedagogy of change in study abroad, and added specific and valuable insights into teacher preparation for diverse students.

For intercultural effectiveness of this program, much more needs to be done than send pre-service teachers to programs outside of the United States. It requires more work with the reflective process and intercultural understandings of the global teaching experiences. An increased focus on both the similarities and differences of the educational systems via
specific intercultural educational objectives will facilitate movement of students from a Minimization (ethnocentric) to a more ethnorelative worldview perspective.

Recommendations for adding intercultural education (a systematic effort to foster intercultural learning through curriculum design to the pedagogy) of this program would likely change the results of pre/post IDI assessment next time. In addition, the next pre-service teachers will have longer teaching periods for better communicating with their Korean students and making themselves fully understood. For advertising this program and training the pre-service teachers, it is encouraged to start early recruiting pre-service teachers.

VI. Future

The president of Indiana University, Michael McRobbie, who was visiting Korea for an international alumni conference and reunion stated that globalization can be made not only by calling international students into American universities, but also by sending American students to foreign universities (Choi, 2009). By having the students experience the world, the American students can understand multi-culture and multi-thoughts. McRobbie even plans that, from year 2011, no Indiana university students can graduate without foreign experiences (for example, language skills or foreign university course credits).

The UMD-Ewha Teaching Exchange Program supports this global idea. To prepare our pre-service teachers for future global classroom, it is necessary for them to experience the world and integrate their world-views and culture into their teaching. With dramatically expanding economies and the world's premier systems of higher education, Korea is providing significant educational and research opportunities for students and faculty (Indiana, 2009). By establishing the relationship between UMD and Ewha in Korea, the
UMD pre-service teachers will have more chances to exchange and learn educational skills and methods.

To continue the UMD-Ewha Teaching Exchange Program, Ewha and UMD must keep sending their pre-service teachers and expand their knowledge by exchanging teaching methods and philosophy. Also, the program needs to have not only a short-term but also a longer-term to exchange their ideas and compare the impact of the program, which develops the longer relationship between two universities.

References


Abstract:

Poetry can push students to delve into language more than vocabulary lists or grammar quizzes if the instructor is dedicated to verse in his classroom. This statement is even more appropriate for beginning Spanish language classes. Imagine students interacting with poems from Neruda, García Lorca, Guillén, Vallejo, Bécquer, or any poet (great or small) from the Spanish-speaking world. Now, imagine these students as writers of poetry in their developing second language. Both reading and writing poetry contribute to language learners’ abilities for creative capacity and spontaneity. The purpose of this paper is to give examples of successes among students where their poetic creativity has contributed to their desire to speak Spanish and to broaden their understanding of the cultures related to the language. On a larger scale, this paper strives to persuade Spanish language instructors from elementary schools to universities to use poetry as a tool to help students to create with the language from their first experiences with it. That poetic creativity will remain with them far longer than any fill-in-the-blank activity or verb chart.
As Pablo Neruda considered his audience when he wrote his three books of Odes (*Odas elementales*, *Nuevas odas elementales*, and *Tercer libro de odas*), he probably did not think about beginning Spanish students in the United States. By the same token, many Spanish instructors would not consider the *odas* as the ideal pedagogical tool for beginning language learners. My goal in this paper is to show that poetry in beginning Spanish courses is indispensable. Through examples from my own experience in the classroom I look to demonstrate how students have been successful communicators in Spanish through poetic creativity even at the most basic levels. On a larger scale, I hope to sway Spanish language instructors toward poetry as a positive language acquisition methodology for their beginning students.

In one of the first classes that I taught at the University level, I decided to put my knowledge and interest in poetry to use so that I could instill in my students my excitement for Spanish-language poetry. My desire was to demonstrate that poetry and creativity in the new language were closely linked. Three weeks into the course, we read Pablo Neruda’s “Oda al maíz” since the chapter in the textbook focused on food. I first performed a short excerpt of the poem:

Oda al maíz

América, de un grano de maíz te elevaste hasta llenar de tierras espaciosas el espumoso océano. Fue un grano de maíz tu geografía. El grano adelantó una lanza verde, la lanza verde se cubrió de oro y engalanó la altura del Perú con su pámpano amarillo […] (Neruda 312)

After my initial performance, I assigned students to work with a partner where they took turns and presented the rest of the poem to each other (they switched from one stanza to the next). Because this reading became a performance of Neruda’s “Oda al maíz,” the usage of dictionaries and constant questions of “¿Cómo se
dice?” occurred much less than in other classes. As the students focused on the reading and presentation of the poem, they did not necessarily believe that it was a comprehension activity (or so they thought). Students sat a little higher to perform the poem; the recitations improved pronunciation almost immediately. After the reading, instead of turning to talk of free verse, rhyme scheme, or the like, we talked of how the poem sounded on their lips.

The in-class activity did not focus on the mechanics of poetry or the mechanics of language, but the sound and visual aspects of poetry. Students recited something beautiful, creative, and even more importantly for them, correct. In other words, it seemed as though some of the pressure to be correct or have a correct answer from a student’s past academic training diminished through this activity. Granted, these beginning students did not understand every word of the poem. In fact, a couple of students mentioned that “they didn’t get poetry in English anyway” so why not give it a shot in Spanish? I saw that because some students looked at poetry as incomprehensible or unintelligible in their native language they could justify the fact that they did not comprehend every word in Spanish. So, because the students knew that poets always challenge linguistic and formal barriers, my goal was to help them see that could do the same in Spanish. If students could only feel comfortable enough to take some risks in the language without fear of making a mistake like poets do, then they could overcome one of the biggest challenges of language learning and second language acquisition.

After the recitations, we talked of other food possibilities that would make great odes. Then for their homework assignment, students chose other foods and they headed home to create their own ode for the next day. I told them “¡la creatividad es importante!” and I mentioned that the next day they also would vote on the most creative poem. I thought that if the assignment required creativity as the only stipulation, students might create more freely.

When they returned to class the next day, they sat in groups and recited their poems to their peers. Performance once again dominated the room; this time however, the students had produced the poetry themselves and they now had a vested interest in the final production. Many used language, grammar, and vocabulary from the very chapter that we were studying plus other items they had studied before. Some had
searched for the exact word in the dictionary at home in order to give their poem the touch that they were looking for. Others wanted more advanced grammar options to exemplify time and place for the poem. After the initial sharing of each of their poems, each group voted on the most creative. Then the winner from each group shared with the entire class. Later, the whole class voted on the most creative poem.

Although each poem was not perfect grammatically, most produced a reaction from the students in the class. We then compared the topics from their food choices with other odes that Neruda had written about food. The passion that students exhibited when they produced poetry in another language gave them power to manipulate the syntax, vocabulary, grammar just like Pablo Neruda and they may not have realized it.

Up to this point I have shared a successful poetic activity that I have used on various occasions in a second semester Spanish course. Despite my initial apprehension to use poetry in first semester courses at the University level, I also have noticed that students can produce language that in many cases goes beyond the brief introduction that they have had to Spanish. Recently, I introduced Neruda’s “Casa de las odas” from Nuevas odas elementales (1955) and I told the students that in the poem the poet describes his perfect house. For homework, I asked for a poem about the students’ perfect casa and I reminded them that la creatividad was what mattered most. I informed the students that they would vote on the best poem and the person who wrote the best poem as voted by the class would receive the coveted Moss Prize (Premio Moss). There was no word limit or specific rule except for one: “creativity is important!” Here is one of the student’s poems (used with his permission) and my translation where I try to relay the same grammar and vocabulary that the author used:
Un poema sobre mi casa perfecta
Ruoyu Jin

Tengo una casa perfecta
La casa es pequeña
Pero tiene una sala
En la sala hay una chica
La chica es encantada

Tengo una casa perfecta
La casa es linda
La casa tiene una terraza
En la terraza está mi amiga
Mi amiga es guapa

Tengo una casa perfecta
La casa tiene una cocina
En la cocina es mi novia
Mi novia cocina comida
La comida para la cena

Tengo una casa perfecta
Mi casa es la casa de mi esposa
La casa tiene una lavandería
En la lavandería hay una lavadora
Con lavadora mi mujer lava la ropa

Tengo una casa perfecta
Es la casa pequeña, pero linda.
Tiene una sala, una terraza, una cocina, y una lavandería.
En la casa hay una chica, una amiga, mi novia, y mi esposa.
En la casa la chica, mi novia, y mi esposa son la misma persona.

A poem about my perfect house
Ruoyo Jin

I have a perfect house
The house is small
But it has a living room
In the living room there is a girl
The girl is enchanted [delighted]

I have a perfect house
The house is pretty
The house has a terrace
On the terrace is my [female] friend
My [female] friend is beautiful

I have a perfect house
The house has a kitchen
In the kitchen is my girlfriend
My girlfriend cooks food
The food for dinner

I have a perfect house
My house is my wife’s house
The house has a washroom
In the washroom there is a washing machine
With washing machine my wife washes the clothes

I have a perfect house
It is a small house, but pretty.
It has a living room, a terrace, a kitchen, and a washroom.
In the house there is a girl, a [female] friend, my girlfriend, and my wife.
In the house the girl, my [female] friend, my girlfriend, and my wife are the same person.

The students, especially the women in the class became indignant after the first two stanzas, while many of the men in the classroom were ready to cheer. The third stanza then began to cause a division of the sexes: gender roles began to shine through and the women booed after the stanza while the men laughed. Then the fourth stanza then solidified that division. Finally, when the author read the last line of the poem, that division in class ended when the women clapped and the men patted the poet on the back.

You will notice that the language of the poem is simple. The listeners in the beginning course could understand the poem after only a brief three-week introduction to the Spanish language. The poem utilizes the vocabulary from the first chapters of the book (we had already spoken about family and social relationships) and the grammar principles from those chapters (we had previously discussed physical characteristics, we had practiced using “hay,” and we had introduced the new “stem-changing” verb “tener”).

More importantly, the poem is creative. During the first stanzas of the poem, I wondered how I would calm the waters after the poem, but the author saved me and recovered by himself in the last line.

“Un poema sobre mi casa perfecta” is an example of how students can use the small amount of language that they possess in order to create and use the language to express themselves. That expression is key for their quest to communicate in a second language. I have seen that poetry in these classrooms also contributes to level the playing field between those students who learn language quickly or who have had previous experience with it with those who do not learn quickly or have not had the same experiences. The question of creativity is what has provided a platform toward a balance between more advanced students and
those who are self conscious about their skills. In fact, I have noticed that on in the majority of my courses those who already have a more advanced level in the class are not the students who win the vote for the most creative poem. Although many of the advanced poems are excellent with extravagant language and grammar beyond the realms of the course, many of their peers look to reward the poems that they feel like they understand more. In other words, students who have more experience create on their level and write for an audience that is more advanced while the winners of the vote speak to their peers at the same level. The activity then provides possibilities for most of the students to progress in the language according to their skill and ability while creating something that they can be proud of.

Now, I have also noted that in some cases, the assignment to write poetry is positive for some students until they realize that they have to share with others. In other words, when they read poems written by the famous poets of the Spanish-speaking world they are willing to perform, but when they have to share their own work, that willingness disappears. However, these students still produce great written results despite their reluctance to read their work out loud or despite the fact that they may not want to be stigmatized as a “good poet” (heaven forbid) or associated with any negative connotation that mainstream society might use against poetry. In a couple of cases, some students have offered to read the poems of those who feel ashamed or worried about their abilities and build up the self-esteem of the student who wrote the poem although he/she did not perform it in class.

Up to this point in this paper I have focused on two ways that I have been successful in beginning language courses with poetry. Now I will look at how I can incorporate poetry more in my language courses. Recently I have been preparing a way to incorporate poetry to communicatively tackle the everlasting grammatical dilemma of the preterit vs. the imperfect. Bécquer’s Rima XLI gives both and explains the how of the differences in twelve lines:

XLI

Tú eras el huracán, y yo la alta
Torre que desafía su poder.
¡Tenías que estrellarte o abatirme!...
¡No pudo ser!

Tú eras el Océano y yo la enhiesta
Roca que firme aguarda su vaivén:
¡Tenías que romperte o que arrancarme!...
¡No pudo ser!

Hermosa tú, yo altivo; acostumbrados
Una a arrollar, el otro a no ceder;
La senda estrecha, inevitable el choque…
¡No pudo ser! (Bécquer 27)

Here we have the imperfect imbedded into the background of each stanza and the preterit to bring a close to each of those stanzas. The students can see the differences and can follow a similar pattern of imperfect for previous background information and preterit to bring closure. My idea is to have students use this poem as a pattern to creatively describe a situation in their past as they follow the model given them in this poem. This poem presents the comparison between the imperfect and the preterit so I would not use it to introduce the material; but I will look to see if it can strengthen the principles that the students have learned.

To conclude, the purpose of this paper was to give examples of successes among beginning students where their poetic creativity contributed to their desire to speak Spanish and to broaden their understanding of the cultures related to the language. Through the examples above, I hope to have shown the value of poetry for communication in a second language. I have seen that reading and writing of poetry allows students to use their creative ability. I hope to have been able to persuade you as Spanish language instructors to use poetry as a tool to help students to create with the language. I am convinced that poetic creativity will give them more confidence in their language ability than any fill-in-the-blank activity or verb chart.
Works Cited


Use of Computer Technology for Instruction in California Public Schools

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Use of Computer Technology for Instruction in California Public Schools

Abstract

This study examined the use of computer technology by students in public school. The uses of technology were divided between programmatic instruction and uses that built the students’ computer literacy. Interviews and observations were conducted in 15 public schools representing a mix of elementary and secondary schools, serving different socioeconomic groups. It was found that computers across all schools were mostly used for programmatic instruction. More uses of building computer literacy were found in schools serving higher income students and in secondary schools. Such patterns are seen as likely to increase, rather than decrease the digital divide between low and high income students.

It is considered a truism that every educated person today should be literate in the use of computers. Almost everyone accepts that computers are an integral part of much of what we do in our daily lives, from shopping and planning travel arrangements to social networking and entertainment. Jobs for mathematics, the sciences, and even the arts usually require creative and skilled use of computer applications. Many claim that the use of the internet galvanized the recent presidential election campaign of Barack Obama, at least in part. Educational policy groups argue that without advanced training in technology, the United States will fall behind other nations in global competitiveness (International Society for Technology in Education, 2007; U.S. Department of Education, nd.). This study looks at what our schools are doing to prepare students for this technological world.

As computers have become a common part of life outside of school, we also see a parallel increase in their presence in schools. In the early 1980s computers were just entering homes and schools. By 2005 over 95% of schools had internet access1 According to the U.S. Department of Education, in 2003 83% of students were using computers in school, a jump from the 60% reported ten year earlier2. With such a huge shift over such a short time, one might ask what impact this has had on our educational system and on our students.

In considering what such a shift might mean for education, educational theorists interested in the topic have tended to predict one of two types of changes. One group has focused on the ability of the computer to empower students. The other group has focused on the power of the computer to effectively and efficiently deliver instruction.

Those of the first camp have claimed that computer technology would or should transform schools and education as we know it, bringing on new ways of teaching and learning
that were not possible in the past (Coppola, 2004; Dede, 2004; Papert, 1982). In particular, these theorists argued that computers made the traditional role of teachers as lecturers—the sage on the stage—obsolete. Computers give students access to almost any information anywhere in the world, replete with multimedia sources. Simulations allow students to engage in complex problem solving. Powerful programs put tools for creativity at students’ fingertips.

Constructivist, learner-centered teaching is based, in part, on being able to do real world authentic activities (Berger, 2003). Computer technology can bring the larger world into the classroom, and with Web 2.0 and Web 3.0 applications, students can share their ideas and creations with the larger world outside of the classroom in an interactive manner. With the use of such computers, teachers can and should now play more the role of guide, coach and facilitator. Some even argue that having computer technology in the classroom would inevitably lead to this revolutionary outcome (Cuban, 2001).

Another view has been that computers would or should transform schools, not by changing our basic paradigm of learning and instruction, but as a more effective and efficient way to deliver instruction, or at least as a strong supplemental aspect to the curriculum (Cruthirds & Hanna, 1997). The idea of using technology for programmatic instruction goes back at least to the 1960s. According this view, the promise of programmatic instruction is now possible with the powerful computers of today. Computers can now be programmed to assess the individual learner, and tailor the instructional pace and problem presented to that student. No longer will each teacher need to be the expert in instructional techniques, since it will be programmed into the computer. Once we have identified the steps, any skill can be taught most efficiently and effectively this way. While this approach could significantly alter the teachers role as deliverer of instruction or information, it does not substantially alter the role of the student.

As of yet, there is not much evidence of either of these becoming realities. There are lots of individual examples of teachers using computers in creative ways that do speak to the claim of a more constructivist paradigm (see for example Coppolla, 2004). On the other hand, these appear to be the exceptions that prove the rule (Cuban, 2001). While there is some evidence that many schools are using computers in ways that match the programmatic instructional idea—that is for teaching basic skills, there is of yet little evidence that it has improved learning beyond small scale examples (Cuban, 1993, 2006; Dynarski, 2007; Halverson & Smith, 2009).
Another issue that has concerned many in terms of technology use is the digital divide. Not surprisingly, those with more money and resources, and those of higher socio-economic-status, are more likely to have computers at home, and use them more powerfully (Snyder, Dillow, & Hoffman, 2007). Potentially public schools could be the place where those with fewer resources could get that access. However, often resources at schools mirror the resources of those in the community. Therefore schools, rather than leveling the playing field for disadvantaged students, may exacerbate those differences (Gorski, 2007; Kozol, 1991).

This study examined 15 public schools to examine what direction computer use has taken in terms of either building the students’ computer literacy or as tools of delivering content. Further, we examined whether the schools in the this study demonstrated equity across socio-economic groups or whether they reflected the digital divide found outside of schools. Our research examined how these 15 schools in the greater Monterey Bay Area made use of computer technology for instructional purposes. We answered these questions through observing the use of technology in schools, and interviewing teachers in these schools. We have attempted to answer the following questions through our investigation:

- For what purposes do the students use the computer technology at the schools?
- In regards to the above question, what differences do we see among schools? Do socio-economic factors correlate with those differences? Is the age level of students a factor?

**Framework for Classifying Computer Use**

For the purposes of this research we divided computer use by students in two basic categories, aligning to some degree with the two basic directions outlined in the section above. Halverson and Smith (2009) used the phrases "technologies for learners and technologies for learning [italics in original]" (p.6). The first category is where students are using computers in ways that are likely to build their computer literacy skills. As a definition of computer literacy, we borrowed the framework developed by the International Society for Technology Standards (ISTE, 2007). In this framework for computer literacy, the ISTE developed six areas or types of uses that comprise full computer literacy: Creativity and Innovation; Communication and Collaboration; Research and Information Fluency; Critical Thinking, Problem Solving and Decision Making; Digital Citizenship; and Technology Operations and Concepts. These uses are more closely aligned with those that advocate for computers being used to transform education
into a more student centered approach.

The other category we referred to as Computer Aided Instruction (CAI). This mapped more closely with the programmatic instruction vision of computers in education. In these cases computers are used for skill building and directly teaching content. Examples of this type of use would be programs designed to reinforce or build reading skills, or practice math problems. We also included in this category programs that were used to track student progress or assess students. Accelerated Reader is such a program, where the computer is mostly used as a tool to assess the students’ reading skill level, and track what they are reading.

Methods

In order to study this question of student computer use, we employed a qualitative design utilizing ethnographic methods. Interviews and observations took place in 15 schools over a tri-county area in the central coast region of California. Eight were elementary schools, four serving largely low-income students, and the other four serving more middle to high-income students. Three were middle schools, split between one serving low-income students and two serving middle to high-income students. Four were high school, two serving low-, and two serving mid-to high-income students. The schools were selected based on a convenience sample. These were the schools at which the research team worked. While not a random sample, these schools do offer a fairly representative sample of public schools in terms of grade levels served of the different socio-economic levels of the student bodies, allowing for a reasonable comparison.

Table 1: Schools Studied

<table>
<thead>
<tr>
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<th>Elementary</th>
<th>Middle</th>
<th>High</th>
<th>Total</th>
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<tr>
<td>Low SES</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>7</td>
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<tr>
<td>Mid-High SES</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
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<tr>
<td>Total</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>15</td>
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The research team consisted of students enrolled in a Masters of Education course on Qualitative Research Methods, with the course instructor acting as lead investigator and author of this paper. These students were also working teachers and educators. To gather this information each member of the research team conducted an observation and interview at one school site, usually the one at which they worked. Each member of the team engaged in an approximately 45 minute observation of technology being used by students for instruction
purposes at one of the school sites, looking specifically at which of the categories the use met, and if it met ISTE standards, which of those it met. Each member of the team interviewed a key person at the school site to ask questions about how they saw technology being used by the students in the school, and their perceptions of the effectiveness of this use, again specifically probing to see the ways computers were being used for each of these purposes.

Findings

This study did find that computers were used differently based on the socio-economic make up of the student body, and based on the grade level of students served. There did not appear to be any consistent factor related to quantity or quality of hardware available to students. However, schools serving predominantly middle- and high-income students were more likely to have well-trained computer technicians and teachers to help make the computers more useful. Schools that served low-income students mostly used computers for computer-aided instruction and as an assessment tool. Schools serving middle- and high-income students were more likely to spend some time using computers in ways that build computer literacy skills. However, in none of the cases did the schools meet the ISTE standard at more than a minimal level. It was also found that high school students were more likely to use computers in ways that built their computer literacy skills than elementary students.

Uses for computer-aided instruction (CAI) highly outnumbered uses that might build computer literacy. The most common use of computers overall was the Accelerated Reading program, with the large majority of schools studied using this program. Other skill building programs, such as Reader Rabbit in primary grades, and Excel Math were common in elementary schools. In the middle schools studied, some skill building programs still continued to be used. By high school such uses appeared to be uncommon. Commonly, computers were used for word processing and internet searches for research papers.

Schools Serving Low-SES v Schools Serving High SES Students

The data suggest that at least for the elementary students, schools serving low-income students use the computers mostly for CAI, due to pressures of the standardized testing. Most of these schools are Program Improvement schools under the No Child Left Behind Act. As such, boosting standardized test scores is the top priority. Such schools are then likely to use the
computers as a tool to boost these test scores, and therefore use programs that are promoted and
designed specifically for that purpose. “They use it for intervention software,” typifies the uses
we saw. Explanations for such uses were “ELD students … need help with reading and phonics,
comprehension, some of that kind of stuff.” The behaviorist philosophy of such program use is
explained by this quote, “What I find the main benefit, for at least the programs we use, is that
there is immediate response, positive and negative, as in if you get the wrong answer…
immediate response and a lot of positive reinforcement when they do well on the computer.”
There were some instances of using computers for creative purposes in schools serving low-
income students. One elementary teacher had received a grant that allowed her to buy digital
cameras. Three teachers mentioned students being able to use drawing programs. Many of the
schools mentioned students using the web for research, or doing so with the students.

Elementary schools serving middle- and high-income students, not being under those
same pressures to raise test scores, may feel the freedom to use computers in more creative ways.
Still, several of the schools did use their computers for Accelerated Reading. There were also
several references to their use for reading and math skill programs. Some, not many, more
creative uses were found in such schools. One school mentioned how as early as kindergarten the
students are using the computers for projects. At another school the interviewee mentioned how
they integrated computers into whatever they are studying. On the more creative side, one school
mentioned the use of CAD programs, building virtual worlds and editing films.

The differences between the schools serving low and high income students were still
there at the high school level, but these differences were less dramatic. Again research was a
common use. Explicit teaching of the use of computers seemed slightly more likely in the
schools serving low-income students (as was the case in 2 of the 3 schools serving lower-income
students). In one of these schools it computer technology appeared consist mainly of taking the
technology class geared toward teaching the Microsoft Office Suite programs. In that school it
appeared that technology was used most creatively by the art students, research being the only
other use mentioned. One of the high schools serving higher-income students only mentioned
technology literacy type uses in regards to having a business technology class focused on
Microsoft Office suite programs. The others mentioned a variety of creative uses, often initiated
by the students themselves, such as music, simulations, photo imaging, and graphic design. In
one of these schools the teacher mentioned that often the students were ahead of her in terms of knowing how to use these programs.

We couldn’t distinguish any differences in student to computer ratio, quality of computers or amount of use based on grade level or socioeconomic status from our limited data. However, schools serving lower-income students appeared to be less likely to have highly trained or certified teachers to run the computer labs, and more likely to have untrained classroom aides or other uncertified personnel in these positions. This quote from one technology person at a high schools serving low-income students illustrates this. “My job description is making sure that network and the equipment are running and the administrative reports are filled out and improving instruction using technology. Unfortunately, the improving instruction part is not done.” On the other hand, at a k-8 school serving high-income students the interviewee described the technology support this way, “I think that’s been a huge change in the curriculum, just having a passionate, highly skilled teacher in charge of the computer lab.” Most schools felt they could use more and better technology support regardless of the age level or socio-economic group being served.

As has been found by other researchers, low-income students often have instruction that is geared to low-level basic skills, while middle- and high-income students are more likely to receive instruction that asks them to think creatively and critically (Finn, 1999). This was particularly apparent at the elementary level, and to a smaller degree at the middle/high school level. The types of computer use we found mirror those previous findings of overall content instruction. However, while it was clear that the schools serving middle- to high-income students did have more opportunities to use them for building computer literacy, both groups were often using them for skill building, assessment and programmatic instruction.

**Elementary v Middle/High School Student Use**

In regards to elementary versus high school student use, the findings suggest that more high school students were already likely to have basic computer literacy skills, allowing teachers to assign more creative projects without having to spend much time teaching how to use the technology itself, especially among middle- and high-income student bodies.

Virtually all of the elementary schools reported using the computers for some sort of CAI. As mentioned before, the reading assessment program Accelerated Reader was most often
cited. Next most often reported were reading programs designed for intervention or practicing skills, mostly for the early grades. One school mentioned using a program specifically designed for English language learners. Math skill programs were also frequently mentioned.

Both of the middle schools serving low-income students mentioned some use of computers for CAI, though one of those sites mentioned that such use “had mixed success.” Outside of Accelerated Reader, we did not hear much about such use at the high school level.

All of the elementary schools mentioned some use of the computers in ways that met at least one of the ISTE standards. In terms of the younger grades, five mentioned teaching keyboarding; six mentioned using Kidpix or other drawing programs. Four mentioned using computers for research, as in browser searches, mostly referring to upper grades. However, using it for research was usually in the context of availability of the individual student. It did not appear that the students were actually instructed in how to do so in any organized fashion. Several also mentioned using the computers for word processing. In one of the schools serving low-income students, the only creative use mentioned was by the teacher who had the grant to buy digital cameras.

In regards to the high schools, two schools (one serving low and one serving high SES students) mentioned having a specific technology class focusing on business type applications such as those in the Microsoft Office suite. Most of the schools mentioned having the students doing research, though in only two of the cases did the interviewees make it clear that students were getting guidance on how to do so. In one of the schools serving low-income students it did appear that students were using the computers in ways that built literacy, from music to writing to research to creating presentations, and allowed for creative uses. One of the other schools serving lower-income students mentioned the art students using a drawing and illustration programs. Two of the schools serving high-income students mentioned a wide variety of creative uses that the students put them to. However, in both cases is sounded as if often the students knew more than the teacher about these uses. The teacher created opportunities for the students to use those technology skills, rather than actually instructing the students in such uses.

**Digital Citizenship**

We found only two example of explicitly teaching digital citizenship. All but one school handled the issue through district or school filters and monitoring students. Some mentioned that
it was a problem, and that the more technologically capable students could often find ways around the filters. Rather than teaching digital citizenship, most schools attempted to police it. In some cases this actually may have led to teaching the reverse, as it seems to have encouraged some students to become adept hackers through the allure of the forbidden.

**Discussion**

The findings from this study must, of course, be taken as only tentative, given both the sample size and the limited basis of the data. Mostly the finding appear to confirm past studies on the issue of the digital divide. That is, low-income students are less likely to be using computers in powerful ways that build their computer literacy than high-income students. While all students were often using them for computer aided instruction and assessment, high-income students had somewhat more opportunities to use them in creative ways. There appear to be two main factors for this at the elementary level. One is the focus on test preparation which centers on rote skills in literacy and mathematics for schools that are program improvement schools under NCLB. All of the schools serving the low-income students were such schools. A second factor was that such schools were less likely to have high quality technology support or technology teachers. Without ongoing technical support, it can be hard to rely on the technology. Without highly trained personnel, the classroom teachers may not be up to the task of knowing how to use the computers in creative integrated ways, or the technology may often be inoperable.

At the elementary level, it was clear that teachers did want to give students opportunities to use computers in creative powerful ways. However time and technical resources limited their chances to do so. There were attempts to get students to know how to keyboard, and at least play with the computers to draw and write, and for upper graders do some basic web searches.

We saw a dropping off of computer aided instruction use for the high school students, and more of a focus on actually using them as tools for productivity, learning and creativity. Again there was slightly more opportunity for this, especially on the creative side for the higher-income students. How much was due to what is expected of students is hard to know. Some educational theories suggest that schools for high-income students are geared to prepare them to be creative and critical, while those serving low-income students train them to be productive workers (Finn, 1999). This research could be seen as somewhat supporting such a theory, though not strongly. The fact that many high-income students came to school knowing how to use
powerful programs for creative purposes probably made it easier for the teachers at these schools to integrate such uses into their assignments. They were also more likely to be able to assume that the students could work on these projects at home, and not have to rely on access to school computers.

**Implications**

This study suggests that if we want to create equity for students from all backgrounds we need to rethink what opportunities we provide for low-income students to use computers in ways that prepare them to be able to use them in as powerful ways as their more well-to-do peers.

Given that high SES students tend to have more opportunities and access to powerful technology at home, and that high SES students also have more opportunities to use computers in ways that build computer literacy, current school practices are likely to exacerbate rather than mediate the digital divide between low and high SES students.

To change such practices a serious reconsideration of what it would take to really bridge the gap needs to be undertaken. Such an examination is unlikely at most schools serving low-income students, given the pressures on district administrators, principals, teachers on down to students, to raise short-term standardized test scores. With such pressures almost everything else becomes at best secondary, if considered at all. Such pressures are only increasing under the current Federal policies.

It would also take an enormous input of resources. The real cost of having enough up-to-date computers, the software to use them well, the personnel to keep them running, and the professional development so that teachers would know how to use them effectively certainly does not exist in these times of economic crisis and education budgets cut to the bone. However, by most estimates, even in the best of times few schools could afford the real costs that such a commitment would take, especially over the long haul (Armstrong & Casement, 2000; Dede, 2004). It would take massive sate and possibly Federal reallocation and reprioritization of resources to make such a change feasible.

These are real difficulties that all of us who are committed to equity face. Those of us who do work with low-income students are therefore forced to think of creative ways to overcome these difficulties. While it is true that all students need to learn to read and do basic arithmetic, it is not true that for some students this should be done at the expense of learning
other things, including to be powerful users of technology. The brains of poor kids do not learn and function differently than those of rich children. Therefore, they do not need to be taught in fundamentally different ways. Without being prepared with equal technological skills, this lack will be just one more division and barrier when these students leave school, leaving them less prepared not just for the world of work, but the world of social empowerment, and access to information to improve their lives and make informed decisions.

Even without a change in resources, it is possible to use those limited resources differently. As the data showed, the difference in resources in the schools between types of schools was minimal. The real differences was in how they were used. These differences underscored an implicit or hidden curriculum (Giroux, 1988). The use of computers as programmatic instruction treats students as passive recipients of knowledge and instruction whose job is to input the correct answer. The uses that the ISTE standards promote ask students to be active participants in their own learning, using computers as a tool to create and convey knowledge. When these uses are promoted differently, for different types of students (which may coincide with the non-computer based instruction they are receiving), students come to view learning and the purpose of school in fundamentally different ways.

The argument for the need for this different instruction is, as mentioned earlier, the need to raise test scores. However, many schools have been effective using constructivist approaches to learning effectively with low- and high income students alike (see for example (Bensman, 2000; Berger, 2003). When students are asked to, and helped to use their minds, they not only do better on standardized tests of knowledge in the short term, but develop the abilities necessary to succeed in many arenas, in and out of school.

Endnotes

1. From the U.S. Department of Education’s National Center for Educational Statistics
2. This is the most recent year for which they collected this data.
   http://nces.ed.gov/programs/digest/d08/tables/dt08_431.asp?referrer=list
3. Low-income was defined as over two-thirds of the students being eligible for free or reduced lunch
Works Cited


Authentic Tolerance: Between Forbearance and Acceptance

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Authentic Tolerance: Between Forbearance and Acceptance

Abstract
Promoting tolerance is seen as a key weapon in battling prejudice in diversity and multicultural training but its meaning has been modified recently. The classical definition of tolerance meant that others are entitled to their opinions and have the right to express them and that even though one may disagree with them, one can live in peace with such differences. In recent years, however, tolerance has come to mean that all ideas and practices must be accepted and affirmed and where appreciation of differences is the ultimate virtue. Such a neo-classical definition has alienated many who value equality and justice and limits the effectiveness of diversity initiatives that teach the promotion of tolerance. The authors offer authentic tolerance as an alternative, incorporating respect and civility toward others, not necessarily approval of their ideas and practices. All persons are equal, but all beliefs and conduct are not equal.
Bill Watterson created a well-known comic strip called *Calvin and Hobbes* about the raucous antics of a 6-year-old boy, Calvin, and his real-only-to-him stuffed tiger companion, Hobbes. In the comic strip listed above the six-year-old hero gives a lame defense of not doing the right thing and denies that moral value has any meaning for philosophically sophisticated people like him. Hobbes, Calvin’s sarcastic, cynical alter ego, however, has some doubts about Calvin’s notion of tolerance.

This paper, like Hobbes, also expresses some concerns about tolerance and addresses this controversial concept and its part in diversity training. If tolerance is defined, as it often is, as “the ability to accept the values and beliefs of others,” (Lickona, 2002, p. 1) it poses a dilemma: How can individuals be asked to accept all people’s values and practices when they may believe that some of those ideas and behaviors are wrong? How, for example, can one ask supporters on opposite sides of the abortion and homosexuality debates to accept the validity of each other’s perspectives? Such contradictory views cannot both be correct.

We address the controversial topic of tolerance by starting with a brief history of tolerance. Then we discuss tolerance in diversity training efforts and explore both traditional...
(classical) and new (neo-classical) definitions of tolerance. In the next section, we review the concept of intolerance and then offer a discussion on the value of dialogue. Finally, we conclude with a summary that emphasizes respect and dignity of persons rather than required acceptance and endorsement of their beliefs and conduct.

Some History

Although the concept of tolerance has been esteemed (Locke, 1689/1983; Mill, 1859/1985; Voltaire, 1763/1994) its value has not always been appreciated. For example, early Western religious scholars St. Augustine and St. Thomas Aquinas viewed tolerance as a vice that can corrupt society and harm innocent people (Colesante & Biggs, 1999). Likewise, a value system that enjoyed near universal support in America for a number of years indicated that a good person was “trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent” (Boy Scouts of America, n. d.)—but not tolerant. Believing in and practicing the Boy Scout values, even if a person was not a Scout or a male, was highly correlated with being a citizen of excellent character and integrity.

Tolerance is said to be “indispensable for any decent society—or at least for societies encompassing deeply divergent ways of life” (Oberdiek, 2001, p. 23) characteristic of many Western cultures. Highly homogenous societies may be able to dispense with tolerance or greatly reduce its centrality but most of the world cannot. Tolerance has been recognized today as an especially important characteristic in pluralist, multicultural communities seeking to be free of oppression, violence, indignities, and discrimination (Mandela & Robinson, 2001).

Tolerance has been considered essential and a highly desirable quality in U.S. society (Hallemeier, 2006), and one of the few non-controversial values today (Kreeft, 2007). Many people insist that in a world burdened by injustice, inequality, unfairness, prejudice, and related
bigotry that the best solution to address these evils is to demonstrate a greater degree of tolerance (Outcome Document of the Durban Review Conference, 2009). Within the last generation tolerance has risen to the apex of America’s public moral philosophy and today it is believed that a good, moral person is tolerant (Tolerance.org, n. d.) and that such tolerance is a virtue essential for democracy and civilized life. Indeed, its absence is at the root of much evil: hate crimes, religious and political persecution, and terrorism (Lickona, 2002).

There is even a museum dedicated to tolerance in Los Angeles (Museum of Tolerance, 2006) and New York has a Tolerance Center (n. d.). It is a powerful selling point for any theory or practice that can claim it. Nowhere is this more evident than in the prominence given tolerance in education and training programs addressing issues of multiculturalism, inclusion, and diversity (Vogt, 1997).

*Diversity training*

Diversity training has become so important that it is a common curriculum now incorporated in nearly every major collegiate and graduate business program (Lansing & Cruser, 2009). This interest has also prompted a proliferation of training programs in industry since training is one of the most visible and potentially viable features of many diversity programs. For instance, an industry report on training in the U.S., prepared by the widely circulated practitioner-oriented *Training* magazine, indicated that 72 per cent of the responding companies offered some form of diversity training (Galvin, 2003) while the Society for Human Resource Management found that 67 per cent of U.S. organizations had multicultural training initiatives (Esen, 2005).

A key component of such programs involves promoting and advocating *tolerance* (Clements & Jones 2008; Wildermuth & Gray, 2005) and participants are frequently told to
recognize and acknowledge differences and to be open to them. Trainees are urged to value, endorse, affirm, and celebrate differences and are advised to appreciate, respect, and accept diverging opinions, practices, and ways of life and to create a climate of *tolerance*.

When “diversity training in the workplace” and “tolerance” were entered in the Google web browser some 182,000 hits were registered illustrating that tolerance is a key component of inclusion and multicultural training (Diversity Training in the Workplace, 2009). Additionally, *Teaching Tolerance Magazine* showcases innovative tolerance initiatives across the country (*Teaching Tolerance Magazine*, n. d.). In higher education, we are told, diversity training should emphasize “tolerance ... and respect for differences in appearance, values and attitudes, perspectives, assumptions, and conduct” (Benjamin, 1996, p. 155). Tolerance is also a key principle of one of the most successful forms of psychotherapy—Rational Emotive Behavior Therapy—which promotes an attitude of tolerance and views intolerance of others as a serious disruptive force in today’s multicultural global society (Ellis, 2004). From a slightly different perspective, The Unlearning Intolerance Seminar Series initiated by the Department of Public Information of the United Nations in 2004 (United Nations Department of Public Information Education Outreach, 2008) aims to examine different manifestations of intolerance and explore ways in which education and civil society can help overcome them. As its name suggests, the “Unlearning Intolerance” series offers opportunities to discuss how intolerance, wherever it exists and for whatever reason, can be “unlearned” through education, inclusion, and example. In sum, there seems to be a vast tolerance industry associated with diversity training.

*Meanings of Tolerance*

The idea of tolerance has seemingly undergone a change in definition over the years from the obligation not to tolerate the immoral, to the requirement of accepting the legitimacy of the
morally different; from tolerance as enduring the odious to tolerance as nearly blank-check acceptance of a myriad of differences (Weissberg, 2008). This is consistent with Apel’s (1997) proposal to distinguish the more traditional concept of tolerance, or, in his terminology, “negative tolerance,” from the newer concept of “positive tolerance” (p. 199). He maintained that negative tolerance with its emphasis on obligations to refrain from interfering with other people’s traditions or opinions was not enough within a pluralistic, multicultural society and that we have a moral responsibility to “support people in their pursuit of their ideals of life” (Apel, 1997, p. 204). To avoid such clearly prejudicial wording, the terms “classical” and “neo-classical” tolerance are used here.

*Classical definition of tolerance*

Classic tolerance derives from the term’s Latin roots—*tolerare* or *tolerantia*—the first the verb meaning to endure, the second the noun denoting forbearance (Weissberg, 2008). Simply put, this definition means “putting up with” something one finds objectionable and an ability to live with pain (assumed to be distasteful) reflects this understanding. In other words, something repugnant is allowed to exist without significant action on the part of those offended. It involves recognition that a civil society must include a willingness to bear with people whose ideas and practices are not merely different, but believed to be wrong.

The classical definition of tolerance incorporated the idea that everyone was entitled to their own opinion and that people were to recognize and respect others’ beliefs, practices, etc., without necessarily agreeing, sympathizing, or sharing in them, and to bear with someone or something not especially liked. In this view individuals accept the right of others to hold differing opinions (have different practices, and be different than themselves)—while not accepting their behavior as right for themselves or society. There is an element of grudging
forbearance in the classical definition of tolerance (Fallacy of Positive Tolerance, n. d.).

Oberdiek (2001) views tolerance as best captured by the slogans of “Live and let live,” “You go your way, I’ll go mine,” or “To each his own” (pp. 29-30).

Classic tolerance simply means the ability to hold on to one’s convictions while accepting the right of others to hold on to theirs. Tolerance is not indifference or acquiescence, but recognition of difference. Tolerance has nothing to do with accepting another person’s belief, only his or her right to have that belief. It is similar to Voltaire’s famous words: “I detest what you write, but I would give my life to make it possible for you to continue to write” (Guterman, 1963, p. 143). Thus, classical tolerance differentiates between what a person thinks or does, and the person himself or herself.

**Neo-classical definition of tolerance**

Today, some reject the classical definition of tolerance because it does not go far enough—it is a half measure (Oberdiek, 2001). What is needed, these critics say, is to move beyond tolerance as classically understood toward a positive appreciation of and an unqualified agreement with differences: a shift from forbearance to acceptance. Therefore, more recent understandings of tolerance suggest that individuals should fully welcome and unambiguously endorse alternative ways of feeling, thinking, and acting—though it is not their own or one that is considered for adoption (Oberdiek, 2001). The neo-classical definition of tolerance asks citizens to be open-minded and empathetic toward a virtually endless parade of differences; it asks them to work sympathetically to build institutional and cultural arrangements that will accommodate different ways of life. Interestingly, it appears that the graciousness implied in the appreciate differences brand of tolerance is selective with only those residing on the political spectrum’s left side deserving acceptance and celebration. For example, while gays and civil rights groups are
generally applauded, there is commonly silence when it comes to evangelical Christians or the military. Such a one-sided interpretation of neo-classical tolerance often engenders the very divisiveness it is supposed to eliminate.

Rather than a begrudging endurance implied in the classical definition of tolerance, the “appreciate differences” brand of tolerance (i.e., neo-classical tolerance) includes a duty to approve and embrace diverse beliefs, customs, and behaviors (McDowell & Hostetler, 1998; Odell, n. d.; Weissberg, 2008)—accepting the odious despite the odium. It has been largely redefined by those seeking to broaden what it means to endure, while diminishing that which is defined as offensive and distasteful in the hope of achieving legitimacy for those perceived as unfairly marginalized, stigmatized, under-appreciated, or otherwise disdained. Neo-classical tolerance is said to simply reflect a natural evolutionary process. Using homosexuality as an example, society has advanced from killing homosexuals to criminalizing homosexuality to treating it as a psychological disorder to just accepting it as a repugnant condition to embracing it as perfectly normal.

The neo-classical interpretation of tolerance requires affirming the rightness of the nonconventional and nontraditional; bearing the objectionable has been blithely replaced by “venerat[ing] the objectionable” (Weissberg, 2008, p. 126). Mistaking toleration for affirmation was made in the UN’s decision to declare 1995, “The Year of Tolerance.” In the UN’s declaration, tolerance was defined as “respect, acceptance and appreciation of the rich diversity of our world’s cultures, our forms of expression and ways of being human….It involves the rejection of dogmatism and absolutism …” (United Nations Educational, Scientific and Cultural Organization [UNESCO], 1995).
Neo-classical tolerance is immediately suspicious of the idea that something may be offensive, and in the event it is, rejects the idea that one is free to express such distaste. To evaluate something as questionable or wrong and publicly say so is considered intolerant and insensitive. No idea or behavior can be opposed, regardless of how gracious, without inviting the charge of being hateful, offensive, or some other harsh accusation.

Neo-classical tolerance goes beyond respecting a person’s right to think and behave differently, and demands that practically every nontraditional value claim and personal practice be made morally legitimate. The neo-classical definition of tolerance suggests “…that every individual’s beliefs, values, lifestyle, and perceptions of truth claims are equal” (Helmbock, 1996, p. 2). Thus, not only does everyone have an equal right to his or her beliefs, but all beliefs are equal. All values are equal. All lifestyles are equal. All truth claims are equal (McDowell & Hostetler, 1998). In a world where all values are inherently equal and a proclaimed hierarchy only reflects power, not demonstrable worth, why, for example, should one embrace capitalism over socialism or Islam in favor of Judaism? Why hold attachments to anything since nothing is better than anything else? In a world where such deeply rooted practices are perceived as “arbitrary” any choice is no better than any alternative, and thus easily interchangeable. Such a world is one of indifference where nothing is worth defending rather than one of equality.

Intolerance

In the lexicon of today’s tolerance pedagogues, respecting an individual means accepting and approving their ideals (beliefs, behaviors, and practices). To argue otherwise is to invite charges that one is engaging in “mean-spirited, right-wing polemic endorsing hatefulness” (Weissberg, 2008, p. xi). Indeed, one of the worst things that can be said of a person today is that he or she is intolerant. Calling someone intolerant helps demonize a particular, social, ethnic,
cultural, or religious group, and faulting their worldview as the most basic, primary cause of their perceived prejudice. There is a litany of words and phrases that, like bullets from a machine gun, are shot in rapid fire reflexively to attack the character and motivations of others using slander, intimidation, and pejorative personal statements: bigoted, dictatorial, narrow-minded, and inflexible. Indeed, those who have firmly-held beliefs are considered legalistic individuals with non-negotiable doctrinal convictions, deserving, in some cases, to be terminated from their job.

At least that is what AT&T representatives seemed to have thought when they fired Albert Buonanno after he refused to agree to portions of the company’s employee handbook that he believed violated his religious beliefs. All employees were required to sign a written acknowledgment that they had received AT&T’s new employee handbook and sign a “Certificate of Understanding.” The certificate contained a statement that the employee signing it “agreed with and accepted” all of the terms and provisions of the handbook, including its policies and rules. The handbook contained a provision that “each person at AT&T Broadband is charged with the responsibility to fully recognize, respect and value the differences among all of us,” including “sexual orientation.” However, Mr. Buonanno’s strongly held religious beliefs regarding the homosexual lifestyle prevented him from condoning or approving the practice of homosexuality. Buonanno shared his concerns with his immediate supervisor and informed him that he had no problem declaring he would not discriminate against or harass people who were different from him, including homosexuals, but he could not sign the statement, because it contradicted his sincerely held religious beliefs. Mr. Buonanno indicated, “As a Christian, I love and appreciate all people regardless of their lifestyle. But I cannot value homosexuality and any different religious beliefs” (Henle & Holger, 2004, p. 155). He declined to sign the document and was immediately terminated. Mr. Buonanno then sued AT&T and was awarded $146, 260 in
damages (see *Buonanno v. AT&T Broadband LLC*, 2004). Employers, it appears, may not force employees to adopt beliefs that may be inconsistent with employees’ religious beliefs and that “Employees shouldn’t be forced to forswear their religious values in the name of tolerance” (Hudson, 2004, p. 1C).

Even in institutions committed to academic freedom and diversity of viewpoints just raising questions about such dogma can be problematic, as Harvard University President Lawrence Summers discovered when he mused in 2006 at a closed-door economics conference that innate differences between men and women might explain in part why more men than women reach the top echelons in math and science (Mansfield, 2006). He was denounced for even surfacing such a question (not an assertion of belief) and was quickly given a no confidence vote by his faculty resulting in his speedy resignation.

*Authentic tolerance: On the value of charity, respect, and dignity in dialogue*

Authentic tolerance, somewhere between the classical and neo-classical parameters, involves treating people with whom we differ, not with appreciation, acceptance, or endorsement but with civility, dignity, and respect even as we recognize that some conflict and tension is inevitable (see Figure 1). Individuals, we feel, should be shown basic respect as human beings even if they hold beliefs that others may not respect. Like Ury (1999), we believe “tolerance is ... showing respect for the essential humanity in every person” (p. 127). People do not lose their dignity because they believe implausible, even offensive, things.

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We argue for charity toward others with whom we disagree—a charity that includes respect for others and the approval of others as a basic object of moral concern. Charity permits conflict and criticism of others’ beliefs and practices, but it limits the ways in which this conflict can be pursued based on respect for the person. For criticism to be charitable, it cannot be blind, based on stereotypes, or debasing opposing viewpoints, but rather requires knowledge and basic concern for the identity and voice of others. Such charity, however, also introduces risk to one’s convictions since dialogue involves an openness to others (Fowers & Davidov, 2006) which, in turn, requires the willingness to allow others to call one’s own deepest beliefs and commitments into question as points of view are compared and questioned. There is nothing wrong with being convinced, in our own minds, that we are right about something. Nor is there anything wrong with promoting or vigorously debating those beliefs. But, there is a great amount wrong with condemning, insulting, or oppressing others who in good faith do not agree with the conclusions that we have freely and honestly reached in our own minds, because the conclusions that they have freely and honestly reached in their own minds just might be right. If individuals are conditioned to be persuaded by sloganeering rather than by rational discourse, they are prepared to be taken in by any smooth talker and to lose their freedoms at the hands of charismatic tyrants.

Briefly, classical tolerance involves forbearance of others and their ideas while neo-classical tolerance preaches appreciation and acceptance of others’ ideas, behavior, and beliefs. Both of these can be considered variants of inauthentic tolerance. Authentic tolerance, on the other hand, involves respect and dignity of individuals without necessarily agreeing with or accepting their practices or values. Key components include dialogue and openness to others.

The richest form of dialogue is not merely an exchange of information, but a process in which the participants actively question their own perspectives and include the other as a partner
in their cultural self-exploration and learning (Richardson, 2003). Dialogue involves self-exploration as much as learning about the other, the articulation of one’s own previously implicit values and assumptions as much as learning what is valued by the other. This kind of exchange can lead to a greater self-understanding as well as a thoughtful consideration of another’s perspective. It can also help one recognize and begin to address inconsistencies, tensions, and blind spots in one’s heritage. This kind of dialogue can be a productive way to question the values and standards of one’s cultural community in light of another viewpoint. At its best, dialogue is challenging and enriching, and it results in greater clarity about and often alterations in one’s own worldview. Such dialogue introduces profound possibilities for self-examination and transformation in ways that members of diverse groups understand: what is good for them, what is praiseworthy, and how to bring that goodness into being. Such a procedure may provide a partial antidote to higher levels of incivility seen in our national culture today (Cortina, 2008).

Of course, some may feel that there are certain beliefs or practices that are so unacceptable that they are unwilling to enter a dialogue with those who keep them. Even so, the temptation to reflexively categorize alien customs and practices as contemptuous or immoral must be resisted. Such a judgment may reflect the limits of our own horizon, rather than the truth of someone else’s point of view. Steven Covey (1989), in his highly successful text, *The 7 Habits of Highly Effective People*, referred to a similar concept when he suggested, “seek first to understand, then to be understood” (p. 235). This habit is similar to empathy and is intended to improve communication by suggesting that individuals listen with the intent to understand the others’ perspective; not listening solely with the intent to reply.

Authentic tolerance, emphasizing respect and charity, is the simple etiquette of public life and can be seen as an antidote to a U.S. culture increasingly characterized by rude and uncivil
behavior (Cortina, 2008). Authentic tolerance allows differing views to have an equal right to exist, not necessarily an equal share in truth. These are different issues. Indeed, the view that all values are equal and immune from criticism is intolerant of the view that moral judgments can be made. The great value of authentic tolerance is that in no way does it excuse individuals from resolving conflicting claims to truth. Is it intolerant to claim that the sun is the center of our solar system because others might think that it is the earth? Are scholars considered intolerant when they believe one hypothesis to be true and another false?

Individuals can be authentically tolerant without accepting another person’s beliefs. Tolerance has nothing to do with endorsing another person’s belief, only his or her right to have that belief. Individuals should be inclusive of people but should not be required to personally incorporate others’ beliefs and behaviors. We should listen to and learn from all, but we are not obligated to be in agreement with everyone. It is a disservice to all when it is believed that tolerance, respect, charity, and dignity imply never saying or doing anything that might upset someone. Indeed, Barrow (2005) goes so far as to say that those who protest that they are being offended by our interpretation is indicted as “one of the supreme self-serving acts. Taking offence, when it means treating one’s personal hurt as grounds for punitive response, involves a refusal to show tolerance, to allow freedom or to play fair—for why should you be allowed to say what you want, when others are denied that right by you” (Barrow, 2005, p. 273)?

**Authentic tolerance in other cultures**

It is worth noting that the conceptualization of authentic tolerance presented here is supported by Eastern and African thinking. Asian societies, particularly countries like China, Japan, and South Korea, stress building harmonious interpersonal relationships through avoidance of conflict and compliance with social norms. This is based on the teachings of
Confucius for whom tolerance implies harmony without conformity (Jiang, 2006). Hence, a true Confucianist or Confucianism-inspired person would graciously show tolerance for differences in beliefs and values for the sake of harmony based on benevolence and love (Lo, 2006), but not necessarily feel obligated to accept and endorse such beliefs and values. Similarly, woven into the fabric of African society is the concept of *ubuntu* which represents a collection of values for treating others with harmony, respect, sensitivity, dignity, and collective unity simply because of a person’s humanness (Kani, 2006). The *ubuntu* value system provides a framework of how people should treat others and values a collective respect for everyone in the system.

An imperative delineated from the above is that it is important to treat others as family, i.e., with kindness, compassion, and humility. Indeed, Mangalisco (2001) noted that “Treat[ing] others with dignity and respect ... is a cardinal point of *ubuntu*. Everything hinges on this canon, including an emphasis on humility, harmony, and valuing diversity” (p. 32).

These African- and Asian-based principles are clearly consistent with authentic tolerance, which is what is strongly argued for and advocated here. As such, there are important implications of authentic tolerance for cross-cultural managerial practice. Managers in charge of multinational firms with operations in African or Asian countries would be well-advised to take heed of the proposed concept of authentic tolerance and develop their corporate diversity and multicultural programs accordingly.

*Key points of authentic tolerance*

We support the idea of a truly pluralistic society where differing views have an equal and legal right to exist but not a society where ideologically driven interest groups require all to accept their worldviews, where disagreement is misconstrued as bigotry, stupidity, and hatred, and where tolerance simply means forced acceptance. We are reminded of the words of noted
English philosopher William Rowe who said: “… those who are most eloquent in demanding freedom for their own views and practices are the first to deny freedom of thought or action to their neighbours” (1930).

We hold a vision of a world that features cultural sensitivity, mutual understanding and affirmation, inclusion, social justice; and the reduction and elimination of prejudice, inequality, discrimination, and oppression—without forced acceptance and agreement associated with the neo-classical definition of tolerance, and without the endurance and forbearance incorporated in the classical meaning of tolerance. We agree with Dubos (1981) that social evolution proceeds most rapidly when different cultures and groups “… come into close contact with each other and thus can exchange information and goods, even though each retains its originality,” (p. 116) and would expand his words by advocating approaching others with respect, dignity, and charity due them as human beings. In an intolerant world, rational dialogue gives way to argument by insult. It is easier to hurl an insult—“you intolerant bigot”—than to confront the idea and either refute it or be changed by it. Tolerance today—what is here called neo-classical tolerance—has become intolerance. When thoughtful principled arguments can be refuted by insults or speculation about hidden motives, rational discourse breaks down.

Authentic tolerance recognizes the rights of other humans to both have and express their opinion. If individuals can learn to respect the rights of all human beings to have and express their understanding of reality, whether they agree with them or not, then everyone will be one step closer to living in a truly charitable world. Tolerance of persons, what might be called “civility,” can be equated with the word “respect.” People can respect those who hold different beliefs by treating them courteously and allowing their views a place in community discourse.
Persons may strongly disagree with their ideas and vigorously contend against them in the public square, but still display respect for individuals despite their differences.

Take the case of Carrie Prejean who, as a contestant in the 2009 Miss USA Beauty Pageant, was asked her views on gay marriage by openly gay pageant judge Perez Hilton. When she replied that she believed that marriage should be between a man and a woman, Mr. Hilton called Ms. Prejean “the B word” on his popular blog and said he would have liked to call her something stronger (Hilton, 2009). Other gay activists took a more measured and civil approach. For example, Rich Tafel (2009) of the gay advocacy group the Log Cabin Republicans said:

“I think it was a perfectly acceptable question. And though I completely disagree with her, I think her response was perfectly fine, too. Calling this woman an unprintable name, as Perez Hilton did, is indefensible. All of us have a belief system, whether it is informed by our faith or a secular world view. The freedom to share those even unpopular positions is what makes this nation great. In my hundreds of debates for gay rights with Christian conservatives, I was often subject to mean and personal attacks and at times was concerned for my safety. As the tide turns in favor of gay equality, what a sad victory it will be if we become the new bullies. The crime here is not that people have opinions we disagree with. The crime is treating those who disagree with us with the same incivility that they treated us to.”

An additional example involved President Barack Obama who spoke of another ideological tension when he delivered the commencement address at Notre Dame University in the spring of 2009 amid much public controversy and protest demonstrations. Some “pro-life” persons thought that the president should not be invited to speak at a Catholic university because his “pro-choice” position on abortion is inconsistent with Church doctrine, and many objected to the university awarding him an honorary degree. The President devoted a section of his address to the protests—not on the merits of one abortion position over another, but rather on public discourse; i.e., on how Americans should engage in public debate on issues with which they
fundamentally disagree. Mr. Obama observed that while opposing views would and should be presented with passion and conviction, they could be done “without reducing those with differing views to caricature (Obama, 2009).” Then he suggested a model: “Open hearts. Open minds. Fair-minded words (Obama, 2009)” in the context of “... friendship, civility, hospitality and especially love” (Obama, 2009). These words are remarkably consistent with our concept of authentic tolerance offered here.

Conclusion

Researchers are increasingly questioning the rhetoric of neo-classical tolerance which seemingly demands acceptance of beliefs and behavior contrary to one’s own in the interest of valuing differences (Lickona, 2002; McDowell & Hostetler, 1998). If diversity training and awareness programs designed to promote social understanding (inclusion, affirmation, and harmony) in a pluralistic world are to continue to do the good work of confronting and eliminating unlawful and immoral discrimination and prejudice, then a key tool in such programs, teaching tolerance emphasizing approval of, agreement with, and endorsement of all beliefs and behaviors, must receive a more considered evaluation.

Authentic tolerance as incorporating dignity and respect for individuals without necessarily sharing in or accepting others’ viewpoints and conduct must supplant the classical and neo-classical views. Individuals can be authentically tolerant without the requirement to internalize others’ thinking or convictions. Inclusiveness should not demand that differences be denied. Authentic tolerance employs respect and civility for persons since every person has inherent value, but does not require adopting another person’s belief, only his or her right to have that belief. It strongly encourages us to explore the terrain between forbearance and acceptance, exploring possibilities of mutual understanding and accommodation along the way.
Within our notion of authentic tolerance respect is accorded the person; whether his or her actions or viewpoints should be tolerated is an entirely different issue. Tolerance of persons must also be distinguished from tolerance of ideas. Tolerance of persons requires that each person’s views get a courteous hearing—not that all views have equal worth, merit, or truth. Rejecting another’s ideas should not be equated with disrespect for the person. The opinion that no person’s ideas are any better or truer than another’s is irrational and absurd. It would be inappropriate to tolerate such things as racism, sexism, or hate speech. This view is consistent with renowned psychotherapist Albert Ellis’ (2004) concept of unconditional other-acceptance which declares that one is not required to “… tolerate the antisocial and sabotaging actions of other people…. But you always accept them, their personhood, and you never damn their total selves. You tolerate their humanity while disagreeing with some of their actions” (Ellis, 2004, p. 212, italics in original).

Those attending diversity workshops where tolerance is encouraged should respectfully engage trainers regarding their definition of tolerance and to question interpretations that imply that participants endure and suffer others’ differences (classical definition) or that trainees should appreciate others’ differences and accept everything (neo-classical definition). We agree with Bennett (2001) that “Properly understood, tolerance means treating people with respect and without malice; it does not require us to dissolve social norms or to weaken our commitment to ancient and honorable beliefs” (p. 138). Such an understanding of tolerance, what is here called authentic tolerance, can enhance diversity training program effectiveness and can be a valuable approach to addressing inclusion in organizations and institutions. Tolerating or respecting people, however, must never be confused with accepting all their ideas and practices.
References


Figure 1. Authentic tolerance relative to classical and neo-classical tolerance.

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A Microgenetic Analysis of Learning Strategies Adoption in Group Discussions of Problem Based Learning

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A Microgenetic Analysis of Learning Strategies Adoption in Group Discussions of Problem Based Learning

Abstract

With increased attention on problem based learning and widely adoption of group discussion in implementing problem based learning in science education, this paper provides evidence of the applicability of microgenetic methodology in analyzing group discussion of problem based learning. Using microgenetic method, while four students planned, implemented and finished a science poster presentation in three group discussions, the study provides the real-time generation and report of the specific development and changes of frequencies of six learning strategies adoption within group as well as the individual differences in the use of the various strategies. This study suggests that microgenetic methodology provides an effective way to describe and understand in depth that group discussion of problem based learning is an active and continuous process involving ever-changing choices of students' strategies adoption. With focusing on the process, the researcher can trace the student’s cognitive development of a certain domain within a period of time. Therefore, in future studies, researchers may apply microgenetic methodology to analyze students’ other strategies, skills, and knowledge in group discussion of problem based learning, and compare students’ different problem solving processes in different domains or under different circumstances, thereby generate a more comprehensive understanding of students’ learning.
Introduction

One goal of science education is to improve critical thinking, logical responding and to develop problem solving abilities of the students (Lavole 1993). Therefore, problem based learning is a commonly used strategy in science education. Mayer & Wittrock (1996) explained that solving a problem means to find or create new solutions for the problem or to apply the new rules to be learned. The problem could be a physical science problem such as a one dealing with motion or a social science problem as one concerning environmental issues. Studies in science education have explored the relationship between the development of students’ thinking and problem-solving skills in science. For example Davies (2008) found that children’s problem solving skills were enhanced when they understood the relevance of their learning, felt capable of completing the task, and could relate it to something else that they had done. Sormunen (2008) pointed out that pupils’ modest problem solving abilities in open-ended inquiry process were due to inability to integrate and apply their existing strategies, skills, and knowledge. Chang & Weng (2002) found a significant mean difference in students’ skills of observation, data interpretation, and hypothesis formulation between higher-level and lower-level problem solvers.

With the increased dissatisfaction towards traditional teacher-instructed approach, researchers have begun to focus on the importance of group discussions in implementing problem based learning. Student group discussion is critical for a student to learn to propose, explain the logical nature of, and defend one’s ideas of the problem. Cazden (1998) found that skills such as problem-solving, critical thinking and scientific reasoning are intimately linked to group interaction and discussion. In other words, the interaction that occurs when student discussion is fostered around authentic tasks positively influences student problem solving and
critical thinking skills. This intimate link between discussion and problem solving skills was recently supported empirically by Webb & Treagust (2006). Their study found a clear and statistically significant improvement in problem-solving and reasoning of pupils who participated in classroom discussions. Other scholars have also proposed a critical relationship between discourse and problem solving skills. Schwartz, Mennin, & Webb (2001) argued that problem based learning in science education refers to students engaged in active learning through small, collaborative groups to develop content knowledge and a range of skills, such as self-directed learning, problem-solving, and communication skills.

Among many different strategies used in group discussion of problem based learning, students tend to choose between different learning strategies and this can vary significantly across individuals. (Siegler & Jenkins, 1989; Luwel, Siegler, & Verschaffel, 2008; Kuhn et al., 1995; Schauble, 1996). Building on a series of studies, Nisbet and Shucksmith (1986) proposed six strategies that students use during group negotiations, a) asking questions, b) planning, c) monitoring, d) revising, e) checking, and f) self-assessing. Asking questions are characterized as the emergence of a new topic with a question or a statement. Planning strategies are characterized as one initial attempt to deal with the new topic, such as providing an example or a suggestion directly to the topic mentioned. It was the initial response to the question, and most of Planning strategies in these discussions were used to clarify the question or narrow down the topic. Monitoring strategies are further attempts to deal with the current topic on the basis of Planning strategies. Checking are strategies as a direct opinion, question, or evaluation to the current plan. Revising strategies are used to revise or redraft, recalculate the initial plan to make it clearer or easier to understand. Self-assessing strategies include assessments of plans and performances of the participants across the topics; for example, making conclusion
or evaluation to the current situation in the discussion. While many studies have been conducted on group discussions, few have focused on discussions during extended problem based tasks.

The purpose of this paper is to report on the use of microgenetic method as an approach to study group problem based learning. The microgenetic method has proved to be applicable in many domains in science education. For example Luwel, Siegler, & Verschaffel (2008) used microgenetic method to find that experiences influenced the students’ strategies adoption in problem-solving process. Karmiloff-Smith (1992) did a comprehensive microgenetic analysis on the child’s cognitive development in the domain of mathematics. Kuhn, Schauble, & Garcia-Mila (1992) also used microgenetic method to find students’ scientific reasoning strategies developed across different domains. Few studies, however, have used microgenetic method in studying group discussions of problem based learning.

Often, problem based learning is assessed by determining students’ understandings before and after the problem (Sormunen, 2008; DiList, Eulberg, Lanese, & Padovan, 2006; Chang & Weng, 2002). Such methodology can only compare the results at two ends of a problem solving process, and fail to have an access to the specific details of changes happened during the process (Adolph, Robinson, Young, & Gill-Alvarez, 2008; Demetriou & Raftopoulos, 2004; Kuhn, et al., 1995; Miller & Coyle, 1999). Considering this methodological tendency of problem based research and building on the intimate connection between group discussion and problem-solving abilities, this paper provides an example of using microgenetic method to study the specific stages of developments in group discussion of problem based learning. It emphasizes the different periods of change as students work through an extended (two week) student-directed problem solving task.
Current Study

This paper provides evidence of the applicability of microgenetic methodology in analyzing group discussion of problem based learning. Unlike traditional methods, microgenetic methodology provides a good way to describe and understand in depth that group discussion of problem based learning is actually an active and continuous process involving constant changes of adoptions of different strategies, skills and knowledge. In this study, the author focuses on microgenetic analysis of six learning strategies (Nisbet & Shucksmith, 1986) students used in three group discussions to understand their problem based learning process.

Using microgenetic method, while four students planned, implemented and finished a science poster presentation in three group discussions, the study provides the real-time generation and report of the specific development and changes of frequencies of six learning strategies adoptions within group as well as the individual differences in the use of the various strategies.

Participants were students attending a summer institute for accelerated middle school students. Twelve groups of four students proposed and explored authentic problems related to the theme Go Green. The students were asked to research their question, develop knowledge claims based on evidence, construct a scientific poster, and conduct a poster presentation to peers and community members. From these twelve groups, one was randomly selected for audio recording and subsequent analysis. The problem for these four students to work together was to determine how disposed computers are affecting our environment. Three audio
recordings were collected throughout the nine days of group project work totaling approximately six hours of audio.

Results

With the microgenetic analysis of the frequencies of six learning strategies students adopted during their group discussions, the author finds that each learning strategy represents an important factor in group discussions.

*Asking Questions* strategy represented the level of group members’ understandings towards the task, and the changes in these three group discussions showed the process of developing similar levels of each individual’s understandings of the current task. The analysis indicated that it took a good deal of time for all group members to clearly establish the nature of the task.

The nature of *Planning* and *Monitoring* strategies suggested the two strategies are closely connected with an individual’s ability and specialty in the discussion topic. When a student was good at or interested in certain topics, he/she would adopt more *Planning* and *Monitoring* strategies than the other students. Considering that these students were exploring an area of study in which they all had a similar understanding, the *Planning* and *Monitoring* strategies contributions were comparatively stable across the three discussions.

*Checking* strategy was closely related to the topics in the group discussions, and the changes throughout these three discussions showed the changes of the topic ranges in their
discussions. It was adopted to make clear what other students said and provide possible alternatives of current perspectives.

According to the nature of Revising strategy, it was built on the basis of Planning and Monitoring strategies, and it represented the harmony among group members, and it took time for the students to set up the harmony among these four students during their discussions.

The changes of Self-assessing strategy during these three group discussions showed that the adoption of this strategy included a thorough consideration of the understanding of the task, the ability or interest of the topic, the level of satisfaction towards current discussion, and the evaluation of the other group member.

The author defines an efficient group discussion as characterized by group members sharing similar strategies to develop ideas and generated useful results, and developing further with Monitoring strategy when the discussion direction had set. This pattern suggests that efficient group work takes time to develop.

Implications for Research and Practice

With increased attention on problem based learning and widely adoption of group discussion in implementing problem based learning in science education, microgenetic methodology brings researchers’ focus on the essential element in problem based learning – the process itself. With microgenetic methodology, the researchers can trace the student’s cognitive development of a certain domain within a period of time.
This study suggests that microgenetic methodology provides an effective way to describe and understand in depth that group discussion of problem based learning is an active and continuous process involving ever-changing choices of students' strategies adoption. Besides learning strategies, students tend to use many different strategies, skills, and knowledge during their group discussion of problem based learning. For example Kuhn (et al., 1995) found students’ adoption of knowledge acquisition strategies during their learning process. Therefore, in future studies, researchers may apply microgenetic methodology to analyze students’ other strategies, skills, and knowledge in group discussion of problem based learning, and compare students’ different problem solving processes in different domains or under different circumstances, thereby generate a more comprehensive understanding of students’ learning.

This study also suggests that in daily science education practice, microgenetic analysis of problem based learning provides researchers and educators a vivid real-time description and report of students’ detailed development during their problem solving process. Therefore, researchers and educators develop a clear understanding of the specific steps the students underwent during their problem solving process. Using such information, researchers and educators can redesign and subsequently implement a more suitable and efficient problem based learning task.

References


PARENT PERCEPTIONS OF THEIR CHILD'S SOCIAL COMPETENCE, SOCIAL SKILLS, AND SELF-CONCEPT IN RELATION TO A TWO-DAY SURF CAMP CURRICULUM FOR STUDENTS WITH AUTISM SPECTRUM DISORDER

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Parent Perceptions of their Child’s Social Competence, Social Skills, and Self-Concept in Relation to a Two-Day Surf Camp Curriculum for Students with Autism Spectrum Disorder

Abstract: Surfing is an emerging alternative therapy that may result in positive outcomes on the psychosocial domains for individuals with Autism Spectrum Disorder (ASD). The purpose of this presentation is to present the results of a study conducted to identify parent perceptions on the benefits and outcomes achieved by their children as a result of a two-day surf camp curriculum. Parents were provided the questionnaire 2-weeks prior to surf camp, immediately after the completion of surf camp, and then again 2-weeks following surf camp. Parents responded to 23 likert questions in the categories of social competence, social skills, and self-concept as it relates to their child’s participation in the surf camp. In addition to these questions, three additional short answer open ended questions were provided to determine participant impact perceptions of the surf camp. Results of the parent perception survey indicate statistically significant changes in the social skill category of empathy, as well as two of the five SURF Camp Social Skills curriculum activities performed at surf camp.
Changing Teacher Beliefs about the Reading/Literacy Process

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The purpose of this research study is to determine if participation in literacy training changes teachers’ beliefs and practice related to the reading/literacy process. Prior to participating in California State University Fullerton’s Reading Institute for Academic Preparation (RIAP), teacher-participants were given a survey to assess current beliefs and practices regarding literacy. Following 60 hours of Institute professional development, via RIAP, secondary teacher-participants completed a post-institute survey. Participants also completed a project examining their classroom practice and a self-analysis.

RIAP is an Institute for teachers interested in teaching content through literacy. It has been developed by the CSU Chancellor’s Office and blends classroom practice with the latest research in literacy. The intent of this study is to determine whether or not teachers experience changes in understanding the reading/literacy process based on their participation in RIAP and exposure to current research. Furthermore, we investigate whether changes in beliefs/understanding impact classroom practice.

RIAP sessions focus on specific topics in literacy, including academic reading, writing, vocabulary instruction, disciplinary literacy, illustrated journaling, comprehension building techniques and assessment. Intensive training sessions are lead by CSUF faculty and guest presenters from other CSU’s. Our research examines paradigm shifts in teachers’ thinking and practice related to the reading/literacy process following 60 hours of research based trainings provided during the course of a year. In addition,
we also look at what specific literacy topics and research covered during the Institute appear to have the most significant impact as reported by participants.

Results from the survey, sample classroom studies and self-studies will be presented during our session. An article based upon the research is in progress.
A Comparison Of Learning Cultures

In Different Size And Types Of High Schools

A Paper Submitted to:

2011 Hawaii International Conference on Education

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A COMPARISON OF LEARNING CULTURES

IN DIFFERENT SIZE AND TYPES OF HIGH SCHOOLS

Paula D. Brown

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ABSTRACT

The purpose of this study was to compare relevant data and information about leadership and learning cultures in different size high schools (small and large) and types of high schools (alternative schools, professional learning communities, small learning communities, and non-learning communities). Research was conducted using a quantitative design with a qualitative element. Quantitative data were gathered using a researcher-created survey, the Brown Learning Culture Assessment. These four themes (shared and supportive leadership, collective learning and application, collaborative culture, and shared values and vision) represent the dependent variables of this research study and the basis for the structure of the Brown Learning Culture Assessment. The independent variables are different size schools (small schools and large schools) and the dependent variables are different types of schools (alternative schools, professional learning communities, small learning communities, and non-learning communities).

High school teachers from small schools, large schools, small learning communities, alternative schools and professional learning communities were used in the population sample. Small schools and large schools were evenly represented. Missouri State High School Athletic Association (MSHSAA) guidelines for school size were used to distinguish categories of schools. Four large schools were represented by 5A and 6A schools and four small schools were represented by 1A and 2A schools. Certified educators completed the survey.

Four research questions were asked in this study. The first one asked, Does school size (large vs. small) make a difference in perceptions of shared and supportive leadership, collaborative culture, collective learning and application, and shared values and vision? Four independent sample t-tests for uncorrelated means were used to calculate the data. The second research
question asked, Does school type (small learning communities, alternative schools, and professional learning communities) make a difference in perceptions of shared and supportive leadership, collaborative culture, collective learning and application, and shared value and vision? Four one way analyses of variances (ANOVA) were calculated using one per subscale. The third research question asked, Do professional learning communities/small learning communities make a difference in perceptions of shared and supportive leadership, collaborative culture, collective learning and application, and shared value and vision? Four independent sample t-tests for uncorrelated means were used to calculate the data. The last research question asked, How do school leaders describe the leadership styles and cultures used within the different high school settings? Two open-ended questions were analyzed and coded for common reoccurring themes.

Independent sample t-tests were conducted in order to analyze the means of school size factors (small and large) and also learning structures (PLC/SLCs and Non-PLC/SLCs). According to responses from teachers statistically significant differences existed between the factor small school size compared to shared and supportive leadership and collaborative culture. Statistically significant differences also existed between the factor PLC/SLCs compared to shared and supportive leadership, collaborative culture, and collective learning and application.

A one-way ANOVA was ran to compare the means of subscales shared and supportive leadership, collaborative culture, collective learning and application, and shared values and vision. Alternative schools and professional learning communities reported significantly higher scores on three of the four subscales (shared and supportive leadership, collaborative culture and shared values and vision). Non-learning communities had consistently lower scores on all four subscales (shared and supportive leadership, collaborative culture, collective learning and application, and shared values and vision). Alternative schools were consistently highest across all subscales, with professional learning communities reported second, followed by small learning communities and non-learning communities. These statistical findings were supported with qualitative responses. However, there were divergent angry voices reported from large school and non-learning communities.

Conclusions made from research question one (Size – Small vs. Large) suggested that small schools experience higher levels of Shared and
Supportive Leadership and Collaborative Culture. Large and small schools both experience similar levels of Collective Learning and Application and Shared Values and Vision.

Research question two (Types – Alternative Schools, Professional Learning Communities, Small Learning Communities and Non-Learning Communities) concluded that alternative schools experience higher levels of Shared and Supportive Leadership, Collaborative Culture, and Shared Values and Vision. Professional learning communities experience higher levels of Shared and Supportive Leadership, Collaborative Culture, and Shared Values and Vision. Non-learning communities have lower levels of Shared and Supportive Leadership, Collaborative Culture, Collective Learning and Application, and Shared Values and Vision. There was also a consistency in the order of learning culture qualities. Alternative schools were the had the highest amount, professional learning communities were always second, small learning communities were always third and non-learning communities always had the least learning culture qualities.

The third research question (PLC/SLC vs. Non – PLC/SLC) concluded the PLC/SLC’s experience higher levels of Shared and Supportive Leadership, Collaborative Culture, and Collective Learning and Application than Non-PLC/SLC’s. PLC/SLC’s and Non-PLC/SLC’s experience similar levels of Shared Values and Vision.

Research question four’s (“Teacher Voices”) qualitative findings supported the quantitative results from the indentified subscale themes: Shared and Supportive Leadership, Collaborative Culture, Collective Learning and Application, and Shared Values and Vision. However, two new themes were identified: Open communication and Divergent Angry Voices. Open communication with administrators was valued by teachers in all size and types of high schools. Divergent angry voices were found in large high schools and Non-PLC/SLC’s.

Five implications for practice were suggested based upon the literature and data. First, principals reflect upon their leadership style, and recognize the value of shared leadership and a collaborative culture. Secondly, practice open communication skills with and among staff. Third, be aware of the importance of small class sizes and working with students in smaller learning environments. Fourth, be knowledgeable of what defines a
true learning community with components such as shared and supportive leadership, collaborative culture, collective learning and application, and shared values and vision. Fifth, be cognizant of divergent angry voices of staff members who may fear changes or feel left out of shared decision-making processes.

Recommendations were made from analyzing the data. School administrators in large schools and non-PLC/SLCs may consider plans to restructure high schools into true learning communities that are divided into smaller units. Principals may also consider using open communication while implementing change. Shared leadership with an open collaborative culture is suggested to be practiced and implemented so principals and staff can work together collaboratively to build ownership in their learning cultures.
Is it possible to impact the attitudes of pre-service general education teachers about the inclusion of students with disabilities?

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Abstract

The study examined the attitudes of pre-service general education teachers about the inclusion of students with mild to moderate disabilities. Participants in the study completed the Teacher Attitudes Toward Inclusion Scale (TATIS) at the beginning and of a semester long introductory course on disabilities. The findings of the study found significant differences on the three dimensions of the pre-service general education teachers’ attitudes as measured by the TATIS. The course is providing the pre-service teachers with information about students with disabilities. This knowledge may be alleviating misconceptions about students with disabilities and improving the pre-service teachers’ foundational skills regarding disabilities.
Can we influence pre-service general education teachers’ attitudes about inclusion?

Current educational practices require general education teachers to be effective instructors for all students (i.e., No Child Left Behind, 2001; Individuals with Disabilities Education Improvement Act, 2004). Legislation alone cannot guarantee the successful inclusion of students with disabilities in general education classrooms (Coulter, 2007; Peters, Johnstone & Ferguson, 2005; Ross-Hill, 2009). Teachers are one of the most important components for successful inclusion (Ross-Hill, 2009; Van Laarhoven, et. al., 2007). The route to become an effective teacher has many parts. Pre-service teachers will gain skills in teacher preparation courses, field experience, student teaching, and later through on the job experience and professional development. The education provided to pre-service teachers will shape the future of inclusive services for students with disabilities.

Many individuals and opportunities will influence the attitudes of pre-service teachers – such influences may include personal experiences in K-12 education, personal knowledge of disabilities and/or individuals with disabilities, and the teacher preparation program. Teacher preparation programs can be very influential. Coursework focused on disability issues and the philosophy of inclusion held by university instructors can impact beginning teachers attitudes toward students with disabilities included in general education. The increasing number of students with disabilities in general education classes requires that preparation at the pre-service level provide opportunities and methodologies for beginning teachers (Henning & Mitchell, 2002). Preparation that includes coursework and opportunities to develop relationships with individuals with disabilities has been found to assist in creating positive attitudes toward students with disabilities (Forlin, 2010; Sharma, Forlin & Loreman, 2008). Pre-service teachers need to
feel comfortable interacting with students with disabilities in order to fully embrace inclusion. It is critical that concerns and doubts that pre-service teachers have be addressed before they go out into their own classrooms (Moran, 2007; Hastings, & Oakford, 2003).

Teachers need an overall acceptance and willingness to instruct a variety of diverse students including students with disabilities (Mintz, 2007). When teachers have positive attitudes toward students with disabilities they are more readily able to adapt and change the ways they teach to meet the needs a variety of student learning needs (Sharma, Forlin, & Loreman (2008). Lower grade levels and less significant disabilities have typically been areas in which pre-service and in-service level teachers are more positive about the inclusion of students with disabilities (Campbell, Gilmore & Cuskelly, 2003; Ross-Hill, 2009). Hasting & Oakford (2003) They found that pre-service teachers rated students with behavioral and emotional disabilities as having a more negative impact on other students, teachers as well as the general school and classroom environments. They also contended that teachers’ attitudes were more negative regarding students with behavioral or emotional disabilities rather than students with intellectual disabilities. These skill areas need to be addressed during the pre-service period.

Sapon-Shevin (1996) states that full inclusion draws attention to the challenges that already exist in the schools. These difficulties are even more apparent when trying to include students with significant behavioral and emotional challenges. The system needs to change in order to support all children. Unfortunately more recent legislation NCLB (2001) has actually encouraged the system to standardize more and to remove some of the flexibility needed by students with disabilities to be successful in an inclusive environment.

Silverman (2007) found that there are three factors necessary for teachers in order to have positive attitudes toward inclusion. First teachers must believe that students with disabilities can
achieve their very best and can learn. Secondly, all teachers have to have a strong sense of self-efficacy for teaching students with disabilities. Teachers with a high self-efficacy are more effective at differentiating instruction, and finally general and special education teachers need to see each other as equals. Beginning teachers typically lack the knowledge and beliefs for positive attitudes about inclusion. Negative attitudes may be due feeling inadequately prepared. It may also relate back the beginning teacher’s own K-12 experiences. These areas also need to be addressed at the pre-service level.

Becoming an effective teacher requires desire to be good for all students, including students with disabilities. The time spent in a teacher preparation program is the time to influence attitudes and to instill the belief that all children can learn (Weiner, 2003). This study sought to determine the impact an introductory course on disabilities had on masters level teacher preparation students.

Method

This research was conducted through a pre and post survey given to pre-service general education teachers at the beginning and end of a survey course on students with disabilities (ED 564: Education of the Exceptional Student). The Teacher Attitudes Toward Inclusion Scale (TATIS) was administered pre and post with pre-service teachers enrolled in the introductory course (Cullen, Gregory, & Noto, 2010).

The TATIS is grouped into three factors: teacher perceptions of students with mild to moderate disabilities, beliefs about the efficacy of inclusion, and perceptions of general educators regarding professional roles and functions. Cullen, Gregory and Noto (2010) established the validity of the TATIS through principal component analysis and the reliability coefficients generated using Cronbach’s alpha measure of internal consistency. The TATIS demonstrated strong content validity and factor loadings, and the overall correlation coefficient of 0.821 exceeded the value of 0.8 for
acceptable internal reliability. The TATIS instrument was a revision of the APTAIS developed by Cullen and Noto in 2007.

Data were collected from 2006 to 2009 in ED 564. Pre and post data were collected from students in a pre-service teacher preparation class on inclusion of students with mild to moderate disabilities into general education classrooms for 80% or more of the school day. Only classes with professors who coordinated syllabi and activities were included in the analyses. The TATIS was employed for both pre and post data collection. Participation in the survey was optional as was providing an identifier for matching pre and post responses. Responses without matching pre and posttest scores were excluded. Additionally, demographic information was collected to investigate whether there were variations in the amount of change in the pre and posttest for different groups.

The data were analyzed with Statistics Package for the Social Sciences Version 16.0 to analyze whether there was a significant difference in the pre and post test scores of respondents. This repeated measure design causes each respondent to be their own control (pre-test) and thereby reduces the variability as compared to a randomly selected sample, minimizing the estimated standard error and increasing the likelihood that differences in the means will permit valuable conclusions to be drawn.

Data were initially collected from all five professors teaching ED 564, 485 records. Seventy-four records were eliminated because they were collected in courses taught by adjunct professors. This limited the invited sample to only those students who were taught by a full-time faculty member. The full time staff met periodically to align classroom practices and content. To improve the response rate, the TATIS was administered in class, but completion of the TATIS and providing an identifier were voluntary. The lack of complete responses, missing identifiers and the mid-semester add or drop of the ED 564 class meant that 53 of the remaining surveys could not be used. The return rate over the three years was 87.1%, 179 pairs of records that were used as the data
generating sample. A paired samples $t$ test was run on the pre and post course data. The mean value for both the pre and post course responses was calculated and compared to look for a significant change at the $p \leq .05$ level. It should be noted that items relating to the beliefs about the efficacy of inclusion (items 7-10) are reverse scored on the TATIS and therefore have been manipulated in these analyses to keep the sign consistent.

**Results**

The demographic results from this sample were dissimilar to other pre-service teacher studies. While other studies (Haberman, 2004; Penny & Bolton, 2009) had samples that were over 80% female, the current sample was 64% female and 35% male. The data were also well distributed regarding the type of communities in which the subjects participated in field experiences or worked, and the amount of perceived experience with students with mild to moderate disabilities (Table 1). The tested sample consisted of mainly pre-service and novice teachers with 82% of the respondents indicating that they had 0-3 years of teaching experience.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>64% Female</td>
</tr>
<tr>
<td></td>
<td>35% Male</td>
</tr>
<tr>
<td></td>
<td>1% Unreported</td>
</tr>
<tr>
<td>Location of School</td>
<td>48% Suburban</td>
</tr>
<tr>
<td></td>
<td>25% Urban</td>
</tr>
<tr>
<td></td>
<td>12% Rural</td>
</tr>
<tr>
<td></td>
<td>15% Unreported</td>
</tr>
<tr>
<td>Experience with students with mild to moderate disabilities</td>
<td>43% Minimal</td>
</tr>
<tr>
<td></td>
<td>27% Some</td>
</tr>
<tr>
<td></td>
<td>30% Considerable/Extensive</td>
</tr>
<tr>
<td>Level of certification (held or seeking)</td>
<td>37% Elementary</td>
</tr>
<tr>
<td></td>
<td>19% Middle/Intermediate</td>
</tr>
<tr>
<td></td>
<td>30% High School</td>
</tr>
<tr>
<td></td>
<td>14% Unreported</td>
</tr>
</tbody>
</table>

When the pre and post-test results were compared there were significant differences in the mean score for every item on the TATIS (Table 2) and for the three factor scores (Table 3). Howard and Dailey (1979) warn that self-reported measures are subject to a response-shift bias, that the ED 564 course will change the respondents point of view and therefore their pre-test response and their post-test response will not share a common standard of measurement.
Howard and Dailey found that this may result in under reporting effects and that the response-bias shift leads to conservative estimates of assessments of effectiveness.

Table 2

*Item results for TATIS*

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-test Mean</th>
<th>Standard Deviation</th>
<th>Post-test Mean</th>
<th>Standard Deviation</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2.37</td>
<td>1.156</td>
<td>1.92</td>
<td>1.020</td>
<td>4.542</td>
<td>.000</td>
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<tr>
<td>2</td>
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<td>2.60</td>
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<td>1.318</td>
<td>3.76</td>
<td>1.579</td>
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<td>2.11</td>
<td>1.039</td>
<td>6.076</td>
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<td>5</td>
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<td>6</td>
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<td>7</td>
<td>3.17</td>
<td>1.391</td>
<td>2.90</td>
<td>1.583</td>
<td>2.680</td>
<td>.008</td>
</tr>
<tr>
<td>8</td>
<td>3.34</td>
<td>1.392</td>
<td>3.06</td>
<td>1.558</td>
<td>2.427</td>
<td>.016</td>
</tr>
<tr>
<td>9</td>
<td>3.31</td>
<td>1.433</td>
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<td>1.587</td>
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<tr>
<td>10</td>
<td>3.49</td>
<td>1.290</td>
<td>3.20</td>
<td>1.434</td>
<td>2.469</td>
<td>.015</td>
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<tr>
<td>11</td>
<td>2.52</td>
<td>1.044</td>
<td>2.11</td>
<td>1.077</td>
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<tr>
<td>12</td>
<td>2.93</td>
<td>1.213</td>
<td>2.49</td>
<td>1.295</td>
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</tr>
<tr>
<td>13</td>
<td>2.37</td>
<td>1.002</td>
<td>2.09</td>
<td>0.993</td>
<td>3.059</td>
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<td>14</td>
<td>2.25</td>
<td>1.001</td>
<td>1.93</td>
<td>1.015</td>
<td>3.528</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 3

*Factor results for TATIS*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Pre-test Mean</th>
<th>Standard Deviation</th>
<th>Post-test Mean</th>
<th>Standard Deviation</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Perceptions about students with mild to moderate disabilities</td>
<td>3.27</td>
<td>0.852</td>
<td>2.54</td>
<td>1.016</td>
<td>8.859</td>
<td>.000</td>
</tr>
<tr>
<td>Factor 2: Beliefs about the efficacy of inclusion</td>
<td>3.26</td>
<td>1.174</td>
<td>2.99</td>
<td>1.411</td>
<td>3.705</td>
<td>.000</td>
</tr>
<tr>
<td>Factor 3: Perceptions about professional roles and functions</td>
<td>2.50</td>
<td>0.765</td>
<td>2.10</td>
<td>0.953</td>
<td>5.255</td>
<td>.000</td>
</tr>
<tr>
<td>Overall Scale</td>
<td>3.04</td>
<td>0.671</td>
<td>2.55</td>
<td>0.817</td>
<td>8.064</td>
<td>.000</td>
</tr>
</tbody>
</table>
Even subject to possible response-shift bias, every factor score and individual item demonstrated a significant change between the pre-test and the post-test response.

When evaluating the individual item responses, the items with the lower levels of significance (7, p=.008; 8, p=.016; 9, p=.043, 10, p=.015) were the reverse scored items. These items also exhibited higher standard deviation in the post-test scores. Items 7-10 measured the respondents’ beliefs about the efficacy of inclusion (factor 2). When aggregated, the change in scores for items 7-10 was significant at the most stringent level tested. Compared to factors 1 and 3, that were also significant at the p=.001 level, the calculated t was lower for factor 2 (3.705) than it was for the other two factors (1, t=8.859; 3, 5.255). To be significant at the p=.001 level, the calculated t value had to be higher than 3.138.

Discussion

The study was designed to investigate the impact of an introductory disability course had on masters level teacher preparation students. Specifically, the study sought to determine if the pre-service general education teachers attitudes about the inclusion of students with mild to moderate disabilities in general education classes could be changed over a semester long course on disabilities.

The course, ED 564, was found to have a significant impact on the three dimensions of pre-service general education teachers’ attitudes as measured by the TATIS. It was anticipated that the introductory course focusing on an overview of various disabilities would have an impact on the pre-service general education teachers’ perceptions about students with mild to moderate disabilities. The course may be alleviating misconceptions about individuals with disabilities and increasing the pre-service teachers’ knowledge about various disabilities.
Knowledge and understanding can be very influential in reducing negative perceptions about students with disabilities.

The philosophical foundation of the course is rooted in the belief that students with disabilities have a right to an inclusive education. Despite this there is still the potential for the pre-service teachers to become more concerned about inclusion as they gain information about various disabilities and the types of supports necessary to successfully educate students with disabilities in inclusive settings. The confidence of the instructor with regards to successful inclusive practices and the instructor’s ability to transmit a foundational level of skills and knowledge to the students may be reflected in the pre-service general education teachers’ beliefs in the efficacy of inclusion. Transmitting that inclusion is “expected” based on legal mandates is important for understanding that an inclusive education is a right of all students but it does not assist beginning teachers when then are faced with the daily reality of inclusion. A legal mandate will not guarantee a willing participant in the inclusion process; a personal philosophy accompanied by knowledge and skills is need for successful inclusion. The positive attitude with regard to inclusion modeled by the instructors appears to have impacted the pre-service general education teachers’ beliefs about the efficacy of inclusion.

The course does provide some very basic knowledge and skills with regards to roles and responsibilities of the general education teacher in the inclusion of students with disabilities in general education classes. However, the expectations for general education teachers in public school classrooms is extensive with regards to including students with disabilities and the one semester course does not allow for more than a cursory introduction to the knowledge and skills needed for successful inclusion. Despite this very basic introduction the pre-service general
education teachers were confident in their beginning abilities to include students with mild to moderate disabilities into their classrooms.

**Future Research**

Recommendations for future research include the use of the TATIS to measure the attitudes of pre-service teachers enrolled in courses that focus on methodology for including students with disabilities in a variety of academic areas. The use of the instrument as a pre test before beginning the Master’s program in general education and a posttest after the completion of student teaching would provide a more comprehensive analysis of the impact of the entire program on the inclusion of students with disabilities. Additionally, to evaluate the level of expected response-shift bias, future research should include pre/then/post measures. Using the TATIS as part of a follow up conducted with graduates several years after they complete the program could also do longitudinal data collection.

Finally, the results of the TATIS, as currently constructed, demonstrate higher standard deviations on the factor that is entirely reverse scored. A revised TATIS instrument, with multiple reverse scored items within each factor should be developed to test whether the higher standard deviations are due to the instrument design or the participant responses.
References


In this study, the potentials of applied technology of e-Learning system to the assistance of Japanese-language teachers are outlined. For this purpose, we conduct an online tryout as a comprehensive information space for expansive learning which includes analysis of activities, and issues of the next step are shaped in this interim report. First, we perceived that communication in cyberspace had specific potentials to enable various forms of data exchange, and allowed new forms of information communication among unacquainted users and beyond geographical location. The next, we discussed about restrictions of expansive learning in Thailand with regard to their relevance for accessing new area of information and improvement of the present teaching curriculum. Finally, we concluded that the method of an intervention to minimize users’ pressure needed to be developed in order them to lead exploratory expansive learning.

Document provided.
A Study on Online Assistances for Japanese-Language Education

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Abstract
In this study, the potentials of applied technology of e-Learning system to the assistance of Japanese-language teachers are outlined. For this purpose, we conduct an online tryout as a comprehensive information space for expansive learning which includes analysis of activities, and issues of the next step are shaped in this interim report. First, we perceived that communication in cyberspace had specific potentials to enable various forms of data exchange, and allowed new forms of information communication among unacquainted users and beyond geographical location. The next, we discussed about restrictions of expansive learning in Thailand with regard to their relevance for accessing new area of information and improvement of the present teaching curriculum. Finally, we concluded that the method of an intervention to minimize users’ pressure needed to be developed in order them to lead exploratory expansive learning.

1. Introduction
Contribution of Japan has lately drawn considerable attention by the world. Accordingly, Japanese-language education is expanding in many countries. At this moment, Japanese-language learners have increased 13 times during 1979 and 2009, and it reached about 3.7 million students around 133 countries (Japan Foundation, 2010a). More than half of learners (56.6%) are learning in Asian region, and Thailand occupies about 79 thousand learners and is ranked 7th in the world.
In Thailand, average number of Japanese-language teachers is 3.39/school (world average: 4.25), and
The data of Table 1 was calculated from the results of the Japanese-language proficiency test in 2009. It shows that learners’ proficiency of Thailand is still substandard and 20.86 point minus on level 1 in comparison with the world. Actually, Thailand is ranked as 5th on a total number of learners in higher education and 4th on a total number of examinees of the test, however this data implies further effort would be required to improve educational quality.

According to the reported problems by Japan Foundation (2010a), teachers recognized the following difficulties as major problems of Japanese-language lessons,
1) Lack of lesson materials (51.7%)
2) Lack of instructional materials and information of instructional method (42.5%)
3) Insufficient facility (39.9%)
4) Lack of number of teachers (37.1%)
5) Lack of information of Japanese culture (37.0%)
These problems are involved organizational and budgetary insufficiencies in the front, however, it is important that many problems, such as 1), 2), 5), involve a shortage to access lesson information as well. This desirable information includes records of lesson experiences, principles of instructional design and socio cultural information in Japan. Unfortunately, shown substandard in the Japanese-language proficiency test relates with competencies of local Japanese-language teachers as well.

In Table 1, requiring number of Kanji characters and relative compatible grade in Japanese school education for each level are optioned. In association with Kanji number, Komiyama (2005) surveyed requiring Kanji number by fields of documentations. Public news papers use about 4,500 Kanji characters, and dictionaries, published books, magazines, and classic documents use about 8,500 Kanji characters. Therefore, even a teacher with level 1 is not enough to read socially distributed Japanese-documents, moreover it is quite difficult for local teachers to read academic or educational Japanese-documents. This is the fatal difference between Japanese-language education field and English-language education field where even local teachers can read and understand professional documents.

Recent expansion of cyberspace enables to access rich information through Internet, but it is quite difficult for local Japanese-language teachers to make use of online data under above situation.

As existing measures, face to face trainings and workshops are usually recognized as chances to improve lesson quality at the present moment, but these events are frequently managed by external organization, such as Japan Foundation, and it has been difficult to offer equally chances across the country.

It must be introduced valid communication chances for improvement over existing restrictions around the small sized Japanese-language environment. Then, authors developed online communication project in a Web Site of Ministry of Education Thailand, and promoted to enhance interests to access contemporary information.
Thus, this study focused on local Thai Japanese-language teachers and operating possible online assistances to reveal Japanese society and educational information by providing interventions by professionals (see Figure 1). And, monitoring of online activities was done to investigate their changes based on the expansive learning theory.

![Figure 1: Online Project to Support Japanese-Language Teachers](image)

2. Design of Online Communication Service

2.1. Programs for Online Communication
To make nationwide scalability and offering impartial services to even teachers work in local area, we developed programs for online communication with CGI. Our developed programs were customized to have the following functions.
1) messageboard
2) allow upload various modes of data, and display
3) archive & retrieval

As an especially developed feature of our program, there is a strong database and a retrieval function in the back side of communication board. By selecting a button on the messageboard, the system leads a user to the menu of an archive database. Here, a user can search a recorded asset with a Boolean operator option (see Figure 2 below).

![Figure 2: Archive and Search Function](image)

In addition, a program for gathering online feedback with questionnaire and interviews functions is developed (see Figure 3). This program enables to gather users’ self-initiated opinions when they intend to post opinions into online sheets. Eventually, gathered data are automatically summarized and draw graphs and tables.
2.2. Online Service System Design

All our developed programs were installed into a server located in Japan. Simultaneously, a content management function of e-Learning located in Thailand is used for online service provision. Thailand Cyber University (TCU) Project (http://www.thaicyberu.go.th/), a Ministrial project under Commission on Higher Education (higher education bureau), provides e-Learning (http://lms.thaicyberu.go.th/) by an originally developed Learning Management System (LMS). Target of the e-Learning is nationwide, and covers comprehensive education fields from school education to higher education and in-service teachers’ training. Affiliating universities of the project have developed over 550 courses. So far, this project has registered more than 4,000 teachers and about 100,000 students. In this e-Learning system, our Online Communication Service (OCS) is listed as one of online courses. But once a user enters our virtual classroom, each communicative service appears as a list item of the course content. (see Figure 4).

To avoid mis-accesses of users of other courses, we pronounced our OCS in a front page of the TCU site (see Figure 5). Because the OCS is not for instructing Japanese-language, notification of OCS to distinguish from variety of online instructions is an indispensible measure.
2.3. Developed Services
For promoting online communication, authors developed following four initial services (see a pane sample in Figure 6).
1) Voice recording service: a user posts a document and an expert edits a document based on the requested Japanese-language proficiency level, records voice or video digitally, and returns as an attached file.
4) Q&A: Free Style Q&A

Figure 6: A Pane of Contemporary Information

In our international joint study, we connected servers that are located in two countries, and developed the OCS (summarized system configuration is shown in Figure 7).

Figure 7: Overall View of OCS
This setting has led the following benefits.
1) Easy to notify to over 4,000 teachers already exist in the e-learning.
2) Potential of nationwide coverage via academic Network infrastructure
3) Rich auto-management functions by LMS where authentication, learner activity record and content management are automatically monitored by the system.
4) Cover all level of school teachers in Thailand.
5) Shopping mall advantage is expected among over 550 existing courses.
6) All users are already familiar to the way how to use LMS, and then we just prepare minimum operation guide to access our OCS.

4. Implementation

Tryout of OCS was implemented and we had monitored initial activities of the following period and introduced our analysis into this interim report.
Period: From October 12, 2009 to July 20, 2010
Total users in this period: 190
Contributors of Online Interviews and Questionnaire: 25

5. Findings

5.1. Visiting Times
The calculated mean visiting times and standard deviation of users from the access data are 5.34 (3.99) times, respectively.

![Figure 8: Number of Learners / Attendance Times](image)

5.2. Access Time

<table>
<thead>
<tr>
<th>Service</th>
<th>Mean Learning Duration (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice recording service</td>
<td>17:34 (5:03)</td>
</tr>
<tr>
<td>Contemporary Information</td>
<td>22:15 (16:45)</td>
</tr>
<tr>
<td>Learning Materials</td>
<td>26:13 (11:24)</td>
</tr>
<tr>
<td>Q&amp;A</td>
<td>17:47 (13:38)</td>
</tr>
</tbody>
</table>

Means of learning duration to use each service are calculated and shown in Table 2. Voice recording service shows the shortest mean, but smallest in standard deviation. This would be the most users accessed not only text but also streaming data that stored in this service most. The means for all four groups were not significantly different at the alpha =.05 level of one-way ANOVA.
6. Implications of Study

The results described below are based on online interviews and questionnaire data, and the comments for a course made at LMS function. Gathered qualitative data are investigated by the step of expansive learning. Engestrom (1987) developed the theory of expansive learning based on preceding theoretical studies (e.g. Bateson, 1972, Bakhtin, 1981). In this theory, transformations of job activities and learning activities in learners’ life, learners must learn new forms of activity which are not yet there. Learners are literary learned as they are being created. Eventually, Engestrom (2001a) summarized the process to consolidate the new practice as the style of cycle (see Figure 9). The cycle is composed by the following six steps (Engestrom, 2001b).

1) The first action is that of questioning, criticizing or rejecting some aspects of the accepted practice and existing wisdom.
2) The second action is that of analyzing the situation. Analysis involves mental, discursive or practical transformation of the situation in order to find out causes or explanatory mechanisms. Analysis evokes “why?” questions and explanatory principles. One type of analysis is historical-genetic; it seeks to explain the situation by tracing its origins and evolution. Another type of analysis is actual-empirical; it seeks to explain the situation by constructing a picture of its inner systemic relations.
3) The third action is that of modeling the newly found explanatory relationship in some publicly observable and transmittable medium. This means constructing an explicit, simplified model of the new idea that explains and offers a solution to the problematic situation.
4) The fourth action is that of examining the model, running, operating and experimenting on it in order to fully grasp its dynamics, potentials and limitations.
5) The fifth action is that of implementing the model by means of practical applications, enrichments, and conceptual extensions.
6) The sixth and seventh actions are those of reflecting on and evaluating the process and consolidating its outcomes into a new stable form of practice.

![Figure 9: Process of Expansive Learning and Observed Strategies against the Contradictions](image)

6.1. Expansive Learning

From our gathered data, unfortunately, we could not confirm any overt activity of a user to incorporate information into their job improvement.

Engestrom and Sannino (2010) postulated that the process of expansive learning was understood as construction and resolution of successively evolving contradictions. They also mentioned that this cycle was not a universal formula of phases or stages.

Then, we tried to investigate online records to know more detailed users activities. First, the most accesses were seen (48.3%) in the service of learning materials where 65 professionally developed learning materials were available to download as well as information and links of convenient Web sites available. Actually, expansive learning is manifested primarily as changes in the object of the collective activity that was
also seen in our case. However, unfortunately, in spite of active accesses to our services, users’ reply were quite limited and counted as only 5.2 percent of accesses.

We could imagine that downloadable materials are limited, so users would have some other requests and ideas to a next product. However, they have been silent. Psychosocial situation of users need to be considered. This active download and passive silence are also seen in the voice recording service (see Table 2).

We can postulate that it should declare a substitute path for Thai shown as a yellow box in Figure 9 in order to explain this passive attitude. Preceding study mentioned that ‘provision of the clear path to follow for learning’ is familiar and comfortable approach of Thai people (Gorman & Dorner, 2006). Individualism and avoidance of criticism that were analyzed Thai national character explained observed passive attitude, and preferring low-context communication and material possessions would explain active data acquisition in silence (Prpic & Kanjanapanyakom, 2004).

6.2. Activity System as unit of Analysis

Table 3: Matrix for the Analysis of Expansive Learning

<table>
<thead>
<tr>
<th>Activity system as unit of analysis</th>
<th>Multi-voicedness</th>
<th>Historicity</th>
<th>Contradictions</th>
<th>Expansive cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are learning?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Why do they learn?</td>
<td>Importance of subculture is increased</td>
<td>Increased difference between curricula and actual communication</td>
<td>Contradictions of curricula, use in job but never use in life.</td>
<td></td>
</tr>
<tr>
<td>What do they learn?</td>
<td>Expansive interests: online knotworking through contemporary information</td>
<td>Sub-culture</td>
<td>Contemporary weight of cultural events are varied</td>
<td>Struggle between words in a textbook and words in online</td>
</tr>
<tr>
<td>How do they learn?</td>
<td>Accessing pages of information, need assistance</td>
<td>Sensitive about trend information</td>
<td></td>
<td>Online search standard, get successful sample materials of sub-culture</td>
</tr>
</tbody>
</table>

Engestrom (2001a) proposed following four central questions to examine the change of learning.
1) Who are the subjects of learning, how are they defined and located?
2) Why do they learn, what makes them make the efforts?
3) What do they learn, what are the contents and outcomes of learning?
4) How do they learn, what are the key actions or processes of learning?

Then, we summarized results of our interviews and a questionnaire, and extracted points were summarized in Table 3.

Only 23.3% of users have first or second exam level of Japanese-language, and it can find that they need strong assistances to access cultural information of Japanese-sites. About learning content, 21.9% of users selected communication method, and 9.4% selected culture and 22.9% selected sub-cultural events. Internet is widely used (24.1%) as method of learning more than learning from Japanese native teachers (7.4%). Communication in learning is quite limited. Almost half of users (52.3%) prefer to learn alone without any consultation from others. Only 12.4% of users have a person to discuss about Japanese-language.

To our surprise, 28.0% of users stated that they cannot learn alone, and took a contrary position to their isolationism.

Summarizing gathered data, we could conclude that users are under double bind situation at this moment. They showed extensive interests and active information gathering. However, it needs to intervene more to enhance their active attendances into communication in new area of society.

7. Acknowledgements
This report was conducted under the research project, Grant-in aid for scientific research (C) of JSPS, project number 21520525.
We deeply appreciate technical assistances to develop the online communication service in this study from Mr. Subhasatra Siengdang and Ms. Rassamee Jirathamthanakul of Commission on Higher Education, Thailand.

8. References


Podcasting System: The best tool to integrate into Teaching and Learning

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Abstract: This paper discusses the uses of Apple's Podcasting system as a tool to integrate into teaching and learning, comparing with another competitive tool, Camtasia Relay. The Podcasting system is used to not only deliver online classes but also supervise student teachers in Education and student clinicians in Communication Sciences and Disorders (CSD). Besides, the Podcast system helps students to develop their own portfolio, providing opportunities to review and assess their performance. In delivering on-line classes, the Podcasting system increases students’ understanding by replaying class lectures and thus, getting actively involved in the class. The surveys results with students are presented to support the idea that the Podcasting system is an essential learning tool for students and educators alike.

Introduction

Countless universities, colleges and K-12 classes worldwide are using the Podcasting technology to deliver recorded lectures, news and information to students. As a result the Podcasting system has emerged as an accessible and affordable means of communicating ideas and knowledge to the world with students getting more engaged and interested in class discussions, field research and independent projects that utilize the Podcasting systems.
Podcasts are digital audio files (e.g. MP3 files) that can be played on any portable media player or computer (Foster & Havemann, 2008). Once generated, podcasts can be disseminated online through personal websites or podcast directories. Podcasting, the name for this process, is an amalgamation of "broadcasting" and the acronym "POD". POD stands for "Portable on Demand", and was first used to name Apple Computer's widely successful portable media player, the iPod. Now, usage of the terms "podcast" and “podcasting” can refer to the distribution of any downloadable digital file.

The podcasting system uses Apple’s Podcast Producer, which is a video capture, processing, and publishing system that is shown in Figure 1 (Yoon, Mizuko, & Kim, 2010). Creating and publishing podcasts of lectures, training, or other audio and video projects are automatically processed with the PodCast Capture program on the Mac Computer. The Podcast Library lets the program’s server store podcasts and delivers them to viewers through specific program protocols. ITunes or a web browser like Safari can access the content from the Podcast Library. Once the content is downloaded, it can be viewed on the desktop or devices including iPhone, iPod and Apple TV. The Apple Podcasting system simplifies all the process of capturing, editing, and publishing lectures, producing more podcasts with less work.

![Fig 1. How Podcast Producer works (captured from Podcast Producer v10.6.pdf, p15)](image)

**A Comparison of Podcasting System with Camtasia Relay**

The Camtasia Relay is another podcasting tool competitive to Apple’s Podcasting System. Currently the major difference between Apple’s Podcast Producer 2 and Camtasia Relay is Apple’s Snow Leopard Server’s dual-source video capture feature (Podcast Producer, 2009). This dual-source video capture enables the presenter to create picture-in-picture podcasts. For instance, one video source can record a presenter and the other source can record a slideshow or computer screen activity. The current version of Camtasia Relay is a software-based screen capture system that only records voice and computer screen activity. It can be used to audio record class lectures, software demonstrations, and slideshows, but it lacks the video recording capabilities of the presenter.

**Uses of Podcasting System in Teaching and Learning**
One significant advantage of Podcasting is the ability to automatically distribute podcasts through online subscriptions. Instead of students going to a specific web site and downloading lectures as they are posted, a subscription to the podcasts can be established, thus enabling new lecture materials to be downloaded to the student's computer automatically. This provides students and faculty an easy-to-create but with high quality output of teaching online. As universities move increasingly to hybrid or online teaching, and as faculty expands their online pedagogy skills to incorporate multiple methods of teaching and learning for online students, the podcasting system is a critical tool for faculty to create audio & video podcast for their classes.

Since the Podcasting system has its strength of developing a cutting edge digital learning environment, it is also possible to help student teachers to develop their own teaching portfolio. Supervisors podcast the student teachers’ teaching performance at the classrooms and the student teachers immediately get their teaching podcasts on their portable devices (iPod, iPad, or iPhone) or their own computer. This will enable the student teachers to view their teaching performance and communicate better with the supervisors. Because the Podcasting system has a wiki and a blog, the student teachers can develop components of their own portfolio with videos recorded by their supervisor.

The Department of Communication Sciences and Disorders (CSD) applies the podcasting system to video record student clinicians in their clinical internship experiences working with their clients during speech and language assessment and intervention experiences. The faculty utilizes the video recordings to give feedback to students about their clinical performances. Also, students have an opportunity to self reflect on their clinical skills and identify area of strengths and weakness. Due to the nature of the clinical experiences, the CSD must follow the Health Insurance Portability and Accountability Act (HIPAA) of 1996, which established specific standards and requirements for the electronic transmission of certain health information. As a result of the HIPAA guidelines, video recordings must follow specific requirements for the electronic transmission of certain health information. As a result of HIPAA, the CSD uses the podcasting system for video recordings as it accommodates a secured transmission and storage of the video recordings of clients and students in a clinical setting.

Further, this Podcasting system incorporates the assessment systems. So, not only student teachers but also the online class students can check their learning directly based on the assessment standards and rubrics. This is helpful for the students to improve their learning and decrease their drop rates of online classes.

**Podcasting in Educational Technology class: Working example**

One of the courses of the Educational Technology Certification program, *Advanced Media Production*, has utilized this Podcasting system within a hybrid course format, which combines both traditional in-person lectures and podcasts. This course covers various advanced software program to develop educational online media.

All podcasts were posted on the course podcast library along with corresponding lectures. Students downloaded lectures according to their needs and interest. Fig.2 shows one of the podcasts of the Advanced Media Production lectures.
Fig. 2 Podcast of a lecture of Advanced Media Production class, Flash II Music Button.

After students used the podcasting system in a semester, they were surveyed about their podcasting experience. None of the 22 students who initiated the course had previously used podcasting in a classroom setting. The survey results indicated that most students agreed or strongly agreed that podcasting enhanced their learning experience due to their ability to pause and replay (see Appendix). Although the overall quality of podcasting in classroom was positive among most of the students, there were students who opposed using only podcasting in the class. Due to nature of the one-way communication of the Podcasts, students recommended the podcasting system to be used as an optional media support system to the traditional in-person lecture.

Conclusions

Apple’s Podcasting system has emerged as the next generation course delivery innovation on campus. The effectiveness as a communication tool validates the use of podcasting in the classroom. The results of the survey provide evidence that students actively used this technology to facilitate their learning experience and, more importantly, that they perceive podcasting as an assistive enhancement to their classroom experience. Students like the pause/play features, as this appears to enhance their individual learning needs. As podcasting becomes more familiar to
students and educators, the use of podcasting system is likely to expand, not only for delivering online-courses but also supervising performance and creating portfolio and assessment tools.

Reference:


Appendix: Survey results from Educational Technology Class

Overall quality of the podcast is

<table>
<thead>
<tr>
<th>Choice</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>67%</td>
</tr>
<tr>
<td>Very Good</td>
<td>33%</td>
</tr>
<tr>
<td>Good</td>
<td>0%</td>
</tr>
<tr>
<td>Fair</td>
<td>0%</td>
</tr>
</tbody>
</table>

What I like most about this class is

I really enjoy viewing the podcasts prior to doing the assignments/ projects. They are very useful and allow for me to go back and view a piece again if I am in need of reiteration of a topic.

I enjoy learning about the neat tools that I can use to teach. The podcasts were very helpful for this class.

What I like most about the podcasts is:
They are well put together and informative.

The podcasts are well organized. I like that Jiyoong starts the podcasts by saying what the tasks being covered are, in order. That enables me to scan through the podcast later if I need to be reminded how to do a particular task.

I really liked the Podcasts. I could watch them on my own time and get a head start or I could rewatch the ones I needed extra help on. I loved being able to do homework at my own pace at home and the podcasts were informative, helpful, and interesting. Thanks!

I like that I could see what was happening. I learn best by following tutorials so this was very helpful.

It was very useful to have seen and heard you through podcast compared to if you were to just have everything online through texts. Being able to see the instructor and hear the directions to how to use the different software made it seem as if we were in class. I would love to learn how to use that software as well maybe to make a video on a tutorial.

I think that podcast movie clips are helpful because you can pause and continue at your own pace. You are able to return to spots to review specific topics. It is nice to have both podcasts and direct presentation from teacher so questions can be asked if something is unclear.

step by step instructions

I can do them whenever I want. Don't have to be in the classroom to watch and respond to them.

I have had a great deal of trouble deciding on whether or not I have found the Podcasting to be beneficial. In some aspects it was helpful because we could go back and review the lesson after viewing it. We could also watch it at our speed because of stop and pause buttons. However, I struggled a little bit with strictly podcasted lessons. There were times when I would have liked to ask questions or have other examples shown but was unable to do so. Overall, I believe podcasting is excellent in addition to a regular lesson. I think it is good to have something for students to go back and watch at a different time. In regards to teaching elementary aged children I would be opposed to the sole use of podcasts. This method would limit student creativity and interaction with other students. I do however I appreciate being introduced to this type of learning, thank you.

It was nice to be able to view them whenever I wanted, and to look over how to do stuff again. It worked out well, and I really appreciate the effort you went through to enable us to get all the materials.
I liked the podcasting for the days when we actually had class because it gave me a chance to review concepts or ideas I might have missed. I think it’s useful and if you’ve got to teach the class you should podcast it anyway so people can review!

The podcasts were a cool new way to learn. It was nice to be able to go back to a part of the podcast that I needed to review to fully understand. Also because we did learn so much and there was a lot of information it was good to have the capability to go back to review a certain topic.

Personally I think being in the classroom with the teacher is the easiest way to learn, but having the podcasts as well as being in the classroom I think would be greatly beneficial to students. Like you said for the days were in the class you created the podcasts of our class for us to review if we needed after class while working on our projects. This was very helpful for myself and for those students you didn’t attend class or take a little longer to understand a topic.

I really appreciated you taking the time to organize and plan these video clips for our class. The way you broke down the steps was great and you explained each concept clearly. The podcasts allowed me to work at my own speed, which made me feel confident with the software/programming. I liked having the videos available for reference and extra practice.

Podcasting helped me greatly as the technical details might sometimes slip by me. Having the lessons recorded let me go back and check things. It also let me work on things on my own time, whether it is 6am or 3pm, etc.

The podcast movies were a great addition to the class. You were very thorough with how to access the software or how to download it. I think it would’ve been more helpful to work with you directly in class, then have the podcasts to refer back to after class time. I do think however, not having you in class forced us to conduct more trial and error by ourselves.

I think that the podcasts can be improved by:

1: They are one-way. If I didn't understand something I listened again but the information is the same and not having that instant communication via classroom interaction was hard for me.

2: If there were a feature to chapter podcasts so that a viewer could skip to a subtopic quickly, that would be ideal.

3: Being shorter.
AN EXAMINATION OF TEACHER PERCEPTIONS OF TRAINING METHODOLOGY
AND MATRICULATION AS RELATED TO SYSTEMIC TECHNOLOGY REFORM: A
CASE STUDY OF MISSOURI VETERAN EMINTS TEACHERS

A Dissertation
presented to
the Faculty of the Graduate School
at the University of Missouri-Columbia

In Partial Fulfillment
of the Requirements for the Degree
Educational Doctorate

by
JULIE RENEE WATSON THOMPSON
Dr. Robert Watson, Dissertation Supervisor
MAY 2010
CHAPTER ONE
INTRODUCTION TO THE STUDY

Background

Technology use finds itself woven into the forefront of educational discourse making it relatively easy to forget computer use in education is a reasonably new phenomenon that has evolved to widespread use only within the last 20 years. During the school years of 1997-1998 and 1998-1999 MOREnet obtained funding from Southwestern Bell to initiate the Multimedia Interactive Networked Technologies (MINTs) Project in St. Louis, Missouri, schools. The MINTs project provided a high-speed internet connection to the classroom and placed technology on the teacher’s and students’ desks while attempting to determine whether eliminating the technology barriers traditionally experienced by schools could change teaching styles and strategies and improve student performance. There were six St. Louis County school districts involved in the MINTs project: Affton, Bayless, Jennings, Normandy, Riverview Gardens, and University City. The MINTs collaborative program brought together advanced communications and the traditional classroom environment to create an interactive learning experience. The program has served hundreds of students in six school districts and received a Smithsonian Award as one of the nation’s leading programs in demonstrating the links between technology and education.

Test scores in the MINTs classrooms improved, but even more importantly, attitudes and styles of teaching and learning changed also. The technology encouraged a new way of educating students— a way that engages them in their education by making resources available in a learning environment that fosters cooperation, collaboration, problem solving, and higher order thinking skills. The connections to parents were also strengthened as parents showed more
interest in the positive stories their children were bringing home. The preliminary results of this program were so successful it prompted the Commissioner of Education to launch a statewide initiative and change the way Missouri is thinking about educating its K-12 students. This new initiative is the enhancing Missouri’s Instructional Networked Teaching Strategies (eMINTS) Project.

The National eMINTS program partners with the Missouri Department of Elementary and Secondary Education (MO DESE), the Missouri Department of Higher Education (MO DHE), and the University of Missouri to provide technology enriched professional development services in the PreK-20 classrooms nationwide. eMINTS classrooms include high levels of technology for students and teachers with each teacher receiving 90–200 hours contact hours of professional development training. The average cost for inventory per classroom is between $9,000 and $37,000 depending on grade level. Each eMINTS classroom hosts at least one computer for every two students at grades 3-12; a teacher laptop computer; a SMART Board (interactive whiteboard) and projector; a printer, camera, and scanner; and productivity and multimedia project software (Beglau, 2009).

Currently, there are 3, 500 eMINTS classrooms with approximately 50,000 Missouri students in 260 of Missouri’s 524 districts. Of these classrooms, 35% are district-funded. On the post-secondary level, Lincoln University and Missouri State University are incorporating eMINTS into pre-service teacher education. Although Missouri was first state for eMINTS classrooms, there are now more than 250 eMINTS classrooms present in 80 districts in 8 states including Alabama, Arkansas, Delaware, Illinois, Maine, Nevada, New Jersey and Utah as well as in 4 regions in New South Wales, Australia (Beglau, 2009).
While several studies demonstrate the effectiveness of the eMINTS instructional methodology on student success, no research exists to determine veteran eMINTs teachers’ perceptions of training methodology and leadership matriculation as related to systemic technology reform. This study will examine the survey responses of 15 veteran eMINTS teachers and 15 of their non-eMINTS colleagues to determine if common threads for leadership advancement may occur from the training process utilized in the program.

Conceptual Underpinnings for the Study

Over the last 25 years, a substantive body of knowledge has emerged expressing the need for professional education programs to develop in teachers the technical knowledge and skills required for professional practice (Woolf & Quinn, 2009). A dilemma academia has not addressed is educators who did not seek a career in education for a strong love of technology or a propensity for adapting to rapid change; “yet they now find themselves facing…the inexorable advance of technology into their personal and professional lives” (Skiba, 2007, p. 343). The risk of teacher burnout exists when low decision authority and high demands are synergistic in terms of increasing the risk of emotional exhaustion among teachers (Santavirta, Solovieva, & Theorell, 2007).

A large body of research shows the development of teacher autonomy may offset the chance of teacher burnout and may even catapult teachers into leadership positions. A major aspect of leadership is teaching others to lead. Technology instruction may provide teachers with the tools they need become leaders themselves. This development of leadership can strengthen the organization of a school. In this way, a principal can directly affect classroom practices and align them with the school’s mission of improvement (Zepeda, 2004). Instructional leaders support teachers in curriculum development and provide opportunities for teachers to shape the
cultures of their schools (Zepeda, 2004). Teachers may then contribute to a number of aspects of running a school including developing curriculum, choosing materials, evaluating performance, building the budget, and setting policy and practices for hiring, promotion, and retention (Suh, 2008).

With the criteria of *No Child Left Behind* (NCLB), the abundance of research has focused primarily on student success rather than examining teacher satisfaction. Such is the case with existing research of the eMINTS professional development program which examines student achievement as related to program fidelity. Historical eMINTS program evaluation research results provide reasonable assurance that differences in eMINTS student performance vs. non-eMINTS student performance were due to changes in instruction created by eMINTS professional development and technology rather than to other factors such as socioeconomic status or student placement (Beglau, 2009).

“Although researchers have demonstrated a link between teachers autonomy and teacher motivation” related to education reform initiatives (Pearson & Moomaw, 2006, p. 44), no current research exists regarding teacher self-efficacy or advancement to leadership as a result of the eMINTS training methodology. It would seem a closer examination is in order to determine how eMINTS training structures and activities correlate with teacher expectations, strategies, and matriculation.

For those teachers who do not matriculate, the Maslach Burnout Inventory-Educators Survey (MBI-ES) may reveal individual teacher characteristics which support the effects of job-related stress or teacher burnout. Burnout is a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity. A key aspect of the burnout syndrome is increased
feelings of emotional exhaustion; as emotional resources are depleted, workers feel they are no longer able to give of themselves at a psychological level. Another aspect of the burnout syndrome is the development of depersonalization (i.e., negative, cynical attitudes and feelings about one's clients). The development of depersonalization appears to be related to the experience of emotional exhaustion, and so these two aspects of burnout should be correlated. A third aspect of the burnout syndrome, reduced personal accomplishment, refers to the tendency to evaluate oneself negatively, particularly with regard to one's work with clients. Workers may feel unhappy about themselves and dissatisfied with their accomplishments on the job. The consequences of burnout are potentially very serious for workers, their clients, and the larger institutions in which they interact.

The MBI is designed to assess the three components of the burnout syndrome: emotional exhaustion, depersonalization, and reduced personal accomplishment. There are 22 items, which are divided into three subscales. The general term recipients is used in the items to refer to the particular people for whom the respondent provides service, care, or treatment. The items are written in the form of statements about personal feelings or attitudes (e.g., "I feel burned out from my work," "I don't really care what happens to some recipients"). The items are answered in terms of the frequency with which the respondent experiences these feelings, on a 7-point, fully anchored scale (ranging from 0, "never" to 6, "every day"). Because such a response format is least similar to the typical format used in other self-report measures of attitudes and feelings, spurious correlations with other measures (due to similarities of response formats) should be minimized. Furthermore, the explicit anchoring of all 7 points on the frequency dimension creates a more standardized response scale, so that the researcher can be fairly certain about the meanings assumed by respondents for each scale value. In the original version of the MBI
(Maslach & Jackson, 1981a), there was also a response scale for intensity of feeling. However, because of the redundancy between the frequency and intensity ratings, the intensity scale was deleted from subsequent editions.

The nine items in the Emotional Exhaustion subscale assess feelings of being emotionally overextended and exhausted by one's work. The five items in the Depersonalization subscale measure an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction. For both the Emotional Exhaustion and Depersonalization subscales, higher mean scores correspond to higher degrees of experienced burnout. Because some of the component items on each subscale had low loadings on the other, exists a moderate correlation between the two subscales, which is in accord with theoretical expectations that these are separate, but related, aspects of burnout. The eight items in the Personal Accomplishment subscale assess feelings of competence and successful achievement in one's work with people. In contrast to the other two subscales, lower mean scores on this subscale correspond to higher degrees of experienced burnout. The Personal Accomplishment subscale is independent of the other subscales, and its component items do not load negatively on them. In other words, Personal Accomplishment cannot be assumed to be the opposite of Emotional Exhaustion or Depersonalization. Indeed, the correlations between the Personal Accomplishment subscale and the other subscales are low.

Each respondent's test form is scored by using a scoring key that contains directions for scoring each subscale. The scores for each subscale are considered separately and are not combined into a single, total score; thus, three scores are computed for each respondent. If desired for individual feedback, each score can then be coded as low, average or high by using the numerical cutoff points listed on the scoring key (Maslach & Jackson, 1981).
Statement of the Problem

The National eMINTS (enhancing Missouri’s Instructional Networked Teaching Strategies) Center grants a professional development program to empower educators to use instructional strategies driven by technology (Beglau, 2007). A large number of the veteran eMINTS teachers who have successfully completed the training eventually leave the eMINTS classroom. Currently, no research exists which examines the long-term professional outcome for classroom teachers who participate in the systemic technological training reform of the National eMINTS Program.

Our inability to support high-quality teaching in many of our schools is driven not by too few teachers coming in, but by too many going out, that is, by a staggering teacher turnover and attrition rate. In general, the turnover rate among teachers is significantly higher than for other occupations (Ingersoll, 2002). Current research reveals the effects of work stress and burnout disrupt teachers’ normal habits. In addition, teachers may experience a lack of work enthusiasm and creativity, an inability to concentrate, lowered self-respect, loss of self-control in class, and an overreaction to moderate amounts of stress. Where schools are concerned, the biggest problems caused by work stress and burnout are the undesirable influences on the students (Yong & Yue, 2007). It is imperative for both professional development providers and those they serve to use research to examine dissatisfactions with the teaching profession and to use these findings to form policy and influence change which leads to quality instruction, leadership, and teacher retention.

Purpose for the Study

The purpose of this study is to investigate veteran eMINTS teacher’s perceived value of the eMINTS instructional model of design. The study will explore if a correlation exists between
veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the demands associated with training for and maintenance of instruction in the technology enhanced classroom.

**Research Questions**

Within the context of this study, the following research questions were addressed:

1. Is there a significant difference between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS Professional Development Program and the time their non-eMINTS colleagues continue to teach in the same content area and grade level?

2. Are there significant differences between how veteran eMINTS teachers rate satisfaction in teaching after completion of the eMINTS training model and how their non-eMINTS colleagues rate satisfaction in teaching?

3. Are there significant similarities between how veteran eMINTS teachers score the Maslach Subscale Items of Emotional Exhaustion, Depersonalization, or Personal Accomplishment and how their non-eMINTS colleagues rate these subscale items?

4. Are there significant differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training Program and the number of non-eMINTS colleagues who assume leadership positions?

5. Are there similarities among perceptions held by veteran eMINTS teachers in relation to the eMINTS training methodology?
Limitations, Assumptions, and Design Controls

1. The eMINTS instructional techniques used to train veteran eMINTS participants may be different than techniques used to train current eMINTS teachers.

2. The questionnaire was a self-report by FY00, FY01, and FY02 veteran eMINTS participants and their non-eMINTS colleagues and does not include reporting from years FY03-FY10.

3. The study was geographically limited to Missouri.

4. There is no data to determine whether the locus of control of participants may have contributed to decisions toward leadership versus teacher burnout.

Definitions of Key Terms

Cohort. A cohort is a group of subjects who have shared a particular experience during a particular time. A team cohort can be used where membership of a group is defined by some factor other than a time-based one.

Deep acting. Deep acting describes the activity that is undertaken to actually feel an emotion that is thought to be required and may lead to Emotional Exhaustion, an item from the subscale of the Maslach Burnout Inventory (Näring, Briët, & Brouwers, 2006).

Depersonalization. Depersonalization (or depersonalisation) is a malfunction or anomaly of the mechanism by which an individual has self awareness. It is a feeling of watching oneself act, while having no control over a situation and one item of the subscale for the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996).

eMINTS. The National eMINTS (enhancing Missouri’s Instructional Networked Teaching Strategies) stemmed from the MINTs program and now partners the Missouri Department of Elementary and Secondary Education (MO DESE), the Missouri Department of Higher
Education (MO DHE), and the University of Missouri to provide technology enriched professional development services in the PreK-20 classrooms nationwide.

*eMINTS Professional Development Programs.* The eMINTS professional development programs are designed to help teachers learn how to integrate technology into their teaching, using instructional strategies that promote inquiry-based learning and encourage collaboration and community building among students and teachers. The eMINTS programs considered in this evaluation include: (1) eMINTS Comprehensive Professional Development (Comp PD), a two-year program consisting of approximately 250 hours of teacher professional development and support, for teachers in school-designated grades, including 10–12 classroom visits each year; (2) eMINTS4ALL, a two-year, 90-hour professional development program built for teachers in the grades above and below eMINTS Comp PD teachers, to support students for multiple years, including 8–9 classroom visits per year; and (3) Professional Development for Educational Technology Specialists (PD4ETS), a two-year program that prepares local district staff members to become eMINTS instructional specialists.

*Emotional consonance.* Emotional consonance captures the situation where somebody effortlessly feels the emotion that is required in a certain situation. Emotional consonance is a side effect of emotional exhaustion which is one item of the subscale for the Maslach Burnout Inventory (Näring, Briët, & Brouwers, 2006).

*Emotional exhaustion.* Emotional exhaustion is characterized by symptoms of physical and emotional depletion and one item of the subscale for the Maslach Burnout Inventory (Maslach, et al., 1996).

*Epistemology.* Epistemology or theory of knowledge is the branch of philosophy concerned with the nature and scope of knowledge. It addresses the questions: What is
knowledge? How is knowledge acquired? What do people know? How do we know what we know? Higher forms of cognitive success may involve epistemological features that cannot be evaluated from a belief view of knowledge but may reveal leadership tendencies.

*FY00, FY01, and FY02.* eMINTS participating districts are grouped according to the fiscal year their competitive application was accepted to participate in the eMINTS program. FY00 refers to the school year 1999-2000. FY01 refers to the school year 2000-2001. FY02 refers to the school year 2001-2002.

*Job Demand-Control-Support Model (JDCS).* The Job Demand-Control-Support Model is an occupational stress assessment used to determine the correlation between job related demands, control, and support on employee health and well-being outcomes. It is another model which may be used to determine burnout tendencies and is often used in conjunction with the Maslach Burnout Inventory (Van der Doef & Maes, 2002).

*Job demands.* Job demands refers to the psychological demands of a job, such as work load and role conflict (Van der Doef & Maes, 2002).

*Job control.* Job control refers to the amount of decision latitude the employee has in order to deal with these demands (Van der Doef & Maes, 2002).

*Leadership advancement.* Leadership advancement refers to transfer of either a veteran eMINTS teacher or non-eMINTS colleague from the grade level classroom into a Leadership Position.

*Leadership positions.* Leadership positions refers to district, building, or public leadership positions. District leadership would include district instructional coaching; directors of curriculum, federal programs, grant writing, public relations, and technology; fiscal officers; superintendents and assistant superintendents. Building level leaders refer to principals, assistant
principals, counselors, and building level instructional coaches or technology specialists. Public leadership refers to bureaucratic leaders such as local and state legislators; leaders of teacher advocacy organizations; juvenile justice officers; and city or state human services departments (Fowler, 2009).

*Locus of Control.* Locus of control is a term in psychology which refers to a person's belief about what causes the good or bad results in his or her life, either in general or in a specific area such as health or academics. Those with a high internal locus of control have better control of their behavior, tend to exhibit more political behaviors, and are more likely to attempt to influence other people than those with a high external locus of control; they are more likely to assume their efforts will be successful. They are more active in seeking information and knowledge concerning their situation. There is often a correlation with a high locus of control and leadership advancement (Rotter, 1966).

*Matriculation.* Matriculation refers to advancement or admission into a leadership position.

*MINTS.* In 1997, Southwestern Bell and the Missouri Research and Education Network (MOREnet) began the Multi-Media Interactive Network Technology Schools (MINTS) in St. Louis, Missouri, schools. The MINTs collaborative program brings together advanced communications and the traditional classroom environment to create an interactive learning experience.

*MOREnet.* The Missouri Research and Education Network (MOREnet) provides Internet connectivity, access to Internet2, technical support, videoconferencing services and training to Missouri's K-12 schools, colleges and universities, public libraries, health care, state government, and other affiliated organizations.
Established in 1991, MOREnet operates as a unit within the University of Missouri and is based in Columbia, Missouri. The MOREnet network is the foundation infrastructure. Members of the education community interact with each other via data and video services; public sector business applications are built and conducted on it; and Missouri citizens interact with their state government through it.

*No Child Left Behind (NCLB).* The Elementary and Secondary Education Act (ESEA), reauthorized as the *No Child Left Behind Act of 2002*, is the main federal law affecting education from kindergarten through high school. ESEA is built on four principles: accountability for results, more choices for parents, greater local control and flexibility, and an emphasis on doing what works based on scientific research (U.S. Government, 2009).

*Non-eMINTS colleagues.* Grade level equivalent colleagues who taught parallel in the same school, grade level, and content area(s) of veteran eMINTS teachers during the veteran teacher’s training and instructional duration in the eMINTS classroom.

*Ontology.* Ontology is the philosophical study of the nature of being, existence or reality in general, as well as the basic categories of being and their relations. Ontological assumptions concern on the nature of the world and human being in social contexts. Therefore, ontology in normative emphasis that social phenomenon is independent from other factors. Leadership ontology—leaders, followers, and shared goals—is useful for understanding the development of leadership direction, alignment, and commitment.

*Personal accomplishment.* Personal accomplishment describes feelings of competence in one’s job. Those with a feeling of personal accomplishment are less likely to suffer from teacher burn-out (Maslach, et al., 1996).
Satisfaction. Satisfaction with teaching is defined as satisfaction with past and present accomplishments; it explicitly assesses an individual's expectations of continued effectiveness at work.

Surface acting. Hochschild introduced the term surface acting to refer to the display of the characteristics of an emotion that are regarded as appropriate but are not actually felt. Continued surface acting may cause teacher burnout (Näring, et al., 2006).

Teacher Autonomy. If teachers are to be empowered and regarded as professionals, then, like other professionals, they must have the freedom to prescribe the best treatment for their students (as doctors and lawyers do for their patients and clients). Those who do not receive autonomy may become dissatisfied with their position and suffer from teacher burnout (Yong & Yue, 2007).

Teacher Burnout. Maslach maintains burnout is manifested in three ways: emotional exhaustion, alienation, and lack of sense of achievement. Emotional exhaustion refers to the absence of enthusiasm for work and is manifested as fatigue, irritability, and depletion of enthusiasm. Alienation is treating people at work with indifference and without human kindness. Lack of sense of achievement means dissatisfaction with one’s performance and is seen when teachers feel their efforts do not bring changes in students, or they do not receive the expected compensation or recognition. Work stress and burnout have negative effects on the individual and the organization (Yong & Yue, 2007).

Veteran eMINTS teachers. Veteran eMINTS teachers refers to teachers who have completed the eMINTS professional development training.
Summary

Thus far, this chapter has focused on the background and conceptual underpinnings of this study, a problem statement guiding the study, an explanation of the purpose of the study, a statement of research questions pertinent to the investigation, the primary investigator’s research hypotheses concerning these questions, the limitations of this study, and definitions of key terms used in this study. The focus of Chapter Two is on the vast body of literature dealing with technology reform in education, the National eMINTS Program, teacher burnout, and current research related to the teacher as leader.
CHAPTER 2

REVIEW OF LITERATURE

Introduction

This study is designed to investigate veteran eMINTS teacher’s perceived value of the eMINTS instructional model of design. The study will explore if a correlation exists between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the demands associated with training for and maintenance of instruction in the technology enhanced classroom.

Traditional teacher education programs are turning to non-traditional approaches to preservice teacher preparation as they struggle to keep up with increasing demand for teachers. One significant challenge is the rapid evolution of methods and pedagogy involved in meaningful integration of multimedia and technology in instruction while providing realistic situations within non-traditional teacher preparation courses that ground students’ theoretical learning. The eMINTS professional development model provides a multimedia-based, case-method alternative for developing teachers’ abilities to connect theoretical knowledge learned in classrooms with real-life teaching and learning scenarios each is likely to encounter in schools. Technology based teacher preparation helps teachers tie theoretical knowledge to practical situations and provides a realistic foundation from which to begin exploration of deeper issues and possible actions as educators. Existing literature documents this instructional evolution, provides sound evidence of purposeful training methods, warns of tendencies which may lead to teacher burnout, or reveals indicators for matriculation to leadership.
Technology Reform in Education

Traditional Preparation. Even as technology use and application rapidly advances, many of the issues related to technology use remain remarkably constant. “These include properly trained staff, adequate equipment, ongoing funding, and successful integration of technology in order to maximize learning. Effectively meeting such challenges can magnify the advantages of incorporating technology while diminishing the disadvantages” (Al-Bataineh & Brooks, 2003, p. 473).

Just as there is no one way to help students learn to read, there is no single approach for selection of technology resources and strategies. All instruction, including choice of technologies, needs to be modified to meet the readiness levels, learning preferences, and interests of a diverse student population. Having a wide range of technology tools allows teachers to adjust instructional strategies to fit the needs of the students and support multiple ways of teaching (Hemphill, 2009). For years, the lecture method was considered the gold standard for teaching, but faculties are now faced with demands from administrators, colleagues, and students to use other, technology-driven teaching techniques (Skiba, 2007).

The shift from traditional instructional roles presents the following exploration: How might technology impact teacher preparation? The need to recruit, prepare, and find a quality teaching force in today's schools is well documented in the literature, especially in critical shortage areas such as special education. Although teacher preparation programs and alternative certification programs are available, most of these programs rely on traditional methods of preparing teachers to work in today's classrooms. These methods include “college courses, field experiences, and some type of culminating student teaching” (Dieker, Hynes, Hughes, & Smith, 2008, p. 4).
There is a deep crevice between the expectations of students in today's schools and those who teach this generation of learners. In a study which examined the implications of technology on special and regular education classrooms, Dieker, et al. (2008) conjecture that “there may be an even wider gap between higher-education professionals who are preparing these future teachers to serve Generation M students” (p. 1).

The limited discourse in the traditional classroom contradicts research by Nonaka and Takeuchi (1995) who point out the imperatives of student collaboration. Cooperative engagement allows extracts from the tacit knowledge held in the brain of one individual to be made explicit before they can be incorporated into the tacit knowledge residing in the brain of another. Tacit knowledge can be made explicit simply through verbalization within dialogue making verbal discourse central to the learning process. Social communication within the classroom provides an opportunity for an individual’s skills and ideas to be exposed to teacher guidance or peer collaboration; the ‘wiser others’ according to Vygotsky (1978, as cited by Haldane, 2007, p. 259). The questions posed or suggestions offered by learners involved in the social discourse help them and the other learners who are listening to construct new concepts and ideas according to their past and current knowledge.

Additional recommendations about education reform reflect new conceptions of teaching and learning that assign primary importance to the way students attempt to make sense of what they are learning rather than to how teachers should deliver information. This current view, referred as constructivism in literature, depicts students as “actively constructing their knowledge by working on authentic tasks in which they must apply and represent ideas” (Karaman & Celik, 2008, p. 203).
Based on the constructivist view, many strategies are infused in teaching and learning in various educational contexts to improve instruction. In turn, student learning is inherently valuable because it is connected to individual experiences. Project Based Learning (PBL), Problem Based Learning, Inquiry Based Learning (IBL) and Cooperative Learning are the most basic strategies among constructivism. PBL is a model which centers learning on projects where learners decide how to approach a problem and what activities to pursue. They gather information from a variety of sources and synthesize or analyze using real skills, collaboration, and reflection. In the end, students demonstrate their newly acquired knowledge and are assessed by how much they have learned and how well they communicate it. Throughout this process, the teacher’s role is to guide and advise rather than direct and manage student’s work (Karaman & Celik, 2008, p. 204).

PBL increases motivation to study. Students know they share the responsibility for the learning process. Frank, Lavy, and Elata (2003) state, “this approach helps to develop long-term learning ability, allows them to acquire knowledge, skills, and personal and interpersonal abilities” (p. 283). By doing project, students acquire knowledge, both interdisciplinary and multidisciplinary. PBL can motivate students by engaging them in their own learning, allowing them to pursue their own interests and questions, and to making decisions about the process. PBL provides opportunities for interdisciplinary learning. PBL helps establish connections to life outside the classroom, addresses real-world concerns, and develops real world skills (especially those valued by employers). PBL provides unique opportunities for teachers to build relationships with students, since the teacher is coach, facilitator, and co-learner. PBL provides opportunities to build relationships with the larger community (Karaman & Celik, 2008, pp. 210-211).
In the 1999 publication, *Instructional Media and Technologies for Learning*, Heinrich, Molenda, Russell, and Smaldino (as cited by Hemphill, 2009), describe a process in which teachers may design and develop the most appropriate learning environment for their students. The ASSURE model continues as a popular guide for planning and implementing technology-rich lessons in the classroom. The ASSURE model covers the following lesson planning steps: (1) analyze learners; (2) state objectives; (3) select methods, media, and materials; (4) utilize media and materials; (5) require learner participation; and (6) evaluate and revise the plan. Using a systematic approach like the ASSURE model assists teachers to ensure proper planning and implementation of the most effective and appropriate use of technology to accommodate all students.

Overall, teachers need added support during their induction year, and they cite classroom management as the primary area in which they need support. Developing ways to further teachers' classroom management skills allows an increased focus on teaching and learning (Dieker, et al., 2008).

*Evolution of Methods.* As we anticipate the future of technology use in education, it is helpful to understand how its applications have evolved. Researchers in conjunction with a grant from the U.S. Department of Education have evaluated three stages of technology implementation. Each stage is examined to validate evidence of positive learning effects and to evaluate its potential impact on current technology decisions related to student learning. It should be noted these stages overlap and simultaneously continue to valuably function when properly used in educational settings. These findings, along with related research, give us a better understanding of lessons learned about best practices for technology integration (Al-Bataineh & Brooks, 2003).
The first phase, classified as print automation, dominated the 1980s. The Apple IIe computers used in our local school district were representative of those commonly used. In this stage, computers were often unused, sitting idly as a wasted resource. Lack of technical knowledge on the part of the teacher and difficulty in designing instruction for a single student in a classroom of many were the most noted reasons for lack of integration. In retrospect, these challenges make sense in light of the fact the print automation technology phase was notable for its emphasis on individualized self-contained lessons. It was logistically challenging to separate one student while the others received instruction in a traditional manner. As teachers’ roles were often relegated to allocating time to send students to a computer lab for drill and practice or electronic tutorials, it is not remarkable that many teachers found lab time sufficient and disregarded the computer that sat in the classroom corner.

Thus, even when early efforts were made to expose students to technology, actual usage per student was minimal. A result of this was an obvious disparity in the level of technical experience by students who received opportunities at home compared to the majority who did not. When one considers that even as late as 1998, over half of teachers had Internet access at home, lack of technical expertise was widespread. Often computer aides, known as specialists, were hired to demonstrate software programs in the classroom and to assist students in the makeshift computer labs. The computer specialist was frequently one of the only staff members who had technical knowledge and often faced resistance from educators reluctant to implement changes. It was not unheard of for a student’s knowledge base of technology to exceed the staff’s especially if the student had access to a home computer. Often the focus was on simply learning the basics of how to utilize the hardware such as turning on monitors and central processing units, loading software, and controlling input with a mouse. These basic techniques had to be
mastered before the learning of software applications could occur. Much of instructional time was taken in the logistics of the hardware. However, these basic computer skills laid the foundation of technical knowledge needed as technology implementation transitioned to the second phase of computer usage in education. Furthermore, and more importantly, research upheld that school-based computer applications resulted in an improvement in the attitudes of students toward school and subject matter.

Clearly, access to state-of-the-art technology alone does not enhance learning. The role of the teacher is pivotal. Staff expertise must go far beyond the basics of understanding the hardware and software. Knowledge needed includes types and purposes of software and appropriate uses of productivity tools by adopting a more learner-centered approach.

Successful integration of technology requires effective uses of learning theories and content-specific approaches to curriculum development. According to Valdez (2005), the second phase of technology use in education can be characterized as a shift to a focus on learner-centered practices that dominated the learning environments of the early to mid-1990s. These practices include cooperative efforts and the creation of products for public perusal, commonly known as multimedia applications. The advantages notable from this type of computer use are still central to the current learning environment. Students can use technology to access and evaluate large volumes of information to solve complex problems.

It is worthy to note that perhaps the greatest challenge in the current era of technology use is moving beyond simply increasing availability of technology. Teachers will need varied opportunities and training to increase their professional skills in order to achieve the use of technology to restructure schools or to teach higher order thinking. Currently, this third phase places a focus on data-driven virtual learning, according to Valdez (2005).
Current challenges in education are reflected as internet usage increases, promoting teachers to use technology to move to higher order thinking applications and the adaption of technology to meet the demands of the standards movement. In planning, districts must allow for how they will fund updates and provide ongoing staff training to make effective use of the technology available. Although leasing hardware is an option to consider, one must weigh the package proposal to ensure it includes operating system upgrades, software upgrades, and data transferability from the old technology to the new. While being able to provide up to date hardware is an ongoing challenge faced by schools, educators must not rely strictly on state-of-the-art technology as the means to promote effective teaching and learning strategies. This moving target of the latest and best quickly becomes obsolete by today’s standards.

In technology integration, as with almost any successfully implemented curriculum innovation, the catalyst for accomplishment remains the teacher. The newest challenge is to use technology to individualize instruction to help students meet standards. Teachers should consider using technology to adjust content to students’ individual learning styles to achieve this goal. A meta-summary verified students put more effort in tasks that incorporate technology. Properly implemented technology use offers schools an opportunity to transform the learning environment helping students to meet standards as a result.

For technology integration to be effective in the classroom, the following guidelines may be summarized from the three phases of technology evolution. Teachers must receive adequate ongoing training, technology use must be matched to the curriculum’s philosophy and theory of learning, and adequate numbers of computers must be conveniently located within the classroom. As McNabb (2005) notes, computers improve learning when there is “alignment of curricular goals and technology uses and assessment measures that capture evidence that learning has
"occurred’’ (p. 52). Addressing these challenges should enable schools to transition into a new phase of technology innovation (Al-Bataineh & Brooks, 2003).

Evolution of Pedagogy. Technology integration has served as an evolutionary agent in the roles of both teaching and learning (Adcock, 2008). This evolution in pedagogy has extended to the university level where the role of teacher educators has changed as well. Therefore, an important emphasis of many teacher education programs is to prepare teacher candidates to infuse technology into teaching. Technology education in elementary school programs has the potential for being used as a means of more effectively implementing the existing curricula as well as to prepare today's youth for tomorrow's world. To facilitate such implementation, tomorrow's teachers must be knowledgeable about such possibilities and the processes involved (Wentz & Wentz, 1995).

One catalyst for technology-assisted pedagogy depends on the teacher educator’s understanding of the value technology can contribute to the learning environment (Hughes, 2005). After all, Salomon (1979 as cited in Haldane, 2009) reminds us when considering the affordances of different media, that a medium in itself cannot influence learning; it is the attributes of a medium that can help to develop cognitive processes unique to that medium. He suggests there are three key attributes that characterize a medium: (1) its technology, (2) its symbol systems, and (3) its processing capabilities. From his research it can be derived, the effective use of a stable medium and the deliberative and reflective processes afforded by that medium would appear to aid the creation of the cognitive keys that help to structure the learning process and seem to be inextricably bound to the cognitive pace of the learner. Interactive technologies provide teachers with a number of opportunities to capitalize on periods of cognitive interaction in order to reinforce or scaffold student learning (Haldane, 2009).
The development of numerous assistive technology devices increases the potential for technology to level the playing field for students with disabilities (Dieker, et al., 2008). With evolving standards, many other new technological advances will be available for day-to-day use and should be a part of students’ daily school experience.

For an effective pedagogical shift, training in skills such as team building, problem solving, and critical thinking should be provided by districts to enhance teachers’ capacities in the current classroom functions (Hambright & Franco, 2008). Many times the tipping point of a small event, such as the introduction of a technology integrated instructional strategy, that makes a big impact is more accurately described as the “context” or “stickiness”. A desirable characteristic of a program’s context becomes “stuck” in the teacher’s perception and contributes to the program’s success. Buy-in or “stickiness” for new approaches may be linked to the choices of delivery of instruction (p. 270).

For this reason, cohort training is an effective way to scaffold new technology rich instructional strategies. Cohort delivery of content strengthens relationships among participants over time, especially when the cohort remains relatively intact throughout the program’s duration. The majority of cohorts complete their program of study intact; thus, attrition is low. Student satisfaction surveys indicate the cohort model is an important “stickiness” factor contributing to completion of educational programs (Hambright & Franco, 2008, p. 270).

While recruiting and retaining high-quality teachers is a practice a district can begin immediately, enhancing the pedagogical skills of teachers probably occurs over time. Marzano and Waters (2009) believe “it takes a considerable amount of time to develop a district in which enhancement of pedagogical skills occurs systematically and comprehensively” (p. 57).
Reconciling Beliefs and Practices. Individual teacher can have a profound influence on student learning even in schools that are relatively ineffective. Great teachers, not only employ research-based instructional strategies, but they also understand their purposes and use them intentionally (Marzano, Pickering, & Pollock, 2001).

Meaningful learning is a process in which new information converges on previous knowledge structures. Jonassen (1995, as cited by Lofström & Nevgi, 2007) has further elaborated Ausubel’s ideas by basing his model of meaningful learning on learning theory with a social constructivist perspective. Constructive integration of thinking, emotions and action leading to empowerment, and commitment and responsibility constitute the core of the concept of meaningful learning. Research supports grounding the basis for quality education in a constructivist view in which learners are considered to be active processors of information. Experiences of relevance and meaningfulness are central facilitators of learning. In this context, meaningful learning entails learner activity and intentionality, application of constructivist principles, collaboration, dialogue, reflection, connection to context, and transferability of knowledge (Lofström & Nevgi, 2007).

In this age of standards-based curricula and rigid accountability, one factor for student success is instruction that promotes academic and social accomplishment based on varied learning needs. With the current generational gap related to technologies, many teachers and policymakers do not readily understand how these new tools can equalize student learning opportunities and outcomes (Dieker, et al., 2008).

The Center for Teaching Quality, with support from the National Education Association, explored which working conditions matter to teachers most and how policy makers and practitioners can improve working conditions in a way that will enhance teacher and student
success (Berry, Wade, & Trantham, 2008). From the data it was found, time demands outside the work day appear to influence teacher attrition. This dissatisfaction is concerning as many professional development requirements occur beyond the normal work day. This calls for continued data purveyance of teacher perspectives to guide changes in curriculum and instruction.

Summary

Although technology is prevalent in classrooms, many teachers do not put it to best use. It is useful to look at how teachers and students are using technology to support learning (Pitler, 2009). Emerging technologies offer new opportunities for encouraging reading, writing, and collaboration. Effective technology integration in the classroom occurs when the focus of instruction is on student outcomes and when technology seamlessly supports the curriculum (Al-Bataineh & Brooks, 2003). Having a wide range of technology tools can support good instructional practices and strategies. In the end, the curriculum and students’ needs must drive the final decision for selecting the type of technology to be used (Hemphill, 2009).

All stakeholders in the educational arena need to be knowledgeable about effective uses of technology. Teacher and administrator training is critical to quality implementation. “High instructional quality within and between schools, or increased reliability, is possible when school districts ‘strike the right balance’ between direction and school support” (Marzano & Waters, 2009, p. 116). A personal understanding of technology is necessary for principals, superintendents, directors, and other educators to maximize the goal of providing proactive leadership.

One way for educators to meet the challenges of skillfully and effectively using technology for learning is to be knowledgeable about evaluating technology resources. The
content should be culturally unbiased, current, appropriate to the curriculum standards, and promote student interest. By reflecting on the cumulative best practices of technology integration and by avoiding ineffective practices, educators are better able to ‘‘make research-based decisions regarding the most beneficial approaches to technology . . . in educational settings’’ (Al-Bataineh & Brooks, 2003, p. 483). We must recognize the speed with which technology progresses and be responsive by adjusting our techniques as necessary. It also is appropriate to acknowledge that some technology applications remain constant when properly inserted into an aligned curricular plan. Although technology offers educators one of the most powerful allies impacting how education is delivered and supplemented, the ultimate success of our schools still remains in training and supporting quality, irreplaceable frontline teachers

The eMINTS Program

History of Program. eMINTS was born out of a 1997 demonstration project called MINTs (Missouri Instructional Networked Teaching Strategies). Mints sought to show the impact a technologically rich networked classroom could have on educational practice and student achievement. Thirteen Mints classrooms were installed in fourth, fifth and sixth grade classrooms in six school districts in St. Louis County, Missouri. Four of the six schools served a predominantly African American student body. In four of the six schools, the majority of students participated in the free and reduced lunch program. Evaluation conducted in the spring of 1999 by an independent evaluation team from OSEDA (Office of Social and Economic Data Analysis) documented important changes in student achievement at all grade levels (Beglau, 2009).
Based on early research findings about the improved student achievement found in the Mints classrooms, eMINTS was inaugurated in 88 third and fourth grade classrooms in 44 school districts across the state in fall 1999.

Since 1999, eMINTS classrooms have been added across the state using a combination of local, state and federal funds. MOREnet (Missouri Research and Education Network) administers eMINTS under a contract from the Missouri Department of Elementary and Secondary Education (DESE). MOREnet provides Internet connectivity, access to Internet2, technical support, video conferencing services, and training to Missouri's K-12 schools, colleges and universities, public libraries, health care, state government, and other affiliates.

eMINTS stands for enhancing Missouri's Instructional Networked Teaching Strategies. The eMINTS National Center is a non-profit unit within the University of Missouri. eMINTS is a collaborative education program sponsored by the Missouri Department of Elementary and Secondary Education (DESE) and the University of Missouri System Office of Academic Affairs. The eMINTS National Center serves as a resource base for Missouri schools and districts as well as for educators from across the United States who wish to collaborate with eMINTS staff and with one another to replicate the eMINTS instructional model (high-quality teaching powered by technology) within their educational systems. eMINTS transforms schools into places for learning where teachers and students use multimedia tools to better understand the world, work together, and achieve at new and higher levels.

The eMINTS National Center programs include professional development experiences for all educators (teachers, administrators, educational technology specialists, and library media specialists) who are interested in implementing the eMINTS instructional model in their schools or districts. The eMINTS National Center also provides faculty development for post-secondary
educators. Introductory short-term programs and customized workshops as well as intensive long-term programs are available.

*Impetus of Teacher Training.* The eMINTS instructional model is a set of research based strategies grounded in constructivist theory. The model supports educators in integrating technology and best teaching practices to create a learning community where teachers and students explore and create knowledge together using a variety of resources. Teachers facilitate student learning through the use of essential questions that stimulate thinking, build curiosity, create connections, and generate long lasting knowledge through issues that matter to students.

In a school that is fully implementing the eMINTS instructional model, observers will see students working collaboratively to solve real-world problems through teamwork and hands-on activities. Teachers guide and coach students in the creation of unique products that show deep student understanding of complex concepts.

The eMINTS instructional model requires conscious alignment of curriculum, professional development initiatives, technology acquisitions, and school vision. Collaborative leadership practices and school structures that support the school’s professional learning community in the implementation of the eMINTS instructional model are required for success. Critical elements of the eMINTS instructional model include:

- A carefully selected suite of hardware and software
- Constructivist, inquiry-based teaching practices
- Sustained, intensive professional development and classroom visits
- Implementation by school-based teams
- Rigorous external formative and summative evaluation (Beglau, M., 2009).
The eMINTS National Center offers professional development programs created by educators for educators. Leading experts at the University of Missouri, the Missouri Department of Elementary and Secondary Education and the Missouri Department of Higher Education have collaborated to produce programs that

- inspire educators to use instructional strategies powered by technology
- engage students in the excitement of learning
- enrich teaching to dramatically improve student performance (Beglau, M., 2009).

Programs range from short-term, customized awareness sessions (including online options) to full school or organizational-wide implementations requiring a long term commitment. Professional development geared to the needs and interests of preK-16 educators is delivered either by eMINTS staff or locally-based trainers who have completed eMINTS “train-the-trainer” certification.

Transforming preK-16 education through technology requires changes in the skill levels of both teachers and learners. Today’s students demand learning tasks that challenge and stimulate them as they use technology tools to acquire knowledge and skills for the 21st century.

Current Research. A September 2008 Program Evaluation by the Center for Children and Technology investigated the fidelity of the National eMINTS program and its impact on teacher mastery and student achievement. Regarding Program Fidelity, the findings suggest that there was a high level of fidelity to the core eMINTS concepts:

- The majority of instructional specialists addressed many of the key concepts.
- The majority of instructional specialists used the recommended instructional practices.
• There were few differences in PD Fidelity between eMINTS staff and participants or graduates of the PD4ETS program.

• During classroom visits, instructional specialists spent the most time working with teachers on lesson planning and modeling instruction and the least amount of time providing technology assistance and problem solving.

• eMINTS staff spent more time than participants or graduates of the PD4ETS program on lesson planning during classroom visits (Beglau, M., 2009).

Regarding Teacher Mastery, the findings indicate a wide range in the levels of mastery of the eMINTS concepts, with certain concepts more successfully mastered than others:

• Teachers displayed a high level of mastery of some core eMINTS concepts, such as integrating technology to support student learning and having students create authentic products to demonstrate their learning.

• Teachers displayed a lower level of mastery of other core eMINTS concepts, such as designing instruction to address diversity and having students generate their own questions to guide their inquiry (Beglau, M., 2009).

Regarding program impact, the findings suggest that higher PD fidelity is associated with greater teacher mastery of eMINTS concepts, and more time spent lesson planning in classroom visits is associated with greater teacher mastery as reflected in the lesson plans:

• There was a significant, positive correlation between PD fidelity and teacher mastery scores on the lesson plans teachers submitted in their portfolios.

• There was a positive trend between PD fidelity and teacher mastery on the WebQuests teachers submitted in their portfolios.
• There was a significant, positive correlation between the amount of time teachers spent on lesson planning during classroom visits and the scores on the lesson plans they submitted as part of their portfolios.

Also regarding Program Impact, the findings suggest that higher levels of teacher mastery of eMINTS concepts are associated with greater student achievement, higher levels of PD fidelity are associated with greater student achievement, and more time spent on lesson planning during classroom visits is associated with greater student achievement:

• There were significant, positive correlations between student MAP scores and teacher mastery on the lesson plan (in grades 3, 4, and 7), on the WebQuest (in grades 3 and 7), and on the classroom website (in grades 4, 5, and 7).

• There were significant, positive correlations between PD fidelity and student MAP scores in grades 3, 4, 5, and 8.

• There were significant, positive correlations between student MAP scores and lesson planning during classroom visits in grades 4, 5, and 8.

Overall, the Center for Children and Technology 2008 evaluation provides evidence the eMINTS program is being implemented with a high level of fidelity by both the eMINTS staff and participants and the graduates of the PD4ETS program; that teachers are mastering some, but not all, of the core eMINTS concepts; and that maintaining a high level of program fidelity is important for ensuring teachers are mastering the core program concepts, which may then result in higher levels of student achievement.

Summary. Currently more than 38,000 students in 2,000+ classrooms, grades 3–12, learn the eMINTS way every day across Missouri, Maine, Utah, Nevada, and Alabama with more joining the adventure soon. Two Missouri universities are incorporating eMINTS into their pre-
service teacher education programs. In addition, eMINTS has been named in new federal
educational technology legislation, ATTAIN, in May 2007. In 2005, eMINTS Comprehensive
Professional Development awarded International Society for Technology in Education (ISTE)
Seal of Alignment. The U.S. Department of Education recognized the eMINTS National Center
and Peabody Elementary, a St. Louis, Missouri, eMINTS school, in its 2004 National
Educational Technology Plan, “Toward a New Golden Age in Education.” The eMINTS
National Center was also recognized in the 2004 National Ed Tech Plan’s success stories in the
categories of Leadership and Teacher Training.

Teacher Burnout

Definition. Freudenberger (1974, as cited in Leung & Lee, 2006) first coined the term
“burnout” to describe work-related stress. The conception of burnout is articulated in the widely
used definition by Maslach and Jackson (1981) in which burnout is described as three correlated
but distinct facets: emotional exhaustion, representing an over-extended emotional involvement
with clients in which emotional bankruptcy occurs; depersonalization, representing the
development of a cynical and callous attitude towards the client in the work setting; and
decrement in perceived personal accomplishment, in which there is ineffectiveness in achieving
desired goals at work.

Maslach’s (1981) three burnout components on the intention to quit teaching provide data
on the associations among social support, burnout, and intention to quit. Results from Leung and
Lee’s (2006) structural equation modeling confirmed the three components of burnout acted
differently on intention to quit, with emotional exhaustion as the dominant factor.

The manifestation of burnout is a function of stressors engendered at both the
environmental, organizational, and personal levels. Among the explanatory models developed to
understand the manifestation of burnout is the transactional model that posits that burnout can be explained as the result of an interaction between triggering environmental variables and intra-personal traits (e.g. personality characteristics), which may facilitate or inhibit the manifestation of burnout (Maslach & Jackson, 1981). However, although it seems burnout occurs as a result of a complex interaction between individual characteristics and issues in the work environment, research has not systematically considered the role of person variables in this direction, especially in studying the manifestation of burnout in teachers’ samples.

Many contextual factors have been identified in the literature to relate to teachers’ occupational stress, such as interpersonal demands, lack of professional recognition, discipline problems in the classroom, the diversity of tasks required, bureaucracy, lack of support, workload, time pressure, the amount of paperwork required, and lack of resources provided. Travers and Cooper (1996, as cited by Kokinos, 2007) found teachers’ stress was also a result of lack of social recognition, large class size, isolation, fear of violence, lack of classroom control, role ambiguity, and limited professional opportunities.

Emotion is inextricably interwoven into organizational processes, and yet, the workplace is typically stereotyped as a rational, planned, and ordered enterprise devoid of irrational, spontaneous, and unruly emotion. Similarly, teaching is one of the professions identified as particularly stressful. Approximately one third of teachers report their job as “highly” or “extremely highly” stressful (Van Der Doef and Maes, 2002, p. 327). Furthermore, teaching has been associated with significant levels of burnout. Teaching is primarily deemed as a rational, rhetorical, and relational communication process, in which teachers strategically use messages and relational cues to influence students and their behaviors. However, teaching is also an emotional process, in which teachers can manage, monitor, and regulate their emotions to
achieve teaching effectiveness and to create a positive learning environment. Ideal teachers are known to remote feelings of enthusiasm, happiness, confidence, self-assurance, and passion about and satisfaction toward teaching (Zhang & Zhu, 2008).

The analyses conducted by Van Der Doef and Maes (2002) revealed significant correlates of burnout in teachers among high work and time pressure, student aggression, role ambiguity, further training, lack of task variety, high physical exertion, high colleague support, and lack of meaningfulness of the teaching job. For anxiety and depression, high work and time pressure, role ambiguity, high colleague support, and high physical exertion are significant predictors. Job satisfaction is associated with high task variety, less work and time pressure, less student aggression, higher support from the school management, better future prospects, and higher meaningfulness of the job. Contrary to expectations, high social support from colleagues is associated with higher levels of emotional exhaustion, depersonalization, and depression. Within a strong social network, teachers are motivated to go beyond their coping capacities in dealing with the demand of the job, as not to burden their colleagues (Van Der Doef & Maes, 2002).

Other factors contributing to emotional stress of teachers are behaviors such as surface acting (displaying an emotion that is not actually felt), deep acting (the activity undertaken to actually feel a required emotion), and suppression of emotion. In many professions, this emotional labor is thought to be related to high levels of burnout (Näring, et al., 2006, p. 303). Since identities are socially constructed, they are essentially malleable, multilayered, continuously negotiated and renegotiated, and defined and redefined. Tracy and Trethewey (2005, as cited by Zhang & Zhu, 2008) went beyond the fake-self, real-self dichotomy and proposed the crystallized self to represent the multi-dimensional, constantly shifting, ongoing, and emergent nature of identity. Tracy argued that emotional labor is affected by a variety of
factors including identity construction, sources of power, strategic interactions, and hidden
transcripts. When individuals construct and maintain preferred or authentic identities, emotional
labor discomfort can be eased (Tracy, 2005, as cited by Zhang & Zhu, 2008, p. 107).

Leung and Lee (2006) supplement our understanding as their findings reiterate teachers
experience a great deal of stress during the course of their career from the negative aspects of the
job, such as disciplinary problems of students, overcrowded classrooms, excessive paperwork,
demanding or unsupportive parents, lack of administrative support, and endless educational
reforms and innovations. There is increasing evidence that such stress may lead to teacher
burnout, which is expressed both physically and mentally (Borg, 1991, as cited by Leung & Lee,
2006). Such stress also affects the achievement of educational goals as it may lead to teachers’
detachment, absenteeism, and ultimately leaving the classroom for alternative careers (Maslach,
Schaufeli, & Leiter, 2001).

This is particularly concerning in a time when American schools have an urgent
challenge: the retention of teachers. Data suggest teacher attrition rates will continue to soar,
while student enrollments climb. A recent report indicates teacher attrition rates, particularly for
beginning teachers in their first three years of service, hover around 50% nationally (National
Commission on Teaching and America’s Future, 2009). Overcrowded classrooms, teacher
shortages, long work hours, and daily job demands placed on teachers are a major cause of
unrelieved stress (Mullins, 1993). Teachers often contend with unmotivated and difficult
students. Student resistance, misbehavior, and teachers’ management of disruptive classroom
behavior can be sources of workplace stress. Conversely, teacher nonimmediacy (Thweatt &
McCroskey, 1998) and noncaring can lead to student misbehaviors and negative teacher
evaluations, respectively. A teacher’s temperament may strongly influence that teacher’s affective orientations.

When polled directly, teachers cite pay as a major topic of dissatisfaction. Lack of administrative support is another major cause of burnout and frustration. Teachers request principals to strive to create environments in which positive support is apparent. When teachers deem working conditions to be poor, they leave to find work in better situations. In addition, many teachers blame high-stakes testing and accountability measures for the disappearance of professional autonomy.

Teacher autonomy is a common link that appears when examining teacher motivation, job satisfaction, stress (burnout), professionalism, and empowerment. An examination of constructs and their relationships reveals teachers need to have autonomy. Autonomy also emerges as a key variable when education reform initiatives are examined. Some researchers argued granting autonomy and empowering teachers is an appropriate starting point for education experts to solve current school problems (Pearson, 2006).

Stable personality characteristics predispose individuals to view the adverse events in a certain way that can either impair or facilitate the adaptation process and its psychological and physical health outcomes. Of the most comprehensive and well-developed models of personality is the five-factor model (Costa & McCrae, 1996), which posits that adult personality can be comprehensively described in terms of neuroticism (the susceptibility to psychological distress, inability to control urges, proneness to unrealistic ideas and inability to cope with stress), extraversion (the disposition towards positive emotions, sociability and high activity), openness (the proclivity towards variety, intellectual curiosity and aesthetic sensitivity), agreeableness (the inclination towards interpersonal trust and consideration of others), and conscientiousness (the
tendency towards persistence, industriousness and organization). The use of the five-factor model of personality to study the process of burnout has been applied to various populations. Zellars, Perrewé, Hochwarter, and Anderson (2006) studied burnout in a sample population of nursing workers and found that neuroticism predicted emotional exhaustion; extraversion and agreeableness predicted depersonalization; and openness and extraversion predicted personal accomplishment. Mills and Huebner (1998) have shown neuroticism and introversion correlated with the three dimensions of burnout in a sample of school psychologists. In addition, emotional exhaustion was associated with conscientiousness and agreeableness; depersonalization was associated with agreeableness; and personal accomplishment was associated with conscientiousness.

Burnout is considered to be an affective reaction to prolonged exposure to stress at work in which various job demands may exceed the individual’s adaptive resources. However, individual resources might also be depleted or strengthened by situations beyond the working environment (Innstrand, Langballe, Espnes, Falkum, & Aasland, 2008, p. 1).

Failure to control teacher’s work stress over extended periods of time may cause work burnout. Stress and burnout keep teachers from fully realizing their potential or effectively carrying out their duties. Teacher stress and burnout affect the school’s climate, morale, prevent the attainment of educational objectives, and increase the probability of teachers leaving their posts (Yong & Yue, 2007).

Work stress is the reactions of persons who feel external demands are beyond their endurance and result in physiological, psychological, and behavioral changes. The concept was first put forward by Freudenberger (1974) to describe the mental and physical exhaustion caused by excessively long hours of work, heavy workload, and excessive work intensity in workers in
the public relations sector. Pines and Aronson (1988) define work burnout as a long-term emotional state resulting in physical, emotional, and psychological exhaustion. Farber (1991) defines work burnout as a work-related syndrome coming from the individual’s cognition of a serious imbalance between input and output. Maslach (1982) maintains work burnout is manifested in three ways: emotional exhaustion, alienation, and lack of sense of achievement. Emotional exhaustion refers to the absence of enthusiasm for work and is manifested as fatigue, irritability, and depletion of enthusiasm. Alienation is treating people at work with indifference and without human kindness, for example when teachers take a negative attitude toward students and distance themselves from them as much as possible. Lack of sense of achievement means dissatisfaction with one’s performance and is seen when teachers feel their efforts do not bring changes in students, or they do not receive the expected compensation or recognition. Work stress and burnout have negative effects on the individual and the organization.

The effects of work stress and burnout on the individual include disruption of teachers’ normal habits, lack of work enthusiasm and creativity, inability to concentrate, lowered self-respect, loss of self-control in class, and overreaction to moderate amounts of stress. The effects of work stress and burnout on the organization are lower quality of service, low morale, loss of interest in work and life, indifference toward people or events, and inefficiency. Where schools are concerned, the biggest problems caused by work stress and burnout are the undesirable influences on the students (Yong & Yue, 2007).

Techniques and Instruments for Determining Burnout. The Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach, et al., 1996) is the foremost instrument used to examine burnout among professional educators and the instrument which is to be implemented in this study. This tool is used to determine burnout across the dimensions of emotional exhaustion,
depersonalization, and personal accomplishment. Maslach’s Burnout Inventory is customarily administered to evaluate the relationship between the stress-strain-coping continuum and measured outcomes of burnout.

A 2002 study by Van der Doef and Maes, investigated whether using a teacher-specific quality of work instrument would explain more variance in burnout, psychosomatic well-being, and job satisfaction than occupational stressors assessed with a general quality of work questionnaire. The Job Demand-Control-Support (JDCS) model, which assumes moderating effects of job control and worksite social support on the relationship between job demands and health and well-being outcomes, was tested. Results support occupational stressors which were assessed using a teacher-specific quality of work questionnaire to explain more variance in the outcomes under investigations. Furthermore, teacher-specific work aspects, like student aggression and further training, are significant correlates of health and well-being. In contrast, only limited support could be found for the assumed moderating effects of job control and worksite social support.

The job demand-control model (JDC model; Karasek & Theorell, 1990) provides a framework to explain the relation between the psychosocial characteristics of the work environment and health outcomes. It comprises two basic dimensions—psychological job demands and control or decision latitude. Job demands refer to the workload and have been operationalized in terms of amount of work, time pressure, and conflicting demands. Control includes two theoretically distinct concepts. Skill discretion refers to the extent to which the job involves the opportunity to learn new things, to develop skills, and to make use of one’s ability. Decision authority incorporates an individual’s possibilities to influence on work content and on how the work is done (Santavirta, et al., 2007).
Current Research Findings. Developing effective educators is a priority for ensuring that future generations learn successfully in the classroom. Along with educator quality there is a need to reduce attrition among educators by clarifying the prospective teacher’s understanding of the learning environment they will be entering. A growing body of evidence indicates attrition is higher for those with little initial preparation (Wei, Andree, & Darling-Hammond, L, 2009). For example, analysis of the Schools and Staffing Survey (SASS) data for 1999-2000 showed large differences in teachers' plans to stay in teaching between first-year teachers who felt well-prepared versus first-year teachers who felt poorly prepared (Dieker, et al., p. 4).

A study by Thornton, Perreault, and Jennings (2008) focuses on identification of the factors associated with a teacher's decision to transfer between schools within one large western district. The analyses were based on responses of 181 teachers who had recently transferred. Multivariate analyses were conducted to identify factors associated with teacher transfer. The findings indicate leadership/administrative issues, professional success concerns, and building factors can have a strong influence on a teacher's decision to transfer. The study provides insight into approaches for retaining teachers at their current worksites. Moreover, a high percentage of teachers who leave the profession are those with the characteristics associated with superior teaching, cognitive breadth and depth, adaptability, and creativity.

Five major motivational factors relate to teachers' decisions to leave the profession. These factors are: 1) lack of administrative support, school policies, and procedures; 2) instructional issues-class size, discipline problems, and students' motivation; 3) lack of opportunities for professional advancement; 4) inadequate classroom resources, materials, and equipment; 5) personal issues and monetary concerns (Thornton, et al., 2008). A study conducted by Provasnik and Dorfman (2005, as cited by Thornton, Perreault, & Jennings) found a high relationship
between reasons teachers transferred and reasons teachers left the profession. For both transferees and teacher leaving the profession, they identified lack of planning time, heavy workloads, low salaries, and problematic students as the top reasons for dissatisfaction.

A 2006 study by Timms, Graham, and Caltabiano explored relationships between teacher perceptions of school administration trustworthiness and teacher burnout and trust. The survey instruments measured administration trustworthiness (ability, benevolence, and integrity), morale, participate decision making, trust, burnout, and job stress. The study found there were significant effects for gender and school, with female primary teachers experiencing more burnout job stress than male primary teachers and secondary teachers (male and female). Female primary and secondary teachers reported less confidence in school administration trustworthiness when compared to male primary and secondary teachers although this differentiation was more pronounced in the primary school.

Teacher turnover is a particular concern for school administrators and educators because of the implications for future hiring practices and concern for the retention of good teachers. In Leiter’s revised model (2001, as cited by Maslach, Jackson& Leiter, 1996), it is suggested the affective (emotional exhaustion and depersonalization) and cognitive (personal accomplishment) dimensions of burnout experiences should be treated as different constructs with different predictors and consequences. In particular, both emotional exhaustion and depersonalization are associated with the defensive coping mechanism of escape that will lead to escape or the desire to escape, while personal accomplishment is more related to outcomes reflecting positive self-efficacy, such as control coping strategy. Individuals strive to obtain, retain, protect, and foster those things they value, which are referred to as “resources” (Lee & Asforth, 1990, 1996, as cited by Innstrand, et al., 2008).
In a myriad of studies, researchers have examined teachers’ intrinsic and extrinsic motivation. Intrinsic factors for teachers include: (a) desire to help students achieve, (b) desire to make a difference in society, and (c) sense of accomplishment when students learn. Extrinsic factors for teachers include: (a) pay, (b) nonmonetary fringe benefits, and (c) recognition of performance. The body of teacher research also supports that notion because intrinsic and extrinsic rewards in the teaching profession have received considerable attention; yet, few researchers have examined the effects of these rewards (Fraser, 1989, as cited by Pearson, 2006).

Various factors such as disciplinary problems, excessive work, and lack of social support are among the stressors that confront teachers. These findings are in line with the Conservation of Resources (COR) theory of stress (Hobfoll, 2001), on which Leiter (2001, as cited by Hobfoll, 2001) posited his model of burnout. According to the COR theory, people strive to obtain and maintain what they value (the resources). When resources are lost, are inadequate to meet demands, or do not lead to the anticipated returns, burnout is likely to develop. The theory also states certain behavioral outcomes, such as intention to quit and coping responses, are likely to occur as a result of burnout (Leung & Lee, 2006).

Hochschild (1983, as cited by Näring, et al., 2006, p. 304) was the first to note employees are often required to show certain emotions in order to please “the customer”. Having to show such emotions while one is not actually feeling them or having to suppress one’s own emotions when their expression does not seem appropriate were taken together in devising the concept of emotional labor. Hochschild already noted the requirement to express emotions that are incompatible with experienced emotions would cause repeated stress. Repeated stress is thought to lead to reactions of psychological strain and physical illness (Van der Doef & Maes, 2002). An increasing number of studies have explored the relationship between emotional labor and job
stress or burnout. Several studies have reported significant relationships between emotional labor and the emotional exhaustion dimension of burnout and thus made the theoretical importance of this relationship clear (Näring, et al., 2006).

In the research of Näring et. al, (2006), of the three emotional labor strategies that were measured, surface acting and suppression were found to be significantly related to depersonalization. This result replicates but also extends findings on surface acting in various professions and students.

The effects of job strain on emotional exhaustion, vitality, and emotional well-being proved to be consistent and robust across alternative formulations, and more restrictive cut-off points produced stronger effects. The main effect of high demands exceeded that of low decision authority in relation to emotional exhaustion. Furthermore, the two factors acted synergistically to increase the risk of emotional exhaustion, providing empirical support for the core mechanism of the job-strain model. In the case of the emotionally exhausted teachers who perceived their job as highly demanding and low in control, 69% of the effect could be attributed to the synergism of these two factors. This information could be used in the planning of interventions to prevent burnout (Santavirta, et al., 2007).

International research and practice have made great efforts to understand and prevent teacher burnout. Besides contextual factors such as job demands and job, research has now started to look at personality characteristics which may predict differences in teachers’ stress and burnout. One personality characteristic that has been suggested to play an important role in teacher stress and burnout is perfectionism (Stoeber & Rennert, 2008). Perfectionists may perceive a great deal of pressure to excel because they feel they have to live up both to their own
high standards and to those of others. Thus, it comes as no surprise that perfectionism has been associated with higher levels of stress and burnout.

The findings of a study conducted by Stoeber and Rennert (2008) show individual differences in perfectionism may be an important factor in teachers’ job-related stress appraisals, coping styles, and burnout. Moreover, the findings show different facets of perfectionism show different, sometimes opposite relationships. When multiple regressions were computed to tease out the differential relationships of the different facets of perfectionism, striving for perfection was positively related to challenge appraisals and active coping and inversely to threat and loss appraisals, avoidant coping, and burnout (emotional exhaustion, depersonalization, lack of personal accomplishment, and total burnout). In contrast, negative reactions to imperfection were positively related to threat and loss appraisals, avoidant coping, and burnout and inversely to challenge appraisals and active coping. Furthermore, perceived pressure to be perfect showed differential relationships depending on the source of pressure (Stoeber and Rennert, 2008).

Only perfectionists, who are concerned about mistakes and feel they have to be perfect, are likely to experience lack of personal accomplishment, become cynical about their job and careless about the people they should care for, and are at risk of physical and emotional burnout. Perfectionists, who are not overly concerned about mistakes and who do not feel they have to be perfect to be accepted by others, should not worry that their perfectionistic strivings will be detrimental for their mental and physical health or will lead to burnout. Instead their perfectionistic strivings may help them to actively cope with the challenges of their jobs (Stoeber & Rennert, 2008).

Hobfoll (2001) identified 74 work-related and nonwork-related resources that he divided into four groups: objects, conditions, personal characteristics, and energy resources. Examples of
work-related resources are “time for work,” “stable employment,” and “support from co-workers” (p. 420). Nonwork-related resources are, for example, “good marriage,” “free time,” or “time with loved ones” (p. 420). Stress occurs when these resources are (1) threatened, (2) lost, or (3) when individuals invest resources and do not reap the anticipated level of return (Hobfoll, 2001). Burnout is thought to result particularly from a lack of resource gain (and sometimes exposure to minor, chronic losses) following significant resource investment of time, energy, lost opportunities, and borrowing from family time and intimacy to support work.

When time for professional development is built into teachers' working time rather than required additional hours, their learning activities can be ongoing and sustained and can focus on particular issues over time. Job embedded professional learning time also supports the kind of context specific professional learning and action research that is effective in catalyzing change (Wei, Andree, & Darling-Hammond, 2009).

Many high-achieving nations also organize extensive professional development that draws on expertise beyond the school. Some mandate the number of formal professional development hours that teachers must participate in beyond the many hours spent in collegial planning and inquiry (Barber & Mourshed, 2007, as cited in Wei, et al., 2009).

Professional development policies and practices in high-achieving nations reflect many of the principles of effective professional learning outlined by research. These nations provide sustained and extensive opportunities to develop practice that go well beyond the limited one-shot workshop approaches still commonly found in the United States. They treat teachers as professionals and make teachers' professional learning high priority (Wei, et al., 2009).

Many of the countries that have established strong systems for high quality teaching have built these infrastructures in the last two decades through purposeful policy. This suggests
education policymakers in the United States could also develop such conditions with purposeful effort and clarity about what matters and what works to support professional learning and practice (Wei, et al., 2009).

Social support available to teachers has been found to be a useful strategy for preventing teacher burnout. Strong associations between support from supervisor and colleagues and emotional exhaustion and depersonalization have been documented. In Hong Kong, researchers found that seeking social support was a significant predictor to depersonalization and hence concluded that readiness to seek support from others may help teachers to guard against becoming depersonalized (Leung & Lee, 2006).

Among the three burnout components, emotional exhaustion was found to be the predominant factor predicting teachers’ intention to leave teaching in this study. The present findings are similar to the findings of Liu and Wang (2004, as cited by Leung & Lee, 2006) who found that emotional exhaustion is a salient factor that was strongly associated with mental health among primary and secondary school teachers (Leung & Lee).

Another important finding of the study was the differential effects of support from a supervisor and from colleagues as a form of coping resources for burnout on intention to quit teaching. Those teachers who perceived their supervisor as supportive were less likely to leave teaching, while having a good relationship with colleagues only had no or at best a minimal effect on their intention to quit (Leung & Lee, 2006).

To conclude, the present study shows that when operationalized as a three-component system of emotional exhaustion, depersonalization, and personal accomplishment, the concept of burnout enables a more precise assessment of the differentiated predictability on intention to quit among a sample of teachers. Findings from this study provide pertinent information for school
officials to prevent teacher turnover by considering and designing prevention and intervention programs concentrated on reducing a teacher’s emotional exhaustion. Support from a supervisor is found to be an important resource to reduce both teacher burnout and turnover intention among teachers (Leung & Lee, 2006).

Teachers’ work overload has been the subject of intense research, and the results of these studies show that a substantial proportion of teachers perceive their job as very stressful (Santavirta, Soloveia, & Theorell, 2007). The effect of job strain on burnout was proven to be consistent and robust across alternative formulations. The main effect of high demands exceeded that of low decision authority in relation to emotional exhaustion. Furthermore, the 2 factors acted synergistically to increase the risk of burnout. In the case of burnout, teachers who perceived their job as highly demanding and low in control, 69% of the effect could be attributed to the synergism of these 2 factors.

The most prominent advocates of 21st century education all stress the importance of learning essential content by way of authentic intellectual skills. These advocates’ documents invariably contain the terms critical thinking and problem solving. They emphasize the ability to argue, analyze others’ arguments, conduct research, and acquire such “habits of mind” as the ability to invent or synthesize information. Literacy—the ability to read, write, and make effective presentations—is central (Schmoker, 2008). There are many schools that use data to drive a curriculum rich in 21st century skills and that achieve both high test scores and deep learning.

Summary. Teaching is considered a highly stressful occupation. Burnout is a negative affective response occurring as a result of chronic work stress. While the early theories of
burnout focused exclusively on work-related stressors, recent research adopts a more integrative approach where both environmental and individual factors are studied.

Teachers’ stress has an impact on teachers as individuals, on the schools in which they work, and on the pupils they teach. Teachers who experience negative emotions at work and who have lost interest in their jobs would likely be less caring and experience emotional exhaustion (Teven, 2007).

Emotional exhaustion is a key characteristic of the burnout syndrome. Teachers’ individual characteristics, as well as job related stressors, should be taken into consideration when studying the burnout phenomenon. The fact that each dimension of the syndrome is predicted by different variables should not remain unnoticed especially when designing and implementing intervention programs to reduce burnout in teachers.

It is plausible to accept that teachers who are exhausted or who feel detached from their students do not respond to certain situations in a way that feels natural. In such a state, teachers might have to use surface acting and suppression more.
The Teacher as Leader

Epistemological and Ontological Assumptions. In classroom settings, learning is a shared enterprise involving instructors and students. However, in practice, teaching structures and activities can vary from the expectations, strategies, and activities of learners. Instructors may be unaware of how their students perceive their teaching. In some cases, fundamentally different epistemological beliefs may exist related to instructor–student roles (Perlman & McCann, 1998). Taken separately, instructor and student expectations and beliefs may be considered reasonable and appropriate. Together, however, misalignments are often evident among the expectations, beliefs, and practices of instructors and students. While successful instructors and students recognize the value of and employ complementary methods, some neither fail to recognize nor deploy complementary approaches (Song, Hannafin, & Hill, 2006).

Current educational practices tend to emphasize direct explanation (i.e., explaining things as clearly as possible to the learner) as well as process or performance perspectives. Some research argues for a shift in focus to students’ beliefs about and connections with conceptual artifacts. Conceptual change refers to the learning process of restructuring pre-instructional understanding to develop new interpretations and acquire new knowledge. Conceptual change, therefore, involves changes in both knowledge and beliefs about knowledge (Chi-Yan, & Treagust, 2004). Most conceptual change models emphasize how students approach learning, and encourage instructors and students to make their conceptions about to-be-learned content explicit from the outset (Song, et al., 2006).

The first place for educational leaders to look in helping negative people change and in creating positive, supportive learning environments is in the mirror. Negative people resist change, interfere with new ideas, reduce student learning (no child learns in the classroom where
the teacher complains all day), and dampen the spirits of other staff members. In addition, negative staff members destroy community support for education and can anger and frustrate board members (Weber, 2008).

A positive climate and vision bring increased community support, higher-quality teacher and administrator candidates, smoother negotiations, more supportive board members, and overall atmosphere of caring and support—and that leads to higher student achievement (Weber, 2008). While cognitive factors are clearly important to conceptual change, some have concluded that purely cognitive connections are unlikely to occur without affective influences (Song, Hannafin, & Hill, 2007).

Marion and Hewson (1999, as cited in Song, et al., 2006) suggested three additional factors influence conceptual change learning in conjunction with metacognitive factors: ideas, status, and justification. Ideas refer to both teacher and student conceptions about the subject under study. Hewson’s (1998) Teaching for Conceptual Change model suggested teachers made explicit both their and their students’ ideas during instruction. Status refers to the degree to which a student believes an idea is useful. Accordingly, Hewson advocated teaching practices that help to raise or lower the status of ideas. Raising the status of an idea increases emphasis; this may increase opportunities for students to accept it. In contrast, lowering an idea’s status may reduce the likelihood that students accept it (Song, et. al., 2006).

The Processes of Change Model is a systemic model of learning success where students encounter tasks and materials that induce conceptual change. They hypothesized that cognitive, metacognitive, and motivational sensitivity influence how students perceive a task. Cognitive sensitivity refers to the relationship between prior knowledge and the cognitive demands of the task (Song, et al., 2006).
Classroom obstacles to conceptual change have also been documented. Given the same instruction in the same classroom, some students demonstrate conceptual change learning while others do not. Similarly, evidence of conceptual change varies under different situations and circumstances (Chi-Yan & Treagust, 2004). While researchers have underscored the influence of factors such as prior knowledge, the introduction of new or alternative knowledge, the use of metacognitive learning strategies, and motivation, few have examined the interdependence among conceptual change factors such as epistemic beliefs, teaching, and learning. Epistemic beliefs refer to an individual’s beliefs “about the definition of knowledge, how knowledge is constructed, how knowledge is evaluated, where knowledge resides, and how knowing occurs” (Hofer, 2001, p. 199). Little effort has focused on the influence of associated beliefs and assumptions on teaching, factors that influence student expectations about learning, and their joint influence in typical learning environments. In this section, we present teaching and learning models and describe the influence of epistemic beliefs on the teaching practices of instructors and the learning practices of students (Song, Hannafin, & Hill, 2007).

Likewise, instructors’ expectations, beliefs, and practices often differ from those of students. Instructors may lack adequate knowledge or experience needed to teach specific topics effectively, fail to recognize student dissonance, or lack willingness to modify their teaching. Rather than reflecting and adapting to reconcile differences, teaching activities may proceed as initially planned, independent of evidence of student learning, thus not fully facilitating students’ conceptual change process. In such cases, instructors might attribute failed student performance to lack of prior knowledge and motivation, blaming them for failing to engage in their teaching activities rather than to the misalignment of expectations or their teaching. Ideally, instructors
and students mutually adapt their respective activities to reconcile dissonance (Song, et al., 2007).

According to Schommer’s (Schommer-Aikins, & Easter, 2007) framework, epistemic beliefs range from naive to sophisticated; naive beliefs indicate that knowledge is perceived as simple and a direct reflection of reality with no need for justification, while sophisticated beliefs indicate that knowledge must be understood contextually and must be open to reevaluation. Students with naive beliefs about knowledge tend to characterize knowledge as resting “in” authorities (usually the instructor). Accordingly, a student might expect the “instructor as expert” to explicitly organize and convey his or her knowledge, such as by directed lectures and explicit study guides. Conversely, instructors’ beliefs about teaching and learning influence how well they facilitate students’ conceptual change learning experiences (Song, et al., 2007).

When an instructor believes knowledge is complex and can be constructed by the learner, he/she might be expected to provide the students with opportunities to explore the to-be-learned subject, such as by project-based or inquiry-oriented learning approaches (Song, et al., 2007).

Epistemic beliefs influence both how instructors teach and students learn (Hofer, 2004), as well as their willingness to reconcile. Willingness to reconcile is influenced by several factors, including individual beliefs and personality traits. When instructors believe knowledge resides in authorities (i.e., the instructor in the classroom), it is unlikely s/he would change practices even according to situational demands. Consequently, a student may fail to learn novel ideas or skills such as new ways to write or technology applications (Schommer-Aikins, & Easter, 2006). In contrast, when instructors believe all knowledge is negotiable, they might inadvertently legitimize simplistic student understanding. Students may fail to recognize conventions or
canonical points of view, thus reinforcing, rather than challenging, naive conceptions (Schommer-Aikins, & Easter, 2006).

Among the myriad of expectations of today’s school leaders, the new generation of principals needs to create the conditions necessary for professional learning communities to flourish. They need to act as lead learners and set the tone within the organization that all community members continue to learn best practices and continue to work to meet the needs of all students. They must develop the skills necessary to collect and use data from a variety of sources to respond to accountability measures set forth in performance standards and help inform decisions related to school improvement. They must fully understand the scope and sequence of NCLB and must prove their ability to meet the standards and expectations set forth by the law. They must have the communication and interpersonal skills necessary to interact with all constituents of a school community including parents, students, teachers, central administrators, and community members. Furthermore, they must be able to create safe school environments and respond to issues particularly related to rising security concerns in the wake of various recent examples of school violence (Loeser, J., 2008).

Smith and Andrews (1989) identified four characteristics of successful instructional leaders:

- First, effective instructional leaders are resource providers. They must know the strengths and weaknesses of each teacher and be willing and able to provide the type of resources necessary to help each teacher grow.

- Second, effective instructional leaders are strong instructional resources. They are able to identify strong teaching and provide the type of feedback necessary to encourage and enhance improved pedagogy.
• Third, effective instructional leaders are strong communicators. In every mode of communication, they convey the core beliefs of the school and focus solely on optimal learning outcomes.

• Finally, they are visible and present in every school occurrence (p. 4).

Whether reconciled unilaterally or mutually, instructors and students can benefit by making their beliefs explicit to each other. However, since significant differences may exist between espoused and enacted beliefs, and between self-reported and actual practices, simply stating one’s epistemological beliefs may be insufficient. One practical option is to make visible the assumptions upon which courses are designed and developed. Instructors can engage in critical reflection activities to examine and reflect on their beliefs, such as through conversing with peers or colleagues or explicitly describing teaching philosophies to the students at the beginning of the course. By overtly initiating otherwise tacit information, the instructor can clarify the biases and expectations underlying course design and student performance. Another implication for teaching, especially for diverse student populations, is to provide opportunities for students to make their beliefs explicit. Louca, Elby, Hammer, and Kagey (2004) suggested observations and interviews were helpful in understanding students’ beliefs about knowledge and learning, their learning behaviors, and their approaches to learning tasks in different contexts. Students, in turn, can become increasingly proactive by explicitly articulating their learning philosophies to the instructor and making potential misalignments explicit (Song, et al., 2007).

The Impact of Locus of Control on Motivation, Self-efficacy with factors of motivation, locus of control, and personal attributes are part of the affective component in Borkowski’s model (Hall, Smith, & Chia, 2008). Successful information processing results when there is an integration of these metacognitive and affective components. Prior research supports
metacognitive factors in predicting academic success as measured by college GPA. There is a significant relationship between metacognitive factors and measures of internal locus of control (Hall, et al., 2008).

Borkowski’s model has been described as being a self-regulation process involving task analysis, strategy selection, strategy use, revision, monitoring, and performance feedback. Self-regulated learners are aware of their own learning processes, knowledgeable about various learning strategies, and effective in applying the most appropriate strategies for the tasks at hand. Self-regulation behaviors should not only make them academically successful (i.e., higher college GPA) but also possibly allow them to navigate through college requirements more efficiently and effectively (Hall, et al., 2008).

An affective component of self-regulation noted in Borkowski’s model is self-efficacy. Self-efficacy can be defined as the belief that one can be successful in accomplishing a task. Research has shown self-efficacy to be situation specific. For example, while there may be some overlap, academic self-efficacy is different from social self-efficacy. Increases in self-efficacy impacts both motivation and performance. Research supports the relationship between goal systems (self-regulatory systems) and self-efficacy and how these factors enhance motivation and performance (Hall, et al., 2008).

Burnout is higher among individuals who have an external locus of control, possess other-oriented empathy, and are more emotional than cognitive. Hence, teacher temperament is likely to be a significant variable in determining caring orientations and potential burnout. The present study was designed to provide a more comprehensive examination of the relationships among teacher temperament, caring, burnout, and organizational outcomes (Teven, 2007).
Instructional leadership is a leadership policy primarily used by school principals. The policy shifts principals’ focus from day-to-day school administration to the improvement of curriculum and classroom instructional practices. Recently though, in the current climate of standards-based learning, high stakes accountability, and relentless attention to improving educational opportunities for underserved students, instructional leadership has made its way back to the forefront of education policy. Instructional leaders support teachers in curriculum development and provide opportunities for teachers to shape the cultures of their schools. Teachers may contribute to a number of aspects of running a school including developing curriculum, choosing materials, evaluating performance, building the budget, and setting policy and practices for hiring, promotion, and retention. Research has also shown the most tangible improvement in student outcomes is made by placing highly qualified teachers in the classroom.

The instructors at any school bring to the institution a broad range of experiences and competencies. Instructional leaders may mentor teachers towards becoming leaders, establish times when teachers can directly contribute to important school conversations, and develop a school culture in which teachers feel invested in one another and the school. Instructional leaders must be supported by the districts in which they work. In the current era of standards based reform, school districts have a responsibility to ensure their students are learning. With the advent of instructional leadership, teacher leadership has evolved to become as much of a factor for success as principal leadership. Leadership development in teachers is fundamental to improving schools. As a school’s principal and administrators develop teachers’ leadership skills, teachers may be called upon to perform a variety of tasks which may change their roles within the school. Teachers in public schools are often isolated in their classrooms; they may feel a clear delineation between their classroom and the rest of the school. With the implementation
of instructional leadership, teachers may be called upon to contribute to school functions like choosing instructional materials, writing curriculum, deciding school policies and hiring practices, and analyzing and evaluating budgets. Imperative to the success of this new role is the acceptance of new teaching practices and a new school culture. Instructional leaders will usually observe classroom practices more often and increase their overall presence in classrooms. For instructional leadership to be successful, it is crucial for teachers and principals to accept and embrace these changes, form strong relationships in which teachers are not afraid of failure, and constantly work towards learning and implementing better teaching practices. Instructional leadership is one of the most empirically supported policies recognized by the education community. Studies on instructional leadership and its effectiveness abound, extolling the policy’s impact on student learning and the health of the overall institution. When implementation is successful, students are successful. However, some barriers to success and conditional requirements need to be taken into account. (Suh, 2008).

The professional development of leaders and teachers is also crucial. Instructional leadership today denotes changes in everyone’s roles. Using the case study of a school seeking to employ instructional leadership, providing professional development opportunities related to instructional leadership skills within the school is more effective than offering outside professional development opportunities. By providing these opportunities within school, teachers are able to adapt new perspectives and skills to the context of their environment (Suh, 2008).

Hall et al. (2008) found a significant relationship between metacognitive factors and measures of locus of control. Taken together, metacognitive strategies and internal locus of control lend support to Borkowski’s (1996) theory of executive functioning which is a process of self-regulation with knowledge and application of cognitive skills being liked to positive
motivational states. Borkowski’s model has been described as a self-regulation process involving task analysis, strategy selection, strategy use, revision, monitoring, and performance feedback. An affective component of self-regulation noted in Borkowski’s model is self-efficacy which is the belief that one can be successful in accomplishing a task. Research has shown self-efficacy to be situation specific (Hall, et al., 2008).

Wright University’s Teacher Leaders Program examined internal program leadership and determined teachers sought independence from the administrative-oriented responsibilities and teacher leadership capacities were best served within the confines of the individual classrooms. The ensuing teacher leader program’s title and mission thus implied teacher leaders primarily led students (Hambright & Franco, 2008).

*Current Research on Indicators for Leadership.* As noted by Yukl (2006), the term leadership is used in multiple contexts without being precisely defined. However, “most definitions of leadership reflect the assumption that it involves a process whereby intentional influence is exerted by one person over other people to guide, structure, and facilitate activities and relationships in a group or organization” (p. 3). What is known is the correlation between quality district and teacher leadership and student achievement (Marazano & Waters, 2009). In the 2009 publication, *District Leadership that Works*, Marzano and Waters identify a model which predicts that “when districts and schools are high functioning in terms of their leadership behaviors, they can positively influence student achievement” (p. 12).

The Institute of Educational Leadership in Washington, D.C. (2001, as cited in Tyson, 1993) acknowledged the “vital role of the teacher in providing instructional leadership, especially at a time when the demands of up-to-date management, political pressure promoting tests and standards, and the near-universal obsession with across-the-board accountability are
making principals more conscious of what happens in classrooms; and 2) the constantly reiterated proposition that well-prepared professional teachers are central to the decades-long push for school reform” (p. 2). This constitutes a very important trend toward recognizing the teacher as leader. Oddly, “the effort to create a cadre of leaders within the teaching ranks is rhetorically supported by nearly everybody and actually supported by very few” (Tyson, 1993, p. 1).

Leadership effectiveness is measured with multiple criteria dependent on intended essential outcome. Yukl (2006) focuses on primary traits, characteristics, or power as indicators or variables for evaluating effective leaders. Leader traits and skills; leader behavior; influence processes; follower attitudes and behavior; and performance outcomes are all situation variables among the primary types of leadership processes.

Bowers and Seashore (1966, as cited by Yukl, 2006) suggest leadership functions may be carried out by someone other than the designated leader of the organization. Review of their research finds leadership behavior among peers is related to subordinate satisfaction. “The work and culture of adults influence in complex ways educational practice and student learning. Teachers and administrators live at the center of the world and together shape the flow of leadership, determining its ultimate impact on students” (Donaldson, 2008, p. 145).

Summary.

The understanding of one’s own epistemic paradigm, ways of knowing, and epistemological beliefs allow for a more complete understanding of personal epistemology. Although research tends to limit personal epistemology to the nature of knowledge, researchers do “not deny the importance of studying the close links between beliefs about knowledge and beliefs about learning” (Perlman & McCann, 1998, p. 411). By combining the epistemological
ways of knowing, the ontological social assumptions, and the methodological assumptions of an individual which focuses on analysis of methods of gaining data, an interpretive paradigm of the lens through which we understand and construe change is better understood.

In general, it seems to be psychologically healthy to perceive that one has control over those things which one is capable of influencing. This internal locus of control is also referred to as “self-agency,” “personal control,” or “self-determination” (Mamlin, Harris, & Case, 2001, p. 25). Those with internal locus of control seem to be more achievement oriented and to get better paid jobs. It is worthy to ponder, do environmental circumstances cause locus of control beliefs or do the beliefs cause the situation, such as privilege and disadvantage?

Winston Churchill once said, “Success is going from failure to failure without loss of enthusiasm” (Lewis, 1995). In additional to a strong internal locus of control, successful leaders tend to possess other essential characteristics such as self-esteem, the need to achieve, screening for opportunity, goal orientation, optimism, courage, tolerance to ambiguity, and strong internal motivation. The good news is many of these leadership characteristics are learnable. For example, one can train the mind to recognize opportunity, optimism is a controllable state of mind (Seligman, 1988), and even the need for achievement can be increased (McClelland, 1983).
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

The National eMINTS (enhancing Missouri’s Instructional Networked Teaching Strategies) Center grants a professional development program to empower educators to use instructional strategies driven by technology (Beglau, 2007). To date, more than 1000 Missouri teachers have participated in this rigorous program which requires more than 250 contact hours of face-to-face instruction. A large number of the veteran eMINTS teachers who have successfully completed the training eventually leave the eMINTS classroom. Currently, no research exists which examines the long-term professional outcome for classroom teachers who participate in the systemic technological training reform of the National eMINTS Program. The purpose of this study is to investigate veteran eMINTS teacher’s perceived value of the eMINTS instructional model of design. The study will explore if a correlation exists between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the technology enhanced classroom.

Research Questions

Within the context of this study, the following research questions were addressed:

1. Is there a significant difference between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS Professional Development Program and the time their non-eMINTS colleagues continue to teach in the same content area and grade level?
2. Are there significant differences between how veteran eMINTS teachers rate satisfaction in teaching after completion of the eMINTS training model and how their non-eMINTS colleagues rate satisfaction in teaching?

3. Are there significant similarities between how veteran eMINTS teachers score the Maslach Subscale Items of Emotional Exhaustion, Depersonalization, or Personal Accomplishment and how their non-eMINTS colleague rate these subscale items?

4. Are there significant differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training Program and the number of non-eMINTS colleagues who assume leadership positions?

5. Are there similarities among perceptions held by veteran eMINTS teachers in relation to the eMINTS training methodology?

**Design for the Study**

The purpose of this study is to examine the perceptions of veteran eMINTS teachers toward the training methodology of the National eMINTS Program by gathering phenomenological reflective data. The study will further explore the possible relationship between teacher perceptions toward the eMINTS training methodologies and career influences toward matriculation to leadership or burnout.

The research method in the study is inductive analysis using a survey method. This will “provide a quantitative or numeric description of trends, attitudes, opinions of a population by studying a sample of that population” (Creswell, 2003, p, 153).
Population and Sample

This study draws from the cross-sectional survey responses of 30 teachers. The determinant for size in this group was to provide enough data to conduct an analysis which yields significant results as indicated by an alpha factor of .05 (Creswell, 2003). Participants are a convenience sample of 15 veteran eMINTS instructors from the FY00 (1999-2000), FY01 (2000-2001), and FY02 (2001-2002) cycles of the eMINTS National Program. The FY00, FY01, and FY02 sequences were chosen as they were the first three cycles of eMINTS participants and sufficient time has passed to allow for review of matriculation, leadership advancement, or “burn out”. Fifteen veteran teachers were chosen from the South quadrant area. The second component of this study is comprised of a convenience sample of 15 non-eMINTS colleagues of the veteran eMINTS teachers when they were eMINTS training participants in the FY00, FY01, and FY02 cycles. Comparative analysis of responses from veteran eMINTS teachers to their non-eMINTS colleagues will allow for consideration of variables in matriculation, leadership advancement, or “burn out” not related to the eMINTS training experience. Criteria for selection of the colleague sample will be by grade level and content area correlated with the EMINTS participants during the years of training.

Data Collection and Instrumentation

The model used to support the evaluation tools in this study was based on (a) a thorough review of the literature on the eMINTS instructional model, program evaluation, and teacher leadership, (b) feedback from the Veteran eMINTS Teacher Questionaire, and (c) feedback from the Maslach Burnout Survey tool developed by Christina Maslach.

After identifying the sample population, the researcher sent an informed consent letter (See Appendix A), Maslach Burnout Inventory (See Appendix C), and questionnaire (See
Appendix B) to explain the purpose of the study and request participation. The mailing outlined the purpose of the research, any risks that were present, and explained the participant’s right to withdraw from the study at any time. All responses were collected from a convenience sample. A follow-up mailing was made to the selected population requesting their participation and return of the study instruments.

*Veteran eMINTS Teacher Questionnaire*

The VETQ consists of 16 items used to collect perceptions of the eMINTS training process, as well as the specific age, gender, academic assignment, work environment, and job promotion data. The researcher designed the instrument utilizing the researcher’s own experience and training as a veteran eMINTS participant and knowledge gained from review of related literature on technology training systems. The survey was constructed to allow both veteran eMINTS teachers and their non-eMINTS colleagues to complete the same instrument for this study. Consequently, two key constructs were developed for the VETQ survey, teacher satisfaction, and leadership advancement (See Appendix C). The teacher satisfaction construct referred to how satisfied a teacher is now he/she has completed the eMINTS Professional Training modules. The leadership construct examined whether those who completed the eMINTS Professional Training Cycle advanced to leadership positions. Estimates of both constructs were supplemented by written comments made by teachers about what they liked and did not like about the learning experience.

The VETQ is divided into two sections. Section I (Questions 1 -8) is designed for study participants, and Section II (Questions 9-16) is designed exclusively for the responses of veteran eMINTS teachers. Demographic data collected (questions 1-5) includes specific age, gender,
academic assignment, years in that position, and years served in the classroom assigned during the eMINTS training cycle.

Questions 6, 7, and 8 seek specific information regarding job promotion or advancement following completion of the eMINTS National training cycle and satisfaction with the teaching profession. Questions 9-13 ask participants to provide their perception of how participation in the eMINTS Professional Development modules influenced pedagogical understandings and instructional methodologies.

Question 14 asks participants to gauge their current technological expertise in relation to their non-eMINTS colleagues. Specifically, Veteran eMINTS teachers were asked if they score themselves behind, equal, or ahead of their colleagues in technical understanding. Questions 15 and 16 provide a forum for respondents to express what they did or did not like about the eMINTS Professional Development experience. Responses to these questions were used to determine if a correlation exists between those teachers who express dissatisfaction in the teaching profession and those who express dissatisfaction with the eMINTS training experience.

**Maslach Burnout Inventory-Educators Survey**

The second instrument used, the Maslach Burnout Inventory—Educators Survey (MBI-ES), is designed to measure three subdimensions (exhaustion, depersonalization, and professional efficacy or reduced personal accomplishment) of burnout in educators (Langballe, et. al, 2006). Maslach (1982) maintains work burnout is manifested in three ways: emotional exhaustion, alienation, and lack of sense of achievement (Maslach & Jackson 1981; Maslach, et al., 1996). There are 22 items, which are divided into three subscales. The general term recipients is used in the items to refer to the particular people for whom the respondent provides service, care, or treatment. The items are written in the form of statements about personal feelings or
attitudes (e.g., "I feel burned out from my work," "I don't really care what happens to some recipients"). The items are answered in terms of the frequency with which the respondent experiences these feelings, on a 7-point, fully anchored scale (ranging from 0, "never" to 6, "every day"). Because such a response format is least similar to the typical format used in other self-report measures of attitudes and feelings, spurious correlations with other measures (due to similarities of response formats) should be minimized. Furthermore, the explicit anchoring of all 7 points on the frequency dimension creates a more standardized response scale, so that the researcher can be fairly certain about the meanings assumed by respondents for each scale value. In the original version of the MBI (Maslach & Jackson, 1981), there was also a response scale for intensity of feeling. However, because of the redundancy between the frequency and intensity ratings, the intensity scale was deleted from subsequent editions.

The nine items in the Emotional Exhaustion subscale assess feelings of being emotionally overextended and exhausted by one's work. The five items in the Depersonalization subscale measure an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction. For both the Emotional Exhaustion and Depersonalization subscales, higher mean scores correspond to higher degrees of experienced burnout. Because some of the component items on each subscale had low loadings on the other, there exists a moderate correlation between the two subscales, which is in accord with theoretical expectations that these are separate, but related, aspects of burnout. The eight items in the Personal Accomplishment subscale assess feelings of competence and successful achievement in one's work with people. In contrast to the other two subscales, lower mean scores on this subscale correspond to higher degrees of experienced burnout. The Personal Accomplishment subscale is independent of the other subscales, and its component items do not load negatively on them. In other words,
Personal Accomplishment cannot be assumed to be the opposite of Emotional Exhaustion or Depersonalization. Indeed, the correlations between the Personal Accomplishment subscale and the other subscales are low (Maslach, et al., 1996).

Each respondent's test form is scored by using a scoring key that contains directions for scoring each subscale. The scores for each subscale are considered separately and are not combined into a single, total score; thus, three scores are computed for each respondent. If desired for individual feedback, each score can then be coded as low, average, or high by using the numerical cutoff points listed on the scoring key. The MBI takes about 10 to 15 minutes to complete. It is self-administered. Complete instructions are provided for the respondent. The Likert scale for this instrument ranges from 0 (very mild, barely noticeable) to 6 (major, very strong).

Research supports the validity and reliability of the MBI-ES as suitable measurement to assess burnout across a diversity of professions, including teachers and people working in the field of information technology (Maslach, et al., 1996). The MBI is the most widely used measure in research on burnout and is generally regarded as the measure of choice for any self-reported assessment of this syndrome. More extensive psychometric research has been done on the MBI than on any other burnout measure, and its multidimensional conceptualization of burnout has made it particularly appropriate for theory-driven research. The successful new development of the MBI-GS provides further evidence of the viability of both the measurement approach and the underlying multidimensional model for extending our knowledge about burnout.

The stability of the MBI's subscales over time is consistent with its purpose of measuring an enduring state. However, one consequence of this stability is that the measure is relatively
insensitive to minor fluctuations in experienced burnout. It also poses a challenge for researchers
who want to determine relationships over time; if the MBI subscales correlate highly with
themselves over the study interval, there will be less variance remaining to relate to other
predictors (Maslach, et al., 1996).

To date, no clinical research, on either burnout symptomatology or on diagnostic criteria,
has been done using the MBI. Thus, it cannot be used for individual diagnosis because there is
no solid basis on which to identify meaningful cutoff scores or dysfunctional patterns of
response. However, the MBI can be used as a self-assessment tool. Individuals can compare their
scores to the norms presented in the MBI Manual to see where they stand in relation to other
people in their occupational group. This exercise can help people develop an awareness of
whether burnout is an issue they need to address. The awareness that a problem exists can be the
first step in alleviating any form of job burnout (Maslach, et al., 1996).

Although the original Maslach Burnout Inventory was designed to measure burnout in a
variety of human services occupations, a number of studies have focused specifically on the
teaching profession. There are several reasons for this high level of interest in teacher burnout.
First, the teaching profession is one of the largest and most visible professions in the United
States. Second, the teaching profession has been subject to increased pressure by society to
correct social problems (e.g., drug, alcohol, and sexual abuse), educate students in academic and
skill areas, provide enrichment activities, meet the individual needs of all students with a wide
range of abilities, and encourage moral and ethical development. Third, a number of national
reports have illustrated the fact many teachers are leaving the profession, while fewer are
choosing to become teachers. This has resulted in teacher shortages in certain disciplines and
predictions of future shortages in all areas. Because of the high level of interest in teacher
burnout and the need for more research in this particular area, the MBI-Educators Survey was
developed and first published in 1986, in the second edition of the *MBI Manual*.

*Development of MBI-ES.* The MBI-Educators Survey (MBI-ES) (Maslach, et al., 1996) measures
the same three burnout dimensions as the original MBI. As in other helping professions, an
initial aspect of educator burnout, emotional exhaustion, is the tired and fatigued feeling that
devels as emotional energies are drained. When this feeling becomes chronic, teachers find
they can no longer give of themselves to students as they once could. Teachers who no longer
have positive feelings about their students are experiencing the second component of teacher
burnout, depersonalization. Among the many ways teachers can display indifferent, negative
attitudes toward their students are using derogatory labels (e.g., "They are all animals");
exhibiting cold or distant attitudes, physically distancing themselves from students (e.g.,
barricading themselves behind their desk), and "tuning out" students through psychological
withdrawal. The third aspect, a feeling of low personal accomplishment from the job, is
particularly crucial for teachers. Most teachers enter the profession to help students learn and
grow. When teachers no longer feel they are accomplishing this, they can focus on fewer areas to
receive rewards (e.g., putting in more time to make more money) (Maslach, et al., 1996).

The MBI-ES is basically the same as the MBI. However, in some of the items the word
recipient has been changed to student. In the teaching profession, students are the teachers’
recipients. This change was made to ensure clarity and consistency in the interpretation of the
items. The same procedures should be used to administer the scale, and the same key is used for
scoring. Cautions and recommendations regarding the use and interpretation of the MBI also
apply to MBI-ES.
Two studies substantiate the validity and reliability of the MBI-ES with these changes. Factor-analytic studies by Iwanicki and Schwab (1981, as cited in Maslach, et al., 1996) with 469 Massachusetts teachers and by Gold (1984) with 462 California teachers support the three-factor structure of the MBI-ES. In regard to reliability, Iwanicki and Schwab report Cronbach alpha estimates of .90 for Emotional Exhaustion, .76 for Depersonalization, and .76 for Personal Accomplishment, whereas Gold reports estimates of .88, .74, and .72 respectively. These reliabilities parallel those of the MBI (Maslach, et al., 1996).

Studies using the MBI-ES have identified personal, organizational, and role related conditions that are related to the three MBI scales. These studies have identified some recurring themes and unanswered questions worthy of noting for future research. Studies that have examined the relationships between teacher demographics and burnout have consistently found certain background factors predict a small but significant amount of variance in burnout subscales. Age has now been shown to be a significant predictor of Emotional Exhaustion, with younger teachers tending to score higher than older teachers. Male teachers tend to score higher than female teachers on the Depersonalization scale. This finding is consistent with research with other helping professions (Maslach & Jackson, 1985). Teachers who work with high school and junior high school students tend to have lower levels of personal accomplishment than their elementary school counterparts. High school teachers also have more depersonalized feelings toward students than either elementary or junior high teachers.

Survey research using the MBI-ES and employing multiple regression techniques has identified organizational factors that contribute to teacher burnout. Among the many variables that have been studied in relation to educator burnout are role conflict, role ambiguity, participation in decision making, reward systems, need deficiency, freedom and autonomy, and
social support networks. Research using the MBI-ES with educators has depended upon samples of opportunity, single school districts, or cross-sectional samples. However, many of these studies have used data obtained from individual teachers and have translated the findings to the organizational level. In doing this, researchers have assumed an individual's assessment of the organization reflects that of others within the organization. Studies that employ such analyses and make such assumptions are subject to the problem of "ecological fallacy." That is, data gathered at one level (teacher) are used to draw inferences about another level (organization). In terms of burnout research in educational settings, the organizational facts that have been found to be related to burnout may only be teacher-perceived contributors. To correct this problem, data must be aggregated and then analyzed at the school level (Maslach, et al., 1996).

In addition to research, the MBI-ES can be used at the school district level to detect potential problems. It can be administered anonymously to all members of a school district and then analyzed by various populations. If a particular school, department, or grade has significantly higher scores, or if the entire district is significantly higher than the educator norms in the MBI Manual, then follow-tip organizational analysis may be warranted (Maslach, et al., 1996).

Data Analysis

Demographic Analyses

Demographic analysis was performed on the data from the VETQ to investigate the relationship between gender, age, academic assignment (eMINTS vs. non-eMINTS), working environment, teacher burnout, and job promotion. Items 1-5 provide profile and demographic data. The responses were grouped by veteran eMINTS and non-eMINTS teacher colleagues. The data were analyzed using SPSS to determine frequencies and percentages for each group.
Analysis for Research Question 1

The Demographic Data Section of the VETQ survey yields information for the initial research questions #1: Is there a significant difference between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS training model and the time their non-eMINTS colleagues continue to teach in the same content area and grade level? The data was analyzed using an independent samples $t$-test of the variables classroom assignment and years in the same position.

Analysis for Research Question 2

Data analyses of the responses to item 7 gauge an interval scale response to satisfaction with the teaching profession for both eMINTS teachers and their non-eMINTS colleagues. The data were analyzed using frequencies and percentages for each group to respond to research questions #2: Are there significant differences between how veteran eMINTS teachers rate satisfaction in teaching after completion of the eMINTS training model and how their non-eMINTS colleagues rate satisfaction in teaching? This comparison will be used in a cross-tabulation with a chi-square to determine if there are patterns among eMINTS teachers who gauge satisfaction with teaching and non-eMINTS teachers who gauge satisfaction with teaching.

Analysis for Research Question 3

Comparative analyses of the responses derived from the Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscale items of the Maslach Burnout Inventory (MBI-ES) were used to determine significance among veteran eMINTS teachers and non-eMINTS teachers regarding subscale items. The data were analyzed using a non-parametric Mann-Whitney $U$ Test of significance for each convenience sample to respond to research
questions #3: Are there significant similarities between how veteran eMINTS teachers score the Maslach Subscale Items of Emotional Exhaustion, Depersonalization, or Personal Accomplishment and how their non-eMINTS colleagues rate these subscale items? The Mann-Whitney $U$ Test determines chances of obtaining greater observations in one population versus the other with the assumption: 1) The two samples under investigation in the test are independent of each other and the observations within each sample are independent. 2) The observations are comparable (i.e., for any two observations, one can assess whether they are equal or, if not, which one is greater).

**Analysis for Research Question 4**

Comparative analyses of the responses to item 6 determines if there are differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training program and the number of non-eMINTS colleagues who assume leadership positions. The data were analyzed using frequencies and percentages for each group to respond to research question #4: Are there significant differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training Program and the number of non-eMINTS colleagues who assume leadership positions? This comparison will determine significance between those who advance to leadership and those who are satisfied with teaching. For each analyses, a test of significance ($p<.05$) was used to determine if eMINTS instructors experience more or less teacher burnout or job promotion in comparison to non-eMINTS personnel.
Analysis for Research Question 5

Responses to items 9-14 of the VETQ, regarding veteran eMINTS perceptions of the eMINTS training methodology, were coded using percentages for each response; a mean score for each subpart was calculated, with the means presented in rank order. This data were analyzed to respond to research question #5: Are there similarities among perceptions held by veteran eMINTS teachers in relation to the eMINTS training methodology? Summaries of categorical variables included frequency and the percentage of response within each category. Statistical analysis comparing teacher perspectives was performed using a $t$-test. All analyses were performed with SPSS.

To assure trustworthiness of the VETQ, the researcher used low inference descriptors. The use of description phrased verbatim (i.e., direct quotation) of participant responses reduced the lack of subjectivity on part of the researcher. Further, triangulation between the Maslach Burnout Inventory and the VETQ allows for "cross-checking" of information and conclusions through the use of multiple data collection sources provides a “holistic’ understanding of the with plausible explanations about the phenomena being studied” (Merriam, 1998, p. 204). Similarities or agreement of the data between the two instruments was used to ascertain validity or corroboration as common themes emerge.

A final strategy to assure accuracy of reporting was the validity measure “member-checking” (Creswell, 2003, p. 196). Member-checking determines truthfulness of the qualitative findings through taking the findings back to the Veteran eMINTS Teachers and their colleagues to determine whether they find the themes and conclusions are accurate.
Summary

This study was designed to investigate veteran eMINTS teachers’ perceived value of the eMINTS instructional model of design. The study explores whether a correlation exists between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the technology enhanced classroom.

This study draws from the cross-sectional survey responses of 15 veteran eMINTS instructors from the FY00 (1999-2000), FY01 (2000-2001), and FY02 (2001-2002) cycles of the eMINTS National Program. The second population for this study was a select sample of 15 non-eMINTS colleagues of the veteran eMINTS teachers when they were eMINTS training participants in the FY00, FY01, and FY02 cycles.

The Veteran eMINTS Teacher Questionnaire (VETQ) instrument for this study was developed by the researcher based on the researcher’s experience, training, as a veteran eMINTS participant, and knowledge gained from review of related literature on technology training systems. A second instrument, the Maslach Burnout Inventory--Educators Survey (MBI-ES), was used to measure three subdimensions of burnout in the study participants. Responses items were correlated statistically comparing teacher perspectives with teacher burnout responses using a t-test.

The survey was sent to the sample group along with a cover letter and informed consent form. Follow-up phone calls, emails, and mailings requesting participation in the study were made to increase the return rate.

The profile and demographic data collected were analyzed using frequencies and percentages. Responses to items of the VETQ, regarding veteran eMINTS perceptions of the
eMINTS training methodology, were coded using percentages for each response; a mean score for each subpart was calculated, with the means presented in rank order.

Subscale total means were calculated and analyzed using an independent samples t-test at alpha=.05. A Pearson correlation at alpha=.05 was made between indicators of leadership advancement on the VETQ and indicators for teacher burnout scale on the MBI-ES.

Research questions for this study are reviewed and data collected for this study are presented in the following chapter. A data analysis is presented in tabular form. A discussion of the data analysis is also provided.
CHAPTER 4

RESULTS

Introduction

While several studies demonstrate the effectiveness of the eMINTS instructional methodology on student success, no research exists to determine veteran eMINTs teachers’ perceptions of training methodology and leadership matriculation as related to systemic technology reform. The purpose of this study was to add to the current field of research regarding the effectiveness of the eMINTS Instructional Program. This study investigated veteran eMINTS teacher’s perceived value of the eMINTS instructional model of design. The study explored whether similarities exist between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the demands associated with training for and maintenance of instruction in the technology enhanced classroom.

Research Questions

Within the context of this study, the following research questions were addressed:

1. Is there a significant difference between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS Professional Development Program and the time their non-eMINTS colleagues continue to teach in the same content area and grade level?

2. Are there significant differences between how veteran eMINTS teachers rate satisfaction in teaching after completion of the eMINTS training model and how their non-eMINTS colleagues rate satisfaction in teaching?
3. Are there significant similarities between how veteran eMINTS teachers score the Masclach Subscale Items of Emotional Exhaustion, Depersonalization, or Personal Accomplishment and how their non-eMINTS colleagues rate these subscale items?

4. Are there significant differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training Program and the number of non-eMINTS colleagues who assume leadership positions?

5. Are there similarities among perceptions held by veteran eMINTS teachers in relation to the eMINTS training methodology?

Profile and Demographic data

This study drew from the cross-sectional survey responses of 30 teachers. The determinant for size in this group was to provide enough data to conduct an analysis which yields significant results as indicated by an alpha factor of .05 (Creswell, 2003). Participants were a convenience sample of 15 veteran eMINTS instructors from the FY00 (1999-2000), FY01 (2000-2001), and FY02 (2001-2002) cycles of the eMINTS National Program. The FY00, FY01, and FY02 sequences were chosen as they were the first three cycles of eMINTS participants and sufficient time has passed to allow for review of matriculation, leadership advancement, or “burn out”. Fifteen veteran teachers were chosen from the South quadrant area. The second component of this study was comprised of a convenience sample of 15 non-eMINTS colleagues of the veteran eMINTS teachers when they were eMINTS training participants in the FY00, FY01, and FY02 cycles. Comparative analysis of responses from veteran eMINTS teachers to their non-eMINTS colleagues allows for consideration of variables in matriculation, leadership advancement, or “burn out” not related to the eMINTS training experience. Criteria for selection
of the colleague sample were grade level and content area in correlation with the Veteran eMINTS teacher sample.

The profile and demographic data was presented in a descriptive form and analyzed using frequency of responses. Comparisons of the frequency were made in order to describe the participants of this study. The demographic information is summarized in Tables 1.a, 1.b, 1.c, and 1.d.

Table 1.a

Demographics for Gender, Age, and Teaching Assignment (N = 30)

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Note: F = Female; M = Male

Table 1.b

Demographics for Gender Years of Teaching (N = 30)

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Table 1.c

Demographics for Classroom Assignment, Leadership Advancement, Choice to Teach (N = 30)

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<th>Not Advance</th>
<th>Teacher</th>
<th>Not a Teacher</th>
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Table 1.d

Demographics for Satisfaction with Teaching (N = 30)

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</tr>
</tbody>
</table>

Years of Continued Service

As shown in Table 2, there was found to be no significant correlation between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS Professional Development Program and the time their non-eMINTS colleagues continue to teach in the same content area and grade level.

Table 2

Independent Samples t-Test of Classroom Assignment and Years in the Same Position (N = 30)

<table>
<thead>
<tr>
<th>Classroom Assignment</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same Position</td>
<td>eMINTS</td>
<td>15</td>
<td>1.73</td>
<td>.458</td>
</tr>
<tr>
<td></td>
<td>Colleague</td>
<td>15</td>
<td>1.40</td>
<td>.507</td>
</tr>
</tbody>
</table>

Note: Significance codes: ***0.0001; **0.01; *0.05; alpha = .05.
Satisfaction with Teaching

Data analyses of the responses to item 7 gauge an interval scale response to satisfaction with the teaching profession for both eMINTS teachers and their non-eMINTS colleagues. The data were analyzed using frequencies and percentages for each group to respond to research questions #2: Are there significant differences between how veteran eMINTS teachers rate satisfaction in teaching after completion of the eMINTS training model and how their non-eMINTS colleagues rate satisfaction in teaching? Table 3 shows the Crosstabulation responses for both Veteran eMINTS Teachers and their Non-eMINTS colleagues for satisfaction with teaching. It can be noted the majority of both samples responded they were Very or Completely satisfied with teaching with a Veteran eMINTS Teacher response of 12 of the

Table 3
Classroom Assignment Satisfaction with Teaching Crosstabulation

<table>
<thead>
<tr>
<th>Classroom Assignment</th>
<th>Satisfaction with Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimally or Somewhat</td>
</tr>
<tr>
<td>eMINTS</td>
<td>1</td>
</tr>
<tr>
<td>Colleague</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 4 shows this comparison based on the Pearson $\chi^2$ test, the $p$ value for the comparison between Veteran eMINTS Teachers and their Non-eMINTS colleagues is .56. The data shows there are no significant differences among eMINTS teachers who gauge satisfaction with teaching and their Non-eMINTS colleagues.

Table 4
*Classroom Assignment Satisfaction with Teaching Chi-Square Tests*

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.167a</td>
<td>2</td>
<td>.558</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1.213</td>
<td>2</td>
<td>.545</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.392</td>
<td>1</td>
<td>.531</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.00.*

*Teacher Burnout*

Comparative analyses of the responses derived from the Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscale items of the Maslach Burnout Inventory (MBI-ES) were used to determine significance between veteran eMINTS teachers and non-eMINTS teachers regarding subscale items. The data were analyzed using a non-parametric Mann-Whitney $U$ Test of significance for each convenience sample to respond to research questions #3: Are there significant similarities between how veteran eMINTS teachers score the Maslach Subscale Items of Emotional Exhaustion (see Figure 7), Depersonalization (see Figure 8),
Figure 7

Boxplot graph presenting raw score computations for Maslach Inventory Emotional Exhaustion Subscale distributions for Veteran eMINTS Teachers and their Non-eMINTS Colleagues.

Figure 8

Boxplot graph presenting raw score computations for Maslach Inventory Depersonalization Subscale distributions for Veteran eMINTS Teachers and their Non-eMINTS Colleagues.

or Personal Accomplishment (see Figure 9), and how their non-eMINTS colleagues rate these subscale items? The Mann-Whitney $U$ Test determines chances of obtaining greater observations in one population versus the other with the assumption the continuous distributions for the test variable are exactly the same (except their medians) for the both Veteran eMINTS Teachers and
their Non-eMINTS Colleagues. The second assumption underlying the use of this test for this study is the case study represents random samples from both Veteran eMINTS Teachers and their Non-eMINTS Colleagues, and the scores on the test variable are independent of each other.

Figure 9

Boxplot graph presenting raw score computations for Maslach Inventory Personal Accomplishment Subscale distributions for Veteran eMINTS Teachers and their Non-eMINTS Colleagues
The results of the Mann-Whitney $U$ test show no significant difference, $p < .843$ (see Table 6), in Emotional Exhaustion between the sample groups. The Veteran eMINTS Teachers had a slightly higher average Emotional Exhaustion rank of 15.80 as compared to the average rank 15.20 of their Non-eMINTS Colleagues but this difference is not significant (see Table 5).

The results of the Mann-Whitney $U$ test show no significant difference, $p < .885$ (see Table 6), in Depersonalization between the sample groups. The Veteran eMINTS Teachers had a slightly higher average Depersonalization rank of 15.70 as compared to the average rank 15.30 of their Non-eMINTS Colleagues but this difference is not significant (see Table 5).

Table 5

Mann-Whitney U-Test Ranks

<table>
<thead>
<tr>
<th>Classroom Assignment</th>
<th>$N$</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional Exhaustion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eMINTS</td>
<td>15</td>
<td>15.80</td>
<td>237.00</td>
</tr>
<tr>
<td>Colleague</td>
<td>15</td>
<td>15.20</td>
<td>228.00</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depersonalization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eMINTS</td>
<td>15</td>
<td>15.70</td>
<td>235.50</td>
</tr>
<tr>
<td>Colleague</td>
<td>15</td>
<td>15.30</td>
<td>229.50</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Personal Accomplishment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eMINTS</td>
<td>15</td>
<td>14.43</td>
<td>216.50</td>
</tr>
<tr>
<td>Colleague</td>
<td>15</td>
<td>16.57</td>
<td>248.50</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the Mann-Whitney $U$ test show no significant difference, $p < .463$ (see Table 6), in Personal Accomplishment between the sample groups. The Veteran eMINTS Teachers had a slightly lower average Personal Accomplishment rank of 16.57 as compared to the average rank 15.30 of their Non-eMINTS Colleagues but this difference is not significant (see Table 5).

Table 6

*Mann-Whitney U-Test Test Statistics*

<table>
<thead>
<tr>
<th></th>
<th>Emotional Exhaustion</th>
<th>Depersonalization</th>
<th>Personal Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>108.000</td>
<td>109.500</td>
<td>96.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>228.000</td>
<td>229.500</td>
<td>216.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.198</td>
<td>-.145</td>
<td>-.734</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.843</td>
<td>.885</td>
<td>.463</td>
</tr>
<tr>
<td>Exact Sig. [2*(1-tailed Sig.)]</td>
<td>.870^a</td>
<td>.902^a</td>
<td>.512^a</td>
</tr>
</tbody>
</table>

*Note:* Not corrected for ties.
Grouping Variable: Classroom Assignment

**Advancement to Leadership**

Comparative analyses of the responses to item 6 determined if there were differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training program and the number of non-eMINTS colleagues who assume leadership positions (see Table 10).
Table 10

*t-Test of Group Statistics Regarding Advancement to Leadership*

<table>
<thead>
<tr>
<th>Assignment</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advancement to Leadership</td>
<td>15</td>
<td>1.67</td>
<td>.488</td>
<td>.126</td>
</tr>
<tr>
<td>Colleague</td>
<td>15</td>
<td>1.87</td>
<td>.352</td>
<td>.091</td>
</tr>
</tbody>
</table>

The data were analyzed using frequencies and percentages for each group to respond to research question #4: Are there significant differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training Program and the number of non-eMINTS colleagues who assume leadership positions? This comparison, seen in Table 11, determined there is a significant difference, $p < .011$, between the numbers of Veteran eMINTS Teachers who advanced to leadership positions versus their Non-eMINTS Colleagues.
Table 11

*Levene’s Test for Equality of Variances toward Advancement to Leadership*

<table>
<thead>
<tr>
<th>Levene's Test</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>95% Confidence Interval of the Difference</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>7.338</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-1.288</td>
</tr>
</tbody>
</table>
Five Veteran eMINTS Teachers advanced to leadership positions after completing the National eMINTS Program Training while only 2 of their colleagues from the sample advanced in the same time period (See Figure 12).

*Figure 12*
Bar Graph of both Veteran eMINTS teachers and their Non-eMINTS Colleagues who advanced to a Leadership Position after completing the eMINTS Program Training
Perceptions of eMINTS Methodology

Responses to items 9-14 of the VETQ, regarding veteran eMINTS perceptions of the eMINTS training methodology, were coded using percentages for each response; a mean score for each subpart was calculated, with the means presented in rank order. These data were analyzed to respond to research question #5: Are there similarities among perceptions held by veteran eMINTS teachers in relation to the eMINTS training methodology? Summaries of categorical variables included frequency and the percentage of response within each category. Statistical analysis comparing teacher perspectives was performed using a t-test. All analyses were performed with SPSS.

The majority of the Veteran eMINTS Teacher sample, 73.3%, noted the eMINTS instructional model improved classroom teaching substantially (see Table 13).

Table 13

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderately</td>
<td></td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Substantially</td>
<td></td>
<td>73.3</td>
<td>93.3</td>
</tr>
<tr>
<td>Completely</td>
<td>1</td>
<td>6.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The majority of the Veteran eMINTS Teacher sample found the amount of time required for professional development by the eMINTS National Center to be adequate (33.3%) to slightly overwhelming (40.0%) (see Table 14).

Table 14

*Frequency Table for VETQ Question:*
*The amount of time required for professional development by the eMINTS National Center was—*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>5</td>
<td>33.3</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Slightly Overwhelming</td>
<td>6</td>
<td>40.0</td>
<td>40.0</td>
<td>73.3</td>
</tr>
<tr>
<td>Moderately</td>
<td>2</td>
<td>13.3</td>
<td>13.3</td>
<td>86.7</td>
</tr>
<tr>
<td>Overwhelming</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overwhelming</td>
<td>2</td>
<td>13.3</td>
<td>13.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The eMINTS instructional model is comprised of four major components: high quality lesson design; inquiry-based learning; classroom community; and technology empowerment. These components are wrapped in ongoing evaluation and are designed to work together to create better learning outcomes for teachers and students. 100.0% of the Veteran eMINTS Teacher respondents said the eMINTS Professional Development Model had a positive impact on their career (see Table 15).
Table 15

*Frequency Table for VETQ Question: How did eMINTS professional development impact your career?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The foundational piece of the eMINTS instructional model is inquiry, constructivist approaches, using ways that cause students to ask and think at a higher depth of knowledge. 60.0% of the Veteran eMINTS Teacher sample said they continue to use some of the eMINTS Instructional Model instructional methodology (see Table 16).

Table 16

*Frequency Table for VETQ Question: How would you currently gauge your instructional methodology in relation to the eMINTS Instructional Model?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do NOT use</td>
<td>3</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Use Some</td>
<td>9</td>
<td>60.0</td>
<td>60.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Continue to Use</td>
<td>3</td>
<td>20.0</td>
<td>20.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
eMINTS is rooted in the belief the best teaching and learning occur in classrooms where
teachers have the opportunity to create lessons which deeply engage students in meaningful
content and inquiry. 46.7% of the respondents noted they only engage moderate use of the
constructivist, learner-centered methods proposed by the National eMINTS Center (see Table
17).

Table 17

*Frequency Table for VETQ Question:*
*To what extent do you currently use the constructivist, learner-centered methods proposed by the
National eMINTS Center?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>3</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Very Little</td>
<td>2</td>
<td>13.3</td>
<td>13.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Moderately</td>
<td>7</td>
<td>46.7</td>
<td>46.7</td>
<td>80.0</td>
</tr>
<tr>
<td>Substantially</td>
<td>2</td>
<td>13.3</td>
<td>13.3</td>
<td>93.3</td>
</tr>
<tr>
<td>Completely</td>
<td>1</td>
<td>6.7</td>
<td>6.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
eMINTS integrates technology with inquiry-based learning and high-quality lessons to produce authentic learning. Technology enables students and teachers to use web and web 2.0 tools to expand learning beyond the classroom walls. Overwhelmingly, 73.3% of Veteran eMINTS Teachers gauge themselves ahead of their peers in technical expertise (see Table 18). Only 26.7% view themselves as equal to or behind.

Table 18

*Frequency Table for VETQ Question: In relation to technical expertise, I would gauge myself:*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behind my colleagues</td>
<td>3</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Equal to my colleagues</td>
<td>1</td>
<td>6.7</td>
<td>6.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Ahead of my colleagues</td>
<td>11</td>
<td>73.3</td>
<td>73.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Creating a collaborative environment has been described as the single most important factor for successful school improvement and initiatives and the first order of business for those seeking to enhance the effectiveness of their school (DuFour & Eaker, 1998). When asked what they liked about the eMINTS Professional Development experience, 60.0% of respondents noted collaboration as having the greatest impact. The remainder, 40.0%, valued the technology training (see Table 19).

Table 19

*Frequency Table for VETQ Question: What, if anything, did you like about the eMINTS Professional Development experience?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>9</td>
<td>60.0</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Technology Experiences</td>
<td>6</td>
<td>40.0</td>
<td>40.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
A lack of resources, such as time, can be a contributing factor in teacher dissatisfaction. The majority of Veteran eMINTS Teachers, 40.0%, identified travel as the most negative aspect of the eMINTS Professional Development experience (see Table 20). eMINTS teachers are required to participate in 100 hours of training outside of the regular school day each year in a central training location. For some Veteran eMINTS Participants, this meant an additional 2 hours driving to or from training in the evening after the normal school day recessed.

Table 20

*Frequency Table for VETQ Question: What, if anything, did you NOT like about the eMINTS Professional Development experience?*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>6</td>
<td>40.0</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Need Continued Training</td>
<td>2</td>
<td>13.3</td>
<td>13.3</td>
<td>53.3</td>
</tr>
<tr>
<td>No Comment</td>
<td>4</td>
<td>26.7</td>
<td>26.7</td>
<td>80.0</td>
</tr>
<tr>
<td>Training too swift and not indepth</td>
<td>3</td>
<td>20.0</td>
<td>20.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Summary

In summation, there were found to be no significant differences among the Veteran eMINTS Teachers and their Non-eMINTS Colleagues in regards to the three subscales, Emotional Exhaustion, Depersonalization, and Personal Accomplishment, of the Maslach Burnout Inventory-Educators Survey. Additionally, Levene’s Test for Equality of Variances determined there were differences among the two samples in relation to advancement to leadership. There is a significant difference between the numbers of Veteran eMINTS Teachers who advanced to leadership positions versus their Non-eMINTS Colleagues. Five Veteran eMINTS Teachers advanced to leadership positions after completing the National eMINTS Program Training while only two of their colleagues from the sample advanced in the same time period. The most notable data came from 100% affirmation by Veteran eMINTS Teachers that the National eMINTS Instructional Program had a positive career impact.
CHAPTER 5
SUMMARY OF FINDINGS AND DISCUSSION

Overview of the Study

This study was designed to investigate veteran eMINTS teacher’s perceived value of the eMINTS instructional model of design. The study explored if a correlation exists between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the demands associated with training for and maintenance of instruction in the technology enhanced classroom.

This study draws from the cross-sectional survey responses of 30 teachers. The determinant for size in this group was to provide enough data to conduct an analysis which yields significant results as indicated by an alpha factor of .05 (Creswell, 2003). Participants are a convenience sample of 15 veteran eMINTS instructors from the FY00 (1999-2000), FY01 (2000-2001), and FY02 (2001-2002) cycles of the eMINTS National Program. The FY00, FY01, and FY02 sequences were chosen as they were the first three cycles of eMINTS participants and sufficient time has passed to allow for review of matriculation, leadership advancement, or “burn out”. Fifteen veteran teachers were chosen from the South quadrant area. The second component of this study is comprised of a convenience sample of 15 non-eMINTS colleagues of the veteran eMINTS teachers when they were eMINTS training participants in the FY00, FY01, and FY02 cycles. Comparative analysis of responses from veteran eMINTS teachers to their non-eMINTS colleagues allowed for consideration of variables in matriculation, leadership advancement, or “burn out” not related to the eMINTS training experience.
The profile and demographic data was presented in a descriptive form and analyzed using frequency of responses. The Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach, et al., 1996), the foremost instrument used to examine burnout among professional educators, was administered to all participants in this study. The tool is used to determine burnout across the dimensions of emotional exhaustion, depersonalization, and personal accomplishment. Maslach’s Burnout Inventory is customarily administered to evaluate the relationship between the stress-strain-coping continuum and measured outcomes of burnout. There were no significant differences among Veteran eMINTS Teacher and Non-EMINTS Colleague responses in the three subscales.

Purpose of the Study

The purpose of this study was to investigate veteran eMINTS teacher’s perceived value of the eMINTS instructional model of design. The study explored whether a correlation exists between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burn out from the demands associated with training for and maintenance of instruction in the technology enhanced classroom.

Summary of Findings

Teaching Position

The Demographic Data Section of the VETQ survey was analyzed for information in response to research question #1: Is there a significant difference between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS training model and the time their non-eMINTS colleagues continue to teach in the same content area and grade level? The data was analyzed using an independent samples t-test of the variables classroom assignment and years in the same position and found there to be no
significant difference between the time veteran eMINTS teachers continue to teach in the same content area and grade level after completion of the eMINTS training model and the time their non-eMINTS colleagues continue to teach in the same content area and grade level.

Satisfaction with the teaching profession

Data analyses of the responses to item 7 gauge an interval scale response to satisfaction with the teaching profession for both eMINTS teachers and their non-eMINTS colleagues. The data were analyzed using frequencies and percentages for each group to respond to research questions #2: Are there significant differences between how veteran eMINTS teachers rate satisfaction in teaching after completion of the eMINTS training model and how their non-eMINTS colleagues rate satisfaction in teaching? This comparison was calculated using a cross-tabulation with a chi-square and determined there are no significant patterns among eMINTS teachers who gauge satisfaction with teaching and non-eMINTS teachers who gauge satisfaction with teaching.

Teacher Burnout

Comparative analyses of the responses derived from the Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscale items of the Maslach Burnout Inventory (MBI-ES) were used to determine significance among veteran eMINTS teachers and non-eMINTS teachers regarding subscale items. The data were analyzed using a non-parametric Mann-Whitney $U$ Test of significance for each convenience sample to respond to research questions #3: Are there significant similarities between how veteran eMINTS teachers score the Maslach Subscale Items of Emotional Exhaustion, Depersonalization, or Personal Accomplishment and how their non-eMINTS colleagues rate these subscale items? The Mann-Whitney $U$ Test determined there was no significance between how veteran eMINTS teachers
scored on the Maslach Subscale Items of Emotional Exhaustion, Depersonalization, or Personal Accomplishment and how their non-eMINTS colleagues rated these subscale items.

*Leadership matriculation*

Comparative analyses of the responses to item 6 were analyzed to determine if there are differences in the number of eMINTS teachers who assumed leadership positions after completing the eMINTS National training program and the number of non-eMINTS colleagues who assumed leadership positions. The data were analyzed using frequencies and percentages for each group to respond to research question #4: Are there significant differences in the number of eMINTS teachers who assume leadership positions after completing the eMINTS National training Program and the number of non-eMINTS colleagues who assume leadership positions? This comparison determined there was no significance between those who advance to leadership and those who are satisfied with teaching between the two sample groups.

*eMINTS constructivist methodology*

Responses to items 9-16 of the VETQ, regarding veteran eMINTS perceptions of the eMINTS training methodology, were coded using percentages for each response; a mean score for each subpart was calculated, with the means presented in rank order. This data were analyzed to respond to research question #5: Are there similarities among perceptions held by veteran eMINTS teachers in relation to the eMINTS training methodology? Summaries of categorical variables included frequency and the percentage of response within each category. Statistical analysis comparing teacher perspectives was performed using a \( t \)-test.

It was determined there were similarities among perceptions regarding the impact of the eMINTS Instructional Model. In response to VETQ question nine, 73.3% of Veteran eMINTS Teachers said the eMINTS instructional model improved classroom teaching significantly. In
response to VETQ question ten, 33% of respondents stated the amount of time required for professional development by the eMINTS National Center was adequate while 40.0% found it slightly overwhelming. In response to question eleven, 100% of Veteran eMINTS Instructors said the eMINTS professional development model had a positive impact on their career. 60% of those sampled revealed they continue to use some of the constructivist, learner-centered methods proposed by the National eMINTS Center when surveyed in question twelve. For question thirteen, 46.7% of participants noted they moderately use constructivism in the classroom. 73.3% of those polled believe themselves to be ahead of their colleagues in technical expertise (question fourteen). When Veteran eMINTS Teachers were asked in question fifteen what they liked about the eMINTS Professional Development experience, 60.0% stated teacher collaboration while the remaining 40.0% liked the technical training. Four participants did not respond to question sixteen. However, from those that did respond the majority, 40.0%, stated they did not like the added stress of traveling to training.

Conclusions

Although this study examined the differences in burnout and advancement levels in two teacher groups, without analyzing their causes its results may nonetheless be of interest to teachers considering participating in the National eMINTS training model. For those schools which have considered of applying for the eMINTS grant, but have not yet done so because of concerns with the stresses of added technology training, studies such as this may give them the confidence they need to explore the opportunity further. Veteran eMINTS Teachers overwhelmingly agreed the eMINTS Instructional Model had a positive impact on their teaching career.
At the same time, teachers who are experiencing symptoms of burnout and are considering leaving their jobs may find that they can achieve greater job satisfaction, not by leaving the teaching profession, but by teaching in an eMINTS classroom. In the teaching profession, burnout may contribute to and result from both poor classroom climate and school disorganization. School boards may want to sponsor research into the conditions in individual schools which lend themselves to lower levels of teacher burnout and attempt to implement change within their schools. The implications of this study affect not only teachers but also schools, students and communities, and indicate the importance of carrying out further related research.

Limitations of the Study

Self-Report

One of the primary limitations of this study was that the research was based entirely on self-report measures. As the constructs of burnout, efficacy, administrative supports, and curriculum supports are all affected by self-perceptions, it is appropriate to measure these constructs via this method. However, the measures of implementation were also collected through teacher self-report, rather than by an observer, and previous research has found low levels of correspondence between teacher self-report and observed levels of implementation (Wickstrom, Jones, LaFleur, & Witt, 1998).

Population Size and Demographics

The sampling frame should be representative of the population. Considering there are currently over 3,500 eMINTS teachers, 15 Veteran eMINTS teachers may not be an accurate representative of the entire eMINTS population. Further, as those surveyed were all from the
eMINTS South area and experienced the same Cluster Specialist for training, eMINTS teachers from other areas may have alternative perspectives of the eMINTS training model.

Locus of Control and Self-Efficacy

A limitation of this study is the failure to consider individual teacher traits such as locus of control or self-efficacy. Locus of control is a term in psychology which refers to a person's belief about what causes the good or bad results in his or her life, either in general or in a specific area such as health or academics. Those with a high internal locus of control have better control of their behavior, tend to exhibit more political behaviors, and are more likely to attempt to influence other people than those with a high external locus of control; they are more likely to assume their efforts will be successful. They are more active in seeking information and knowledge concerning their situation. There is often a correlation with a high locus of control and leadership advancement (Rotter, 1966).

Teacher efficacy has been defined as "teachers’ belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passaro, 1994, p. 4). In addition, the construct includes teachers’ judgments about their own capacity to manage student behavior. Low levels of teachers' instructional and classroom management efficacy were associated with poor job performance (Betoret, 2009), and efficacy beliefs have a strong influence on behavior (Tschannen-Moran, Hoy, & Hoy, 1998; Tschannen-Moran & Hoy, 2001). Teachers with a stronger sense of efficacy set more challenging goals for themselves and their students, take responsibility for student outcomes (Ross, 1995), and are more likely to adopt innovations (Fuchs, Fuchs, & Bishop, 1992). Teacher efficacy has been linked to more successful implementation of prevention curricula. In order to fully understand
why a teacher does not advance to a leadership position, it may be important to more closely examine the locus of control and efficacy scale of individual teachers.

*Alternative reasons contributing to burn-out*

The three subscale items for teacher burn-out may be affected by any one of a plethora of contributors to emotional exhaustion, depersonalization, or personal accomplishment. A limitation of this study may be consideration for other factors aside from eMINTS placement and training. Other factors which may contribute to burn-out are an unsupportive school leader, witnessing other teachers failing in their classrooms, parents who fail to support learning and students who have behavioral problems.

*Implications for Practice*

There are several implications which flow logically from the aforementioned conclusions. First, as eleven of the fifteen Veteran eMINTS Teachers left the eMINTS Classroom after extensive hours of eMINTS specific training, it would be worthwhile to more closely examine the reasoning for departure. If there are similar reasons noted for leaving the classroom, other than matriculation to leadership or retirement, the school may more carefully select participants to ensure continued integrity of the program.

In a second implication it may be noted all fifteen Veteran eMINTS Teachers said the eMINTS training program had a positive impact on their teaching career. Of those, five advanced to leadership positions after completing eMINTS training. In addition, twelve of the fifteen Veterans stated they felt a moderate to high level of Personal Accomplishment. These combined points may be considered a testimony to the effectiveness of the eMINTS Instructional Model and a selling point for district level participation.
A final implication of the study is the negative impact Veteran eMINTS Teachers stated travel for training had on the overall eMINTS experience. Perhaps the National eMINTS program may consider more site specific or online opportunities to reduce the stress associated with the requirements of intensive eMINTS training. For example, Maine’s Learning Technology Initiative (MLTI) eMINTS program is part of a ubiquitous 1-to-1 digital learning program which provides laptop computers and wireless classrooms to all 7th and 8th grade students and their teachers, along with resources, technical assistance, and professional development for administrators and teachers. Teachers are given online resources for instruction and on-site support by area cluster specialists as needed. This type of delivery allows teachers to complete their daily commitments without adding undue stress of a lengthened work day or travel. A similar model may positively influence teacher perspectives of the National eMINTS Training Model.

Recommendations for Further Research

There are numerous recommendations for further study of technology based instructional practice, teacher burnout, and advancement to leadership. There is much which has not been investigated regarding the cognitive and pedagogical design of technology based instruction. Understanding an effective model of teacher technology integration preparation may hold promise of more general applicability in the investigation of the mediated nature of student learning. How may we credibly prepare pre-service teachers to effectively use classroom technology to supplement student understanding?

Larger sample size

The study could be repeated with a larger population sample. Though low correlations were found between teacher burnout and demographic data, no statistically significant results
were achieved, possibly due to the small sample size. A larger-scale study could generate statistically significant results.

*Different populations*

The current study was performed using a convenience sample of a population from the South eMINTS area were Veteran eMINTS Teacher participants experienced training under the same eMINTS Cluster Specialist. A repeat study using a sample from the remaining eMINTS area populations showing similar trends could further verify whether a relationship exists between the eMINTS Instructional Teacher Preparation Model, teacher burnout, or advancement to leadership. Further, a possible area of research could be evaluation of specific eMINTS Cluster Specialist effectiveness.

*Locus of control and self-efficacy*

The present study assumes that a lower level of teacher burnout is attributable to the environment experienced by teachers; however, it does not analyze the characteristics of teachers seeking work in schools. Research carried out by Sadowski (1993) there was a positive correlation between an internal locus of control in teachers and lower burnout levels. A further study could be carried out to investigate the level of internal locus of control for eMINTS teachers. The literature reviewed also included a study by Evers (2000) which found that teachers with a strong sense of self-efficacy suffered less from the symptoms of burnout than teachers with low self-efficacy. An additional study could be conducted to verify whether the percentage of teachers with a high level of self-efficacy in eMINTS classrooms is greater than that of their Non-eMINTS Colleagues. These studies could help determine the extent to which training for the eMINTS classroom leads to a teacher burnout level.

*Personality differences*
The personality traits of teachers who seek participation in eMINTS classrooms may vary from those of their colleagues, and it may be these traits, rather than the eMINTS environment itself, that account for either sample’s level of burnout. A longitudinal pretest-posttest study which tests teachers twice – once before eMINTS training and a second time once they have completed eMINTS training– would show whether the confounding variable of personality has an effect on the level of burnout experienced.

Causes of burnout

For the study to be useful to school boards and administrators, the differences in environmental factors leading to burnout must be considered. A study could be performed to investigate the factors leading to burnout that are present in eMINTS classrooms yet absent in Non-eMINTS classrooms. If substantial differences are identified, a study that focuses on why these factors are absent in Non-eMINTS classrooms could help administrators and boards in eMINTS schools reduce the factors that lead to teacher burnout.
References


Skiba, D. (2007). Faculty 2.0: Flipping the novice to expert continuum. Nursing Education Perspectives, 28(6), 342-344.


APPENDIX A

INFORMED CONSENT LETTERS
Dear Veteran eMINTS Teacher,

I am inviting you to participate in a research project to study Veteran eMINTS Teacher’s perceived value of the eMINTS instructional model of design. The study will explore if a correlation exists between veteran eMINTS teacher perceptions and matriculation to a position of leadership or, conversely, burnout from the technology enhanced classroom. Along with this letter is a short questionnaire that asks a variety of questions about how technology has impacted your professional achievements and instructional technique. You will also find a form, the Maslach Burnout Inventory--Educators Survey (MBI-ES), which is designed to measure three subdimensions (exhaustion, cynicism, and professional efficacy) of burnout in educators. I am asking you to look over each questionnaire and, if you choose to do so, complete it and send [or give] it back to me. It should take you about 10 minutes to complete.

Through your participation I hope to understand the correlation between systemic technology reform for educators and its relation to leadership advancement. I am optimistic the results of the survey will be useful for encouraging classroom teachers to seek advanced technological training, like that provided by the National eMINTS Program. I hope to share my results by publishing them in a scientific journal. There are no foreseeable risks to the participants or to the subjects of this study. Benefits to the subjects or society may include an understanding of the impact of the eMINTS instructional model on teacher matriculation to leadership.

You will not be identified personally and I guarantee complete confidentiality of your responses. I promise not to share any information that identifies you with anyone outside my research group which consists of me and my doctoral advisors at the University of Missouri-Columbia. Please do not put your name on this questionnaire or other identifiable characteristics. You are not required to answer all items and may withdraw at any time without penalty. If you do not feel comfortable returning your survey to me in person, you may also mail it to the address on the enclosed stamped envelope.

Each survey should take you about 10 minutes to complete. I hope you will take the time to complete these questionnaires and return them. Your participation is voluntary and there is no penalty if you do not participate. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, write:

Julie R. Thompson, Director of Curriculum and Instruction
West Plains R-VII Central Administration Building
613 W. First Street
West Plains, MO 65775

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at 417-270-0811. This project has been approved by the Institutional Review Board at The University of Missouri-Columbia (Project #: 1161397).

Sincerely,

Julie R. Thompson
Dear Research Participant,

I understand you are the colleague of a former Missouri eMINTS teacher. I am inviting you to participate in my research project to find out teacher opinions regarding the use of technology in the curriculum. My work is part of the requirement for the Doctor of Education degree in Educational Leadership and Policy Analysis at the University of Missouri—Columbia. I want to understand what relationship, if any, may be found in improved technology integration and leadership advancement. I have attached a short survey and a copy of the Maslach Burnout Inventory which I hope you will fill out and return it to me. It should take you about fifteen minutes to complete. There are no foreseeable risks to the participants or to the subjects of this study. Benefits to the subjects or society may include an understanding of the impact of the eMINTS instructional model on teacher matriculation to leadership.

Each survey should take you about 10 minutes to complete. I hope you will take the time to complete these questionnaires and return them. You are not required to answer all items. Your participation is voluntary and there is no penalty if you do not participate. Regardless of whether you choose to participate, please let me know if you would like a summary of my findings. To receive a summary, write:

Julie R. Thompson, Director of Curriculum and Instruction
West Plains R-VII Central Administration Building
613 W. First Street
West Plains, MO 65775

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at 417-270-0811. This project has been approved by the Institutional Review Board at The University of Missouri-Columbia (483 McReynolds • University of Missouri • Columbia, MO 65211 • 573 882-9585 phone • 573 884-0663 fax-- Project #: 1161397).

Sincerely,

Julie R. Thompson
Doctor of Education degree program, Educational Leadership and Policy Analysis
University of Missouri--Columbia
APPENDIX B

VETERAN EMINTS TEACHER QUESTIONNAIRE (VETQ)
Survey

Veteran eMINTS Teacher Questionnaire

SECTION 1: DEMOGRAPHIC DATA

This section is to be completed by all survey participants.

Note: All responses are strictly confidential and will remain anonymous. Please choose one:

☐ I am a Veteran eMINTS Teacher.
   If yes, select your year of participation:
   ☐ FY00 ☐ FY01 ☐ FY02

☐ I am the colleague of a Veteran eMINTS Teacher.
1. What is your sex?
   ○ Male
   ○ Female

2. What is your age? (circle one)  26-35  36-45  46-55  56-65  Over 65

3. Are you still a classroom teacher?
   ○ Yes   ○ No (If not, please briefly explain.)

If you responded Yes to the question above, what is your current teaching assignment? Please specify grade level and content area.

________________________________________________________________________

4. How many years have you been or were you, if no longer applicable, a classroom teacher?

5. Is this the same position you held during your eMINTS training?  ○ Yes  ○ No
   (If you are the colleague of a MO eMINTS teacher but not an eMINTS teacher yourself, is this the same position you held during your colleague’s eMINTS training?)

   If yes, how many years in this position? _____________
6. Did you advance to a new position after completing your eMINTS training?
   ○ Yes  ○ No
   *(If you are the colleague of a MO eMINTS teacher, have you advanced to a new position after your colleague’s completion of eMINTS training?)*
   If you answered YES above, to what do you attribute this job advancement?
   OR choose  ○ N/A

7. How would you currently gauge your satisfaction with the teaching profession?
   ○ Not at all  ○ Minimally  ○ Somewhat  ○ Moderately  ○ Very  ○ Completely

8. If I could select a new career:
   ○ I would still choose to become a teacher.
   ○ I would NOT choose to become a teacher.
Survey

Veteran eMINTS Teacher Questionnaire

SECTION 2: VETERAN PERCEPTIONS
This section is to be completed by Veteran eMINTS Teachers Only.

Note: All responses are strictly confidential and will remain anonymous.

9. To what extent did the eMINTS instructional model improve your classroom teaching?
   - Not at all
   - Very little
   - Moderately
   - Substantially
   - Completely

10. The amount of time required for professional development by the eMINTS National Center was—
    - Insufficient
    - Adequate
    - Slightly overwhelming
    - Moderately overwhelming
    - Overwhelming

11. How did eMINTS professional development impact your career?
    - eMINTS PD had a positive impact on my career.
    - eMINTS PD had a negative impact on my career.
    Briefly explain:

12. How would you currently gauge your instructional methodology in relation to the eMINTS Instructional Model?
    - I continue to use the constructivist, learner-centered methods proposed by the National eMINTS Center.
    - I continue to use some of the constructivist, learner-centered methods proposed by the National eMINTS Center.
    - I do NOT use the constructivist, learner-centered methods proposed by the National eMINTS Center.
13. To what extent do you currently use the constructivist, learner-centered methods proposed by the National eMINTS Center?

- Not at all
- Very little
- Moderately
- Substantially
- Completely

14. In relation to technical expertise, I would gauge myself:

- behind my non-eMINTS colleagues.
- equal to my non-eMINTS colleagues.
- ahead of my non-eMINTS colleagues.

15. What, if anything, did you like about the eMINTS Professional Development experience?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

16. What, if anything, did you NOT like about the eMINTS Professional Development experience?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
APPENDIX C

MASLACH BURNOUT INVENTORY—EDUCATORS SURVEY (MBI-ES)

{Note: This instrument will be purchased and dispersed after approval by the IRB}
Teachers in peer-mediated classrooms

Am I still the teacher?:
The teacher’s role in a peer-mediated learning environment

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Teachers in peer-mediated classrooms

Abstract

This study explores the professional roles and identities of teachers who are participating in a student-centered instructional model in urban science and mathematics classrooms. In this model, the Peer Enabled Restructured Classroom (PERC) program of the Math and Science Partnership in New York City (MSPinNYC), the teacher plans, facilitates, and assesses student learning with the assistance of high school Teaching Assistant Scholars (TA Scholars). Contrary to traditional, teacher-centered classrooms, the majority of PERC class time is spent with the TA Scholars directing learning experiences in their groups of four students. The teacher is no longer the chief source of information in the classroom. This shift in classroom focus had a variety of impacts on the participating teachers’ sense of their role in the instructional experience and their identities as teachers. Some teachers believed that they had now become the teachers they had always wished to be, while others experienced as loss of identity as their concept of teacher-as-explainer was challenged by implementing the model. Findings also include challenges and possibilities of the new roles that the teachers developed in the PERC model classroom.
Teachers in peer-mediated classrooms

Research Objectives

While previous studies have examined the development of teacher identity and roles at different points in teachers’ careers, the impact of specific pedagogies on teachers’ identities is absent from the literature. This study seeks to fill this gap, exploring the ways teachers perceive their roles in the classroom and their identities as teachers when they implement student-centered, peer-facilitated pedagogy.

Background

This study was conducted as part of the work of the Math and Science Partnership of New York City (MSPinNYC), a National Science Foundation-funded project to improve mathematics and science learning in urban classrooms. The instructional model was named Peer Enabled Restructured Classrooms (PERC) to emphasize the complete change in approach to learning and the central role of the peer-instructor in this process. The PERC program is being implemented in algebra and biology classes in New York City high needs schools, both in summer school and academic year classrooms. The PERC model involves peer-mediated instruction, in which the students spend the majority of the class period working in a small group led by a Teaching Assistant Scholar (TA Scholar). The group activity is carefully planned by the teacher and implemented by the TA Scholars, who provide feedback to the teacher about the instruction and students’ progress. The TA Scholars are students who have passed the course and the associated state exam, but not at a very high level, and are usually one to two years older than the students taking the class. During class, the teacher conducts whole class instruction for approximately 10 minutes and spends the majority of the class time observing student interactions and supporting group functioning. Teachers occasionally work one-on-one with individual students during the group work time. The class ends with a summary or assessment, either whole class or group-based. During a focus group at the beginning of the 2009 summer program, experienced TA Scholars argued forcefully that the PERC classroom would function the same way if the teacher left the room but would be completely altered by the absence of the TA Scholars. While the TA Scholars may have a limited view of the entire classroom process, their perspective certainly suggests that the PERC model has altered the classroom from a teacher-centered to a student-centered learning environment.

The PERC program initially was developed during summer school for high school students who had not passed their state mandated exam in mathematics or science. During the five weeks of the program, the students spend four days a week working with their teachers and TA Scholars. The students’ day consists of a two-hour class followed by a 90 minute tutoring session that focuses on exam preparation. After lunch, the teachers and TA Scholars meet together to reflect on the morning and plan for up-coming lessons. The TA Scholars and teachers then work separately to prepare for future instruction. While the program began using undergraduates as TA Scholars, most TA Scholars in summer 2009 were high school students supervised by one undergraduate per class. Based upon the tremendous success of the summer revision program, in which students pass the state exam at a rate of two to twelve times the rate of standard summer school programs in the city, an academic year model was piloted in spring of 2008 and implemented fully in the 2008-2009 and 2009-2010 academic years. During the academic year program, the TA Scholars are scheduled into both a PERC class to support students taking the course for the first time and their own TA Scholars class, in which they learn
Teachers in peer-mediated classrooms

The pedagogical skills and review the content necessary to implement the PERC lesson, as well as learn advanced mathematics and science content and college preparation skills.

The program has been highly successful for the students, both in terms of test scores and affective responses to learning (Gerena & Keiler, 2009a; Gerena & Keiler, 2009b; Keiler, 2010). TA Scholars also report positive outcomes in terms of self-confidence, understanding of and affective response to science and mathematics, and plans for college attendance. However, while the project has carefully structured, examined, and documented the impacts on both the students and the peer-instructors, the experiences of the teachers have remained relatively unexplored. The current study analyzes the perspectives of the teachers who have participated in the program during the summers of 2008 and 2009 and the 2008-2009 and 2009-2010 academic years. The focus of the study is the examination of the teachers’ perceptions of how implementing this student-centered pedagogy affects their roles and identities as teachers.

Literature Review

“Teacher identity is based upon the core beliefs one has about teaching and being a teacher that are constantly changing and evolving based upon personal and professional experiences” (Grier & Johnston, 2009, p. 59). Cohen (2008) argues that, “teachers’ identities are central to the beliefs, values, and practices that guide their engagement, commitment, and actions in and out of the classroom” (p.80). The initial development of teacher identity is prevalent in the literature. For example, Volkman and Anderson (1998) examine the interaction between personal and professional identity in a first year teacher’s development, analyzing the interactions between reality and expectations. Proweller and Mitchener (2004) argue that students play a central role in the development of their teachers’ professional identities. Grier and Johnston (2009) review the career changer literature, describing the loss of identity many new teachers experience as they leave established careers and enter the classroom. Their own work highlights the challenges these previously competent adults faced as they took on the roles of novices and learners in their development of teacher identities. Eick and Reed (2002) argue that the past experiences of new teachers affect their development of a teacher identity and this identity then affects the pedagogies that teachers choose to implement. Similarly, Rex and Nelson’s (2004) study of the pedagogical choices of secondary English teachers demonstrates that such decisions are strongly affected by teacher identity. Teacher self-efficacy is related to the concept of teacher identity. Davis, Petish, and Smithey’s (2006) review of the literature describes the impact of teacher self-efficacy on their choice of pedagogies, with stronger self-efficacy being associated with inquiry-based instruction. Additionally, multiple studies have demonstrated that participating in inquiry-based instruction increases teachers’ self-efficacy (Richardson & Liang, 2008). However, there is an absence of research exploring the ways in which practicing teachers’ roles and identities are affected by implementing new pedagogies, which is the focus of the current study.

Methodology

This study draws on a variety of data sources (Stake, 1994, 1995; Yin, 2009) to explore teacher perspectives about their roles and identities in peer-mediated classrooms. Data was collected during the summers of 2007, 2008 and 2009, as well as during the 2008-2009 and 2009-2010 academic years. Twenty teachers, along with their TA Scholars and students, were
involved in the study. Data sources included semi-structured interviews (Kvale, 1996; Merriam, 1988), focus groups (Krueger & Casey, 2009), surveys, reflective writing, and classroom observations. Categories emerged through close reading of the data and patterns developed within the categories through reiterative review of the data (Huberman & Miles, 1994).

Findings

“How do I do this?”

As with Grier and Johnston’s (2009) study, the teachers participating in the MSPinNYC program had to develop an identity of novice and learner. However, while previous work explored this experience for career switchers, the teachers in this study were not changing careers but developing new pedagogies to implement in their existing classrooms. The teachers in the current study had a wide range of responses to this learner identity. Some claimed to welcome the opportunity to develop new skills that they thought would benefit their students while others resisted losing their expert identities. Those who were eager to learn implemented the model quickly compared with their peers who tried to hold onto their expert status, regardless of their own preferred pedagogies.

“This was the best way to come into the program.”

The MSPinNYC has established summer school as a primary means of orientation to the PERC program and professional development for the participating teachers. During the summer of 2009, nine teachers entered the program by teaching the full 5 weeks of summer school. The teachers worked in three pairs and one trio to plan and implement the four PERC classes. Each morning the teachers facilitated the PERC classes, supervised the tutoring sessions run by the TA Scholars, and met with their TA Scholars to get feedback and give them their assignments for the next day. Each afternoon the teachers collaborated with the researchers and professional development staff to discuss the days’ lessons and student progress, and then to plan the subsequent day’s lessons. A TA Scholar who was a college student with experience in the program led the high school TA Scholars during their planning time. The TA Scholars worked together in the afternoons to prepare their tutoring sessions for the following day. Four additional teachers spent one week participating in the classes and being mentored to plan their own PERC lessons for the academic year. Two teachers had no summer experience but had the opportunity to observe the PERC and TA Scholars classes in their school during the spring of 2009.

In interviews both during the summer and the 2009-2010 academic year, summer school teachers attributed their successful entry into the program to the collaborative planning with peer teachers and mentorship by researchers and professional development staff. They claimed that having targeted feedback about their PERC lesson plans was critical for them as they changed their thinking about their role in the classroom and learned how to teach through the TA Scholars. During the academic year, teachers complained about mentoring from professional development staff that waivered from issues central to PERC into other aspects of their teaching and interactions with administrators. Teachers who were isolated in implementing PERC within their schools were frustrated by the lack of collaborative planning during the academic year. While planning upcoming lessons was a major component of monthly professional development meetings and teachers shared lessons and resources across schools through online communication, daily planning with a peer PERC teacher in the same discipline proved invaluable to the teachers who were able to continue this type of relationship year-round.
Teachers who spent a week in the summer program claimed that sitting in on real PERC classes and planning PERC lessons under the mentorship of professional development staff enabled their smooth transition to PERC teaching. Teachers who did not experience summer school argued that being able to see the PERC and TA Scholars classes in action the previous spring was necessary and sufficient for their introduction as a PERC teacher. Each teacher claimed that the way he or she entered the program was appropriate.

“It lets me be the teacher I always wanted to be.”

Some teachers described the ways in which participating in the MSPinNYC PERC model allowed them to fulfill their vision of what it means to be a teacher. Teachers in this group tended to view themselves as facilitators of learning and believed that the model allowed them to live this role in ways that had not been possible in the traditional classroom. They described the shift in their role in the classroom from dispenser of information to assessor of understanding. At the end of the 2008-2009 academic year, one teacher reflected that in her favorite lessons she did not talk to the whole class at all and the lesson was completely implemented by the TA Scholars, allowing her to listen to the students and gain insight about what they could do. Another teacher, new to the program in the 2009-2010 academic year, expressed a similar perspective during his first month, claiming that the most effective lessons were review carousels completely facilitated by the TA Scholars. These teachers argued that planning effective learning experiences for the peer-instructors to implement was their most important function in this new system. They claimed that they were working harder than ever to prepare for PERC classes, but that during class they were much more relaxed and reflective than in previous years. They perceived that the active engagement of the students in the learning process had reduced classroom management demands. Further, they explained that when a student did need personal attention from the teacher for a behavioral issue, the TA Scholars ensured that the rest of the class was still learning. Thus, the PERC model allowed them to reduce their identity as disciplinarians. One of the teachers who learned the PERC model in the summer enthusiastically described September of 2009 as the best start of her 4-year career.

“I hardly teach anymore.”

For other teachers, learning to be a program teacher challenged their very concept of what it means to teach. These educators claimed that their favorite mode of both learning and teaching was lecture. However, most teachers in this group acknowledged that this pedagogy was not effective for their students, as evidenced by their test scores and their behavior in class. Still, these teachers’ identities seemed to be wrapped up in their role as lecturer. In a 2009 summer professional development session in which he was demonstrating the PERC model, one teacher claimed, “I hardly ever teach anymore.” When challenged to explain this claim, it became clear that he equated ‘teaching’ and ‘explaining.’ This attitude was prominent for several teachers as they entered the program, having a very clear sense of their identity as the person who explained concepts and processes to their students. However, the concept of teaching for several of these teachers changed through their participation in the summer program. This was evident in end-of-summer interviews in which teachers used language such as “Now, I rarely talk when I teach.” Thus, they were still ‘teaching,’ but in new ways.

Teachers in this category also initially believed that they had more control over the classroom when they were the center of instruction. During the summer of 2009, one teacher, who had just finished the first year of his alternative certification program, expressed frustration that a
learning activity in which the students were highly engaged and demonstrating increased understanding was taking longer than he had planned. He claimed, “When I am teaching, I know how long it is going to take.” When the researcher queried, “Then have you ever know how long it takes the students to learn it?” he stood in stunned silence, eventually responding, “I never thought about it that way.” Throughout the 2009-2010 academic year he referred to this moment as an epiphany in his teaching, when he first realized that planning was not about him and what he would do but instead was about student learning.

“The TAs know them much better than I do.”

A critical part of many teachers’ identities seemed to involve their care for and understanding of individual students. Some believed that they understood their students better because of the structure of the PERC classroom. One teacher described her surprise at the higher order thinking that her students could do with the TA Scholars compared to the lower order questions she had asked the same students in previous classes. Another teacher described the personal interactions she had with students, particularly those who were struggling, in her PERC classes in contrast to the whole group overview she had before joining the program. Teachers talked about the increase in information accessed as they listened to the small group interactions, claiming that it was easier to listen carefully when they did not have to think about their responses to student questions or the next question to pose to students themselves.

Other teachers perceived the TA Scholars as a buffer between themselves and their students. One teacher claimed that teachers did not know that a student was an English Language Learner because they relied on the TA Scholars for that kind of information. Another teacher expressed dismay that the TA Scholars seemed to have a much deeper understanding of student learning progress than he did. While he initially intimated that the TA Scholars were blocking his direct access to this information, during subsequent conversation with a researcher this teacher admitted that he had not accessed this level of insight about his students when his classes had been teacher centered. What was different with the PERC model was that the TA Scholars had demonstrated the kinds of information available about student understanding in this classroom. This teacher admitted that he was jealous of his TA Scholars’ insights, while believing that he needed to look at more of the students’ written work in order to catch up on this understanding.

“What is my role regarding the TA Scholars?”

Even though every teacher to participate in program has praised the impact that the TA Scholars have on student learning and affect in their PERC classes, all but one of the teachers has seemed to struggle with some aspects of their relationships with the TA Scholars. In many cases, this could be attributed to the teachers’ over estimation of the TA Scholars’ maturity and independence. Becoming managers of other instructors in their classrooms was a new role that proved difficult to master.

Throughout the summer of 2009, teachers praised the TA Scholars for their in-class efforts, but complained to the administrative staff and researchers about the lack of effort that the TA Scholars were putting into their preparation for class and tutoring sessions. The staff and researchers encouraged the teachers to be clear and firm with the TA Scholars about expectations, reminding them that the teachers are the bosses in an employer-employee relationship. Teachers also were reminded that most of the TA Scholars were high school students and needed to be monitored to ensure that they were meeting expectations. For example, when a researcher saw the TA Scholars in the computer lab looking at You-Tube videos
unrelated to the upcoming lessons, she talked to the teachers about increasing their level of supervision of the TA Scholars’ work. Teachers increased their vigilance for that day, but quickly returned to leaving the undergraduate TA Scholar to supervise the high school TA Scholars. This led to continuing frustration for the teachers, as many TA Scholars did not complete assignments unless the teachers actively intervened.

During the 2008-2009 and 2009-2010 academic years, teachers whose TA Scholars class was scheduled during the first period of the day had significant attendance problems in that class. They claimed that some TA Scholars who took their PERC work very seriously and made a positive impact on their students’ learning were much less committed to their own preparation class. When asked what they were doing about this problem, some teachers said that they did feel comfortable “coming down hard” on the TA Scholars. A similar phenomenon occurs around homework. The MSPinNYC PIs feel strongly that doing homework is a critical aspect of the college preparation component of the TA Scholars’ course. Holding the TA Scholars responsible for the assigned homework is another standard that most teachers struggle with maintaining. Assigning and completing homework is rare in these urban schools, and participating in this cultural shift is something most teachers do not impose upon their TA Scholars during the teachers’ first year in the program. However, a dramatic shift in perspective takes place as teachers enter their second year in PERC. Second year PERC teachers are much more comfortable being demanding of their TA Scholars from the beginning of the year, imposing strict attendance and homework policies. This change in requirements seems to reflect a shift in attitude from being grateful that the TA Scholars are there in the PERC class to seeing that the TA Scholars benefit from the program themselves and need to be held accountable.

“What will my AP think?”

In addition to their own responses to the experience, the teachers’ identities included concern about how others would view their teaching in the new model. Some teachers expressed concern over how MSPinNYC program staff members were evaluating their performance in the PERC classrooms. These teachers shared their anxiety and perceptions that they were being judged as they learned to teach in the PERC model during summer school. Other teachers described apprehension about how their base school assistant principals would view their work as they implemented the model. Still other teachers articulated the value they felt in being treated as professionals in the classroom as the model was developed, implemented, and tested. One teacher claimed, “You have no idea what it is like to have someone come into your class and treat you as an equal, intelligent professional.” While some teachers discussed the tutors’ perceptions of them, none discussed how their students might view them in their new classroom roles.

Importance of the Study

Teachers’ identities and their perception of their roles in the classroom have implications for teacher retention as well as student learning. If teachers are not comfortable with their identities and if they believe that their work is not valued, they tend to leave the profession (Costigan, 2004, 2005; Flores, 2006; Sparks & Keiler, 2003), exacerbating urban teacher shortages (Baker & Smith, 1997; Ness, 2001; Pigge & Marso, 1997; Scherer, 2003). It would not serve the schools or their students well to participate in a highly effective educational model only to have the teachers involved change careers. This study highlights important shifts in teachers’ roles and
Teachers in peer-mediated classrooms

identities as they implement this peer-mediated educational model, as well as their affective responses to these changes. These responses affected the facility with which the teachers learned to implement the model and their ability to implement it effectively.

The findings of this study have shaped the development of the professional development program for the next phase of the MSPinNYC. When schools enter the program, two teachers in a subject area will become PERC teachers together. This will facilitate collaborative planning of both the PERC and TA Scholars classes. It will enable teachers to visit each other’s classes, benefitting both the observed and observing teacher (Showers & Joyce, 1996). Teachers will have the opportunity to observe PERC and TA Scholar classes the spring before they join the program as part of their orientation. This is consistent with the findings of this study as well as Topping’s (2001) claim that teachers are more willing to implement pedagogies that they have seen used in actual classrooms. In response to teacher concerns about professional development staff behaving like administrators, a clear division will be developed between the professional development staff, who work with the teachers, and the project director, who works with the school administrations. Mentoring will focus on planning for PERC and TA Scholar classes, as well as developing relationships with the TA Scholars. This will satisfy the common teacher desire for mentoring tied to their daily work (Carter & Keiler, 2009). MSPinNYC research will continue to explore the development of teacher roles and identities in the PERC program, developing insights about both program entry and growth and development within the program.
Teachers in peer-mediated classrooms

References Cited


Teachers in peer-mediated classrooms


TITLE: “Insights into Five Centuries of Gender and Ethnicity Challenges To Women of Diverse Populations Serving in the American Armed Forces.”

TOPIC AREA: Teacher Education, Social Studies Education

PRESENTATION FORMAT: This will be a presentation of a Power Point and Paper Session of research about challenges that diverse populations of women face in the American military because of their ethnicities and gender.

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Abstract:
What have been the impacts of societal perspectives and discrimination regarding gender, ethnicity, color, and class on diverse American women [e.g. Native American, African American, Asian Pacific, and Hispanic American] in the armed forces between the 17th and 21st centuries? The “official” history of women in the US military begins in the 20th century with the establishment of the army nurse corps in 1901. That history records almost one-half million women who served in wartime and 1.2 million women veterans counted by the 1990 census. The “official” history ignores tens of thousands of women who have served the military since this country’s founding. Contemporary women in the armed forces who engage in combat are subjected to additional challenges of “balancing family life with a military career, inadequate military health care specifically for women, high rates of sexual assault and harassment, and opportunities for career advancement.”

Section One Introduction

RATIONALE FOR CHOOSING THE TOPIC
The “official” history of women in the US military begins in the 20th century with the establishment of the army nurse corps in 1901. That history records almost one-half million women who served in wartime and 1.2 million women veterans counted by the 1990 census. The “official” history ignores tens of thousands of women who have served the military since this country’s founding.

Contemporary women in the armed forces who engage in combat are subjected to additional challenges of “balancing family life with a military career, inadequate military health care specifically for women, high rates of sexual assault and harassment, and opportunities for career advancement.”

OBJECTIVES OF THE TOPIC
The cognitive or knowledge based objectives of this paper include [1] analysis of the historical roles of diverse populations of women in the US military between the 17th and 21st centuries; [2] learning about selected cases of challenges to diverse populations of women in the US military; and [3] comparison of war/peacetime contributions of diverse populations of women in the US military.

Affective objectives of this paper focus on [1] valuing the contributions of diverse populations of women in the US military; [2] gaining insights into the psycho-social impact of discrimination by color, gender, and/or ethnicity on diverse populations of women in the US military; and [3] rethinking how to teach about women in the US military, especially diverse women populations.

METHOD USED FOR THIS PAPER
The method used to conduct the research for this study was a qualitative one. Qualitative research is a method that seeks insights through verbal and written, rather than statistical and measurable, data. Qualitative research is used when there is an exploratory study that seeks to identify the dimensions of a problem, draw assumptions based on collected data from documents and a variety of primary and secondary sources, and attempts to understand the motivations of the stakeholders involved with the problem.

THE PROBLEM STATEMENT
What have been the impacts of societal perspectives and discrimination regarding gender, ethnicity, color, and class on diverse American women [e.g. Native American, African American, Asian Pacific, and Hispanic American] in the armed forces between the 17th and 21st centuries?
Section Two Selected Review of Literature:

Most of the sources consulted for this study were found through various internet searches that uncovered websites for inclusion in this limited study of diverse American women [e.g. Native American, African American, Asian Pacific, and Hispanic American] in the armed forces between the 17th and 21st centuries. A plethora of websites are available through the various browsers available to researchers. How does one know if the quality of the content on the websites is valid and worthy of inclusion in his/her study? The following seven criteria must be applied in evaluating the quality of internet websites.

<table>
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<tr>
<th>Authority</th>
<th>Who says? Know the author. Who created this information and why? Do you recognize this author or their work? What knowledge or skills do they have in the area? Is he or she stating fact or opinion? What else has this author written? Does the author acknowledge other viewpoints and theories?</th>
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<td>Objectivity</td>
<td>Is the information biased? Think about perspective. Is the information objective or subjective? Is it full of fact or opinion? Does it reflect bias? How? How does the sponsorship impact the perspective of the information? Is a balance of perspectives represented? Could the information be meant as humorous, a parody, or satire?</td>
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<td>Is the information authentic? Know the source. Where does the information originate? Is the information from an established organization? Has the information been reviewed by others to insure accuracy? Is this a primary source or secondary source of information? Are original sources clear and documented? Is a bibliography provided citing the sources used?</td>
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<td>Reliability</td>
<td>Is this information accurate? Consider the origin of the information. Are the sources truth worthy? How do you know? Who is sponsoring this publication? Does the information come from a school, business, or company site? What's the purpose of the information resource: to inform, instruct, persuade, and sell? Does this matter? What's their motive?</td>
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<td>Timeliness</td>
<td>Is the information current? Consider the currency and timeliness of the information. Does the page provide information about timeliness such as specific dates of information? Does currency of information matter with your particular topic? How current are the sources or links?</td>
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<td>Relevance</td>
<td>Is the information helpful? Think about whether you need this information. Does the information contain the breadth and depth needed? Is the information written in a form that is useable (i.e. reading level, technical level)? Is the information in a form that is useful such as words, pictures, charts, sounds, or video? Do the facts contribute something new or add to your knowledge of the subject? Will this information be useful to your project?</td>
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<tr>
<td>Efficiency</td>
<td>Is this information worth the effort? Think about the organization and speed of information access. Is the information well-organized including a table of contents, index, menu, and other easy-to-follow tools for navigation? Is the information presented in a way that is easy to use (i.e., fonts, graphics, headings)? Is the information quick to access?</td>
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Source: Teacher Tap – It is a free, professional development resource that helps educators and librarians address common questions about the use of technology in teaching and learning by providing easy access to practical, online resources and activities. [http://eduscapes.com/tap/topic32.htm](http://eduscapes.com/tap/topic32.htm)

A major source of information consulted in this study is the Women in Military Service for America Memorial website. ([http://www.womensmemorial.org/H&C/h&cwelcome.html](http://www.womensmemorial.org/H&C/h&cwelcome.html)) The web pages are divided into four main categories:

- **Collections**, highlighting photographs, documents, textiles, artifacts and audiovisuals available for research;
- **Exhibits**, featuring selected visuals from the many special and permanent exhibits currently on display at the Women’s Memorial;
- **History**, offering an overview of the history of women who have served in or with the US Armed Forces and resources for further study; and
- **Oral History**, providing a how-to guide, consent forms and a finding aid for those interested in the oral history program as well as excerpts from the hundreds of oral histories in our collections.
A second important website about women in the American military is the U.S. Army Women’s Museum, Fort Lee, Virginia. ([http://www.awm.lee.army.mil/](http://www.awm.lee.army.mil/)) The “about us” page explains that:

The U.S. Army Women's Museum is the only museum in the world dedicated to Army women. The Museum honors women's contributions to the Army from the Revolutionary War to the present, telling their stories with interactive exhibits and videos throughout the gallery, as well as film presentations in our theater. The museum also has an extensive research and learning center, unique gift shop and memorial garden.

A limited review of the literature about women during the American Revolution, and Civil War is included here. Julia Ward Stickley is known for her work about a Revolutionary War woman soldier in "The Records of Deborah Sampson Gannett, Woman Soldier of the Revolution," in the National Archives’ publication *Prologue* 4 (1972): 233—241. Another interesting website sponsored by the National Archives, is entitled Women Soldiers and Nurses of the American Civil War.

It is an accepted convention that the Civil War was a man's fight. Images of women during that conflict center on self-sacrificing nurses, romantic spies, or brave ladies maintaining the home front in the absence of their men. The men, of course, marched off to war, lived in germ-ridden camps, engaged in heinous battle, languished in appalling prison camps, and died horribly, yet heroically. This conventional picture of gender roles during the Civil War does not tell the entire story. Men were not the only ones to fight that war. Women bore arms and charged into battle, too. Like the men, there were women who lived in camp, suffered in prisons, and died for their respective causes.

Both the Union and Confederate armies forbade the enlistment of women. Women soldiers of the Civil War therefore assumed masculine names, disguised themselves as men, and hid the fact they were female. Because they passed as men, it is impossible to know with any certainty how many women soldiers served in the Civil War.

The army itself, however, held no regard for women soldiers, Union or Confederate. Indeed, despite recorded evidence to the contrary, the U.S. Army tried to deny that women played a military role, however small, in the Civil War. ([http://american civi1war.com/women/](http://american civi1war.com/women/))

**Sarah Emma Edmonds Seelye served two years in the Second Michigan Infantry as Franklin Thompson [Art]. In 1865, she received a military pension.**

**ALBERT D.J. CASHIER ne JENNIE HODGERS**

The work of Deanne Blanton is well known for its focus on women in the Civil War. She has experience as a military archivist at the National Archives in Washington, D.C., and has served as president of the Society for Women and the Civil War. (http://www.swcw.org/DBlanton.html) She has written Women Soldiers of the Civil War, Parts 1, 2, 3. A 1993 review of Blanton’s work in the National Archives’ Prologue Magazine [Spring 1993, Vol. 25, No. 1] indicated that

Even though some modern writers have considered Seelye and Cashier, the majority of historians who have written about the common soldiers of the war have either ignored women in the ranks or trivialized their experience. While references, usually in passing, are sometimes found, the assumption by many respected Civil War historians is that soldier-women were eccentric and their presence isolated. Textbooks hardly ever mention these women…… For the most part, modern researchers looking for evidence of soldier-women must rely heavily upon Civil War diaries and late nineteenth-century memoirs. (http://www.archives.gov/publications/prologue/1993/spring/women-in-the-civil-war-1.html)

Clandestine Women: Spies in American History, an exhibit presented at the National Women’s History Museum is significant for its exposure of information about women who have been labeled “shadow warriors.” (http://www.nwhm.org/spies/1.htm)

While spies and their stories naturally fade into obscurity, women operatives in particular have been largely overlooked by writers and historians. At least part of this reality can be traced to the secret nature of espionage work. ……Researchers are finding long forgotten records, attesting to the heroism and patriotism of these “shadow warriors.” With this exhibit, the National Women’s History Museum honors the contributions of female intelligence officers throughout American history and the spirit and dedication characterizing their service. To view the exhibit, click the next button on the bottom of each page, or jump ahead to a specific section (American Revolution, Civil War, World War I, World War II, Cold War, and Post Script).

Phillip Kalisch’s book review of Cadet Nurse Stories: The Call for and Response of Women During World War II, written by Thelma M. Robinson, R.N., MSN, PNP and Paula M. Perry, AD, RN and PHN, revealed that “More than 50 years after World War II, cadet nurses tell their stories about how they helped win the war on the home front by serving in hospitals during the worst nurse shortage in history. Recalling what it was like to serve their country, these women share touching historical and personal stories about their experiences.” More than 180,000 Cadets served in more than 2,000 hospitals as student nurses.

NATIVE AMERICAN CADET NURSES
http://www.rpadden.com/nurses/native_cadets.htm
RESEARCH QUESTIONS

Multiple preliminary research questions were formulated by the writer about the central focus in this study, diverse women populations in the American military service.

1. Who were the little known or ignored diverse women who have served the military?
2. Why have women enlisted in the armed forces?
3. Why has the American government recruited women into the armed forces?
4. What are selected examples of American Women’s military experiences between the 17th and 21st centuries?
5. What have been the highlights of diverse populations of American women in the military?
6. What are some selected cases of challenges to diverse populations of American women in the military?
7. What are the contemporary challenges to women in the American armed forces?

Section Three Analysis of Data and Findings

Who were the little known or ignored diverse women who have served the military?

Women of a variety of ethnicities have defended America in both war and peacetime. Their contributions, for the most part, have not received the recognition, or the rewards that they have deserved. Native American women’s contributions in the nation’s armed forces are sparsely known.

Historians have only recently rediscovered and verified the actions of an Oneida woman, Tyonajanegen, at the battle of Oriskany during the American Revolution (1775-1783). Tyonajanegen was married to an American Army officer of Dutch descent. She fought at her husband's side on horseback during the battle, loading her husband's gun for him after he was shot in the wrist.

The World War I Army Nurse Corps included Fourteen Native American women, two of whom served overseas. A little known fact is that nearly 800 Native American women saw military service during World War II. Private Minnie Spotted-Wolf of Heart Butte, Montana was the first Native American woman who enlisted in July 1943 in the U.S. Marine Corps Women’s Reserve. Many Native American women enlisted in the armed forces in the 1950’s and 1960’s during the Korean and Vietnam conflicts. It was not until the 1970s and 1980s that the number of Native American women who enlisted in the armed forces increased. Five hundred and nine Native American women and Native Alaskan women were serving in the military forces of the United States as of 1994. The first known Native American service woman killed in combat during Operation Iraqi Freedom in March, 2003 was a member of the Hopi people, Lori Piestewa,

In keeping with Native American heritage and culture, the tribes showered the Piestewas with gifts – blankets, shadow boxes, paintings and eagle feathers ………the most frequently asked question on the Hopi reservation was: ‘Why did Lori join the Army?’…..Perhaps it was because she followed in the legacy of those before her – her father, a Vietnam veteran, and her grandfather, a World War II veteran.…..Maybe it was because of early ROTC involvement……Only Lori could give us the answer. Whatever the reason, the question should not be
why did she, but rather, why is it strange for her not to? (http://userpages.aug.com/captbarb/wimsaex.html)

Pfc. Lori Piestewa, right, and Jessica Lynch pose at Fort Bliss, Texas the day before their deployment to the Middle East in Feb. 2003. The Army notified the Piestewa family in Tuba City, Ariz., Friday, April 4, 2003, that they had recovered Lori's remains after rescuing Jessica, who was in Piestewa's company in Iraq http://dopeless-hope-fiend.blogspot.com/2009/01/lori-ann-piestewa_3274.html

Women in the United States Armed Forces share a common history of discrimination based on their gender, but black women have faced a double blow based on both their color and gender. A minor number of Hispanic women joined the American armed forces when, in the early 20th century, the national government first began to accept females into the military. Traditional Hispanic cultural values mitigated Hispanic women’s military enlistment because they were discouraged by their families from traveling long distances or from working outside their homes. (http://www.womensmemorial.org/HisHistory.html) Only a limited number of Asian Pacific American service women have revealed the stories of their military experiences, even though they have served on the domestic front and foreign theater during war and peace. (http://www.womensmemorial.org/APA.html) “The ‘official’ history of American women in the armed forces ignores tens of thousands of women who have served the military since this country’s founding.” (http://www.gendergap.com/military/usmil1.html)

WHY HAVE WOMEN ENLISTED IN THE ARMED FORCES?

Five major reasons may be identified as to why women have enlisted in the American armed forces of the years: [1] to perform services for the male troops; [2] to carry on the work of men; [3] to spy for “their side” in the armed conflict; [4] to free a man to fight; and [5] to use military service as a stepping stone for career advancement.

[1] To perform services for the male troops

Women served in the military during the American Revolution to assist on the battlefields as: nurses, water bearers, cooks, laundresses, and saboteurs. Union and Confederate women were allowed to provide medical aid and casualty care to the troops on both sides of the fighting lines during the Civil War in one of the few socially acceptable contributions to their respective nation’s military efforts. (http://www.womensmemorial.org/WHM982.html) Men were known to resent women tending to naked soldiers and see the bloody horrors of warfare on the battlefields and in hospitals. Nursing duties during the Civil War included

- Tending to and cleaning wounds
- Feeding meals
- Administering medications
- Comforting the dying
- Searching for wounded on the battlefields
- Assisting doctors during operations
- Writing letters for the soldiers
- Talking to soldiers and building up moral
- Transporting and delivering supplies
- Overseeing sanitary conditions at various facilities
- Standing up for their moral convictions in the face of graft, correction, and incompetence and changing it whenever they could.

(\url{http://www.dtdsk8.org/6_8/8/Civil%20War%20Webpage-RS/duties.html})

Minimal remuneration of thirty dollars a month was paid to over one thousand civilian contract nurses during the Spanish-American War. (\url{http://www.womensmemorial.org/Highlights.html})

[2] To carry on the work of men

There are some examples of women who enlisted in the military, disguised as men, to carry on the work of males in the armed forces. Obituaries of female soldiers during the Civil War supply much of the information about their service. (NARA, Records of the Adjutant General's Office, 1780's - 1917, RG 94). A death notice on October 4, 1920 for Mrs. Elizabeth A. Niles indicated that she successfully concealed her gender with “close cropped hair and a uniform” during the Civil War as a soldier fighting next to her husband, Martin, in the Fourth New Jersey Infantry. (\url{http://www.archives.gov/publications/prologue/1993/spring/women-in-the-civil-war-3.html})

“Historians are not sure how many women entered military service in disguise during the eighteenth and nineteenth centuries, because only those who were ultimately discovered are recorded.” (\url{http://www.womensmemorial.org/WHM982.html}) Deborah Samson of Plymouth, Massachusetts volunteered in the colonial army during the American Revolution disguised as a young man in October, 1778. She enlisted as Robert Shirtliffe and served for the entire length of the War in the Captain Nathan Thayer’s of Medway, Massachusetts Company. Her duties varied, and she was twice wounded during her three years of service: by a sword cut on the side of her head, and a bullet wound through the shoulder. She was able to keep her gender a secret during her service. Only when she was stricken with a brain fever prevalent among the soldiers was her true identity uncovered. (\url{http://www.undelete.org/military/timeline1.html})
How did women soldiers successfully enlist in the services, and thereafter, continue to deceive their males in the ranks and their superiors?

It was probably very easy. In assuming the male disguise, women soldiers picked male names. Army recruiters, both Northern and Southern, did not ask for proof of identity. Soldier-women bound their breasts when necessary, padded the waists of their trousers, and cut their hair short…… Most recruiters only looked for visible handicaps, such as deafness, poor eyesight, or lameness. Neither army standardized the medical exams, nor those charged with performing them hardly ever ordered recruits to strip. That roughly 750 women enlisted attests to the lax and perfunctory nature of recruitment physical checks.

[3] To spy for “their side” in the armed conflict

The gathering of information about one's enemy is an age old activity. Leaders needed to know the strengths and weaknesses of their enemies. “Through the ages spying developed into an art form and no one was better at it than women.” Espionage and its related intelligence collection often have not been acknowledged for the major role that they have played in American History. The “fairer sex” served as General George Washington’s spies or “field agents” against the overwhelming odds of the British forces during the Revolutionary War. “Women have effectively served in the shadowy world of espionage as couriers, guides, code breakers, intelligence analysts, even as covert agents—spies.” Housewives and young girls were recruited by both sides during the Revolution as cooks and maids. They could eavesdrop on conversations about “troop movements, leadership changes, and equipment shortages and deliveries without raising suspicion” because of their unlimited presence throughout the forces’ campsites. They clandestinely disseminated their intelligence pieces to the appropriate military and civilian leaders on their sides, with great danger for their own lives.
“This changing perception of gender roles made Civil War intelligence gathering much more dangerous for females, especially those serving undercover.”  
(http://www.nwhm.org/spies/8.htm)

Several women of color stand out as spies during the Civil War on behalf of the Union cause. Mary Elizabeth Bowser, a lesser known spy who was born a slave amid the Van Lew family members in Richmond, Virginia and emancipated in 1851, remained as a servant in their home. She later was placed in Confederate President Jefferson Davis’ home by the Union “Spymaster” Elizabeth Van Lew [known as “Crazy Bet”]. Davis assumed that Bowser was illiterate because of the anti-literacy laws in the ante-bellum South, and he negligently left his important papers untended and uncovered to Bowser’s eyes. His miscalculation resulted in the transfer of Confederate information to “Crazy Bet” when Bowser memorized the intelligence in the documents. (http://www.nwhm.org/online-exhibits/spies/9.5.htm)

Harriet Tubman is a well known example in American History of a woman of diverse ethnicity who served as a military nurse, scout, and spy for the Union army. 

…. the Union Army asked [her] to organize a network of scouts – and spies -- among the black men of the area. She not only organized a sophisticated information-gathering operation, she led several forays herself in pursuit of information. In July of 1863, [she] led troops under the command of Colonel James Montgomery in the Combahee River expedition, disrupting Southern supply lines by destroying bridges and railroads. …. [she] is credited …. with significant leadership responsibilities. ..... General Saxton….said ‘This is the only military command in American history wherein a woman, black or white, led the raid and under whose inspiration it was originated and conducted.  
(http://womenshistory.about.com/od/harriettubman/a/tubman_civilwar.htm)

[4] To free a man to fight

The periods of the American Revolution and the Civil War were ones in which women were not expected to serve in the military, but it was anticipated that they would demonstrate their willingness to perform actions on behalf of the common good through their patriotism, morality, and virtuousness. Women were known to boycott specific goods and engage in home production to meet their domestic
needs. One area of special importance was their role as “Deputy Husband,” fulfilling their husbands’ responsibilities while the men served in the military. ([http://www.americanantiquarian.org/Exhibitions/Womanswork/waryears.htm](http://www.americanantiquarian.org/Exhibitions/Womanswork/waryears.htm))

World War I saw the employment of women working under contracts with the American Army as drivers, secretaries, clerks, and telephone operators. The first women to enlist in the service during World War I joined the Navy and the Marine Corps, and more than 12,000 women were stationed stateside. In excess of 400 women died in the military as a result of their service overseas. ([http://www.womensmemorial.org/DidYouKnow.html](http://www.womensmemorial.org/DidYouKnow.html))

An example of women who served the nation during wartime “to free a man to fight” was the women in Minnesota, who enthusiastically took on the everyday jobs of their men at the start of World War II. They joined up with women’s military units, worked in defense plants, and assumed the jobs of the men who had gone to war. ([http://stories.mnhs.org/stories/mgg/intro.do?id=24](http://stories.mnhs.org/stories/mgg/intro.do?id=24)) Women were employed stateside in positions that men normally would occupy, if the latter were not serving in the military overseas. Some of the jobs that the women engaged in were as pilots traveling from base to base, office personnel, radiomen at air bases, and drivers in motor pools. ([http://stories.mnhs.org/stories/mgg/scene.do?id=14](http://stories.mnhs.org/stories/mgg/scene.do?id=14))

![WWII Clip Art](http://www.historyimages.com/WWII/clipart.html)

Eventually, the government recognized the significance of organizing women’s branches of the military, so that men could fight. A poster designed by Steele Savage in 1944 encouraged women to join the Women's Army Corps, the Navy WAVES, Marine Corps Women's Reserve, and the Coast Guard SPARs, thereby freeing a man to fight in the War. ([http://stories.mnhs.org/stories/mgg/resources/artifact.do?shortName=women](http://stories.mnhs.org/stories/mgg/resources/artifact.do?shortName=women))
“All branches of the armed forces conducted massive publicity campaigns urging women to volunteer and ‘Free a Man to Fight.’” (http://www.jewishvirtuallibrary.org/jsource/US-Israel/women.html)

[5] To use military service as a stepping stone for career advancement

Some women followed the troops to their camps during the Revolution, War of 1812, and Civil Wars for reasons other than engaging in combat. An example of this situation was during the War of 1812 in North Carolina. Marital security during wartime apparently was a factor in why women joined their husbands at the front.

The women that were in the camp during the War of 1812 were wives of the soldiers, they were chosen by a lottery system. Only six wives were allowed in camp for every one hundred soldiers. The women were employed as seamstresses, nurse maids, laundry maids and scullery maids. It is said that the women were given the hard jobs and the men looked after the dangerous jobs. The women also had to cook and clean for their own families, the life was very hard and the women were very much respected by the men. If a woman's husband was killed or died she had three to six months to grieve and then she had to re-marry or leave the camp, most re-married for the security. There are at least two reports of women who married four times in five months because their husbands died. (http://www.rootsweb.ancestry.com/~nc1812tp/facts.htm)

Women in the Union and Confederate camps during the Civil War also frequently were the wives of the soldiers, and would serve as paid laundresses to the men in the camps. In addition to laundering the troops’ clothing, the women would mend the uniforms, write letters, and cook for the soldiers. Usually four women were allowed to engage in these activities per camp. Most of the time the women stayed behind the lines. (http://www.freewebs.com/civilwarladies/whoweare.htm)
This picture was taken in a Civil War Camp near Washington DC in 1862.  
It shows a soldier with his wife and children. 

Photo Credit: Library of Congress  
LC-B811- 2405 [P&P]  

http://old-photos.blogspot.com/2009/07/civil-war-women.html

Women also disguised themselves as soldiers so that they could be closer to the military camps and promote their "trade". “An added difficulty is that if a female soldier's sex was discovered it [was] likely that the commanding officer would deny any knowledge of her and she would be labeled a prostitute.” (http://www.geocities.com/yosemite/2518/cladinuniform.htm) There were women during the Civil War who were “camp followers,” who came from the ranks of prostitutes, as well as women whose men were in the military, had been left to fend for themselves, and who sought the security of performing housekeeping jobs for the soldiers in the camps. Venereal diseases were present among the soldiers as a result of their sexual liaisons. “By 1862, Washington D.C. had over 7,500 prostitutes. (http://www.freewebs.com/civilwarladies/whoweare.htm)

Women in the 21st Century American military envision their time in the service as a true stepping stone to career advancement. Lt. Gen. Claudia Kennedy, writing in 2001, indicated that

The military offers a great way for a woman to get a start in life, by having a two or three year job that gives her something for her resume that shows leadership and a strong work ethic, and is readily understood by people who don't have a traditionally good appreciation for what women do…… We have all grown more confident of the ability of women to perform not only the traditional women's jobs, but those that are new and unusual for women to fill. 


Lt. General Claudia J. Kennedy http://www.wic.org/bio/ckennedy.htm
WHY HAS THE AMERICAN GOVERNMENT RECRUITED WOMEN INTO THE ARMED FORCES?

Three major reasons have fueled the recruitment of women into the American armed forces: [1] To fill shore positions during wartime; [2] To fill overseas positions during wartime; and, [3] To fill possible combat positions during wartime. The events surrounding World War II encouraged patriotic fervor among the women of the nation, as evidenced by the fact that over four hundred-thousand women responded to the government’s call through posters and magazine advertisements for women to participate in military service. (http://www.undelete.org/military/posters.html)

[1] To fill shore positions during wartime

The Navy enlisted 11,880 women as Yeomen (F) to serve stateside in shore billets and release sailors for sea duty. They were active as air traffic controllers, parachute riggers, and radio operators. The Army established the Women's Army Auxiliary Corps (WAAC) in 1942, which was converted to the Women's Army Corps (WAC) in 1943. Starting in 1942, the Navy recruited women into its Navy Women's Reserve, called Women Accepted for Volunteer Emergency Service (WAVES). (http://www.womensmemorial.org/Highlights.html) The Women Air force Service Pilots (WASP) were organized and flew as civil service pilots. WASPs flew stateside missions as ferriers, test pilots and anti-aircraft artillery trainers. “Gallant WASP pilots – women who flew every airplane made during WWII – including an experimental jet at 350 mph at 35,000 feet (flown by Ann Baumgartner in 1944) – yet were not considered military pilots until decades later.” (http://userpages.aug.com/captharb/pilots.html) The Marine Corps created the Marine Corps Women's Reserve in 1943. Marine women served stateside as clerks, cooks, mechanics, drivers, and in a variety of other positions. The Coast Guard established their Women's Reserve known as the SPARs (after the motto Semper Paratus - Always Ready) in 1942. SPARs were assigned stateside and served as storekeepers, clerks, photographers, pharmacist's mates, cooks, and in numerous other jobs. (http://www.womensmemorial.org/Highlights.html)

[2] To fill overseas positions during wartime

Women served as helpers and nurses to the military during wartime before World War I. Over 12,000 women served in stateside positions in the Navy and Marine Corps during World War I. Over four hundred women died as a result of their World War I service. (http://www.womensmemorial.org/)
DidYouKnow.html) The Army recruited and trained 233 bilingual telephone operators to work at switchboards near the front in France during World War I, and sent 50 skilled stenographers to France to work with the Quartermaster Corps. The shortage of available nurses for the military during World War II impelled the national government to organize the Cadet Nurse Program. (http://www.rpadden.com/nurses/nurses.htm) More than 180,000 women were recruited into the U.S. Cadet Nurse Corps during World War II. They provided urgently needed nursing in more than 2,000 hospitals. During the Korean conflict, Navy nurses served on hospital ships, as well as in the States at Navy hospitals.

U.S. Navy recruiting poster from World War II showing a Navy Nurse with a hospital ship http://www.solarnavigator.net/biology/nursing.htm

[3] To fill possible combat positions during wartime

The question of whether or not women should serve in the American military has been a controversial issue for many years, even though other nations [e.g. Israel] do include females in compulsory military service and as combatants during wartime. Separate military services were established for American women in 1942, but they were not granted professional military status until 1948 in the Women's Armed Services Integration Act, signed by President Harry S. Truman, and which limited the number of women in the total military to 2 percent. This percentage was maintained until the 1970s, and since has been increased to 14%. The law also forbade women from serving on naval combat vessels. (http://www.cdi.org/issues/women/combat.html)

Several issues have been at the heart of the controversy about women in the American military serving in combat: unqualified women would serve in key military positions if there were no quotas on who could serve in the military; it is too dangerous to put women in the position of becoming prisoners of war [e.g. this did occur in the Gulf War]; there would be a greater probability for acts of sexual molestation and rape if women were on the front lines of combat; should women be subjected to the horrors of war; women do not have the physical strength and endurance to serve in combat; women would disrupt the esprit de corps of the combat unit in the event of romantic relationships and pregnancies.
Extra demand for more combat personnel was present during the 1991 Gulf War, at which time the bans on women flying combat missions and serving on combat ships were lifted. More than 90% of military tasks were lifted for women by President Clinton. “The Iraq and Afghanistan wars have changed everything. For the first time, women have lived and fought for long periods beside men, exposed to the same dangers…….The blurring of the lines is reflected in the baldest of statistics. In Iraq and Afghanistan, 125 US women have paid the ultimate price.” ([http://www.guardian.co.uk/world/2010/jun/23/us-military-women-in-combat](http://www.guardian.co.uk/world/2010/jun/23/us-military-women-in-combat))

**WHAT ARE SELECTED EXAMPLES OF AMERICAN WOMEN’S MILITARY EXPERIENCES BETWEEN THE 17TH AND 21ST CENTURIES?**

A chronological view of women’s roles in the American military depicts a concise overview of their various experiences and interaction with the government. Most of the data in this chart came from The Women’s Research and Education Institute. ([http://www.wrei.org/WomeninMilitary_DidYouKnow.htm](http://www.wrei.org/WomeninMilitary_DidYouKnow.htm))

<table>
<thead>
<tr>
<th>CENTURY</th>
<th>DATE</th>
<th>EVENT</th>
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<tbody>
<tr>
<td>17TH</td>
<td>1607</td>
<td><strong>Contact or Settlement Wars</strong> between colonists and Native Americans. Women were affected by war over this period in a number of ways. Many of them fought on the home front.</td>
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<td></td>
<td>1600s</td>
<td><strong>Imperial war</strong> most often between France and England, and other European countries. Perhaps most important, there’s the experience of women who stayed home after their husbands went off to fight, having to take on every aspect of running the household.</td>
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<tr>
<td>18TH</td>
<td>Early 1700s</td>
<td><strong>Imperial wars continued,</strong> most often between France and England, and other European countries.</td>
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<tr>
<td></td>
<td>1754-63</td>
<td><strong>French and Indian War</strong> Perhaps most important, there’s the experience of women who stayed home after their husbands went off to fight, having to take on every aspect of running the household.</td>
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<td></td>
<td>1775-1783</td>
<td><strong>American Revolution:</strong> Women serve on the battlefield as nurses, water bearers, cooks, laundresses and saboteurs. The first woman awarded a disability pension by Congress for wounds incurred during military service was Margaret Corbin. She took over her fallen husband's cannon in the Battle of Fort Washington and she herself was wounded.</td>
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<tr>
<td>19TH</td>
<td>1812-1815</td>
<td><strong>War of 1812</strong> During the War of 1812, two women served as nurses aboard United States, Stephen Decatur's flag ship. What was not known at the time was the fact that a U.S. Marine, serving aboard Old Ironsides, as George Baker, was actually Lucy Brewer. Eventually the Marine Corps reluctantly acknowledged that Lucy Brewer was perhaps the very first woman marine.</td>
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|         | 1846-48| **Mexican War** Mrs. Borginis and a Mrs.Foley enlisted with their husbands into the 8th calvary at the Jefferson Barracks, Mo. Sarah became the principal cook at Fort Brown (Fort Texas) and stayed on the job when General Taylor moved most of his troops to the mouth of the Rio Grande. However, when the Mexicans began bombarding Fort Texas, (Fort Brown) from their positions at Matamoros, she was issused a musket. It's said she took an active part in the ensuing fray, never missing a target or preparing a meal. Gen. Zachary Taylor breveted her to colonel, making her
<table>
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<th>Period</th>
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<tr>
<td>1861-1865</td>
<td>the first female colonel of the U.S. Army. She moved to El Paso and opened a hotel. For years it was a favorite stop of '49ers heading for the Civil War. Dr. Mary Edwards Walker was awarded the Congressional Medal of Honor. Women disguised as men served on both sides, served as spies, and nurses—including aboard at least one hospital ship. Historical records verify the fact that over sixty women were either wounded or killed at various battles during the Civil War.</td>
</tr>
<tr>
<td>1898-1901</td>
<td><strong>Spanish American War</strong> In 1898 when Teddy went charging up San Juan Hill, after the Battleship Maine blew up in Havana Harbor, sanitary conditions for the wounded soldiers were deplorable. There were typhoid fever epidemics in the camps and few qualified medical personnel. Congress quickly authorized the U.S. Army to procure female nurses but not with military status. They were hired as civilians under contract and over one thousand women were recruited to serve - for thirty dollars a month. From 1898 to 1901 more than 1500 women served in the states, overseas, and on a U.S. Hospital ship. Spanish American War Nurse Clara Maass died as a result of yellow fever. Army Contract Nurse Maass volunteered to participate in an experimental treatment program, after having survived the war. A stamp was issued in her honor in 1976. Dr. Anita Newcomb McGee was instrumental in the recruiting of these women and continued to argue for nurses as a permanent part of the military. When Dr. McGee became Acting Assistant Surgeon General in charge of a new Nurse Corps Division she drafted the necessary legislation to begin the process of giving nurses some sort of military status. Yet they had no rank, equal pay, or benefits.</td>
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<th>20th Century</th>
<th>Event</th>
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<tr>
<td>1901</td>
<td>Women have served in the American armed forces for over 100 hundred years—since 1901—when the Army Nurse Corps was established. The Navy Nurse Corps soon followed in 1908.</td>
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<tr>
<td>1908</td>
<td><strong>World War I</strong> Women who were not Nurses were first enlisted in the Navy and Marine Corps. Only nurses served in the Army during this war; but the Army did hire about 200 civilian women who were fluent in both English and French to serve as telephone operators. These women, often referred to as the &quot;Hello Girls,&quot; were later given veterans' status. 13,000 women enlisted in the Navy and Marine Corps on the same status as men; first women officially admitted to full military rank and status 30,000 women served in the Army &amp; Navy Nurse Corps, the Navy as Yeoman, the Marines, the Coast Guard</td>
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<tr>
<td>1917-1920</td>
<td><strong>Army Reorganization Act</strong> grants military nurses the status of officers with &quot;relative rank&quot; from second lieutenant to major (but not full rights and privileges)</td>
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<tr>
<td>1920</td>
<td><strong>World War II</strong> 432 American military women were killed; 88 were prisoners of war all but one of these in the Pacific Theater. More than 60,000 Army nurses serve stateside and overseas</td>
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<tr>
<td>1941-1945</td>
<td><strong>The Army-Navy Nurse Act</strong> makes the Army Nurse Corps and Women's Medical Specialist Corps part of the Regular Army and gives permanent commissioned officer status to Army and Navy nurses.</td>
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<tr>
<td>1947</td>
<td><strong>THE WOMEN'S ARMED SERVICES INTEGRATION ACT</strong>: SIGNED BY PRESIDENT TRUMAN. WOMEN GIVEN PERMANENT STATUS IN THE ARMY, NAVY, AIR FORCE, MARINE CORPS. NO MORE WOMEN'S &quot;COMPONENTS&quot; FORMED DURING EMERGENCIES. WOMEN IN SERVICES SUBJECT TO MILITARY AUTHORITY. Women ENTITLED TO VETERANS BENEFITS. 2% CEILING ON</td>
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<td>Year</td>
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<tr>
<td>1949</td>
<td><strong>Air Force Nurse Corps is established</strong></td>
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<td>1950-1953</td>
<td><strong>Korean Conflict</strong> 540 Army nurses, 50 Navy Nurses and less than 50 Air Force Nurses served</td>
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<td>1952</td>
<td>U.S. Postal Service issued a deep blue three-cent commemorative stamp entitled “Women In Our Armed Services.” The stamp featured four uniformed women representing the women of the Army, Navy, Marine Corps, and Air Force (not the Coast Guard).</td>
</tr>
<tr>
<td>1960s-70s</td>
<td><strong>Vietnam Conflict</strong> 7 women died in the line of duty while serving in theater. Their names can be found inscribed on the Vietnam Memorial. 7,500 military women served in Southeast Asia. Military nurses assigned to military hospitals, air evacuation units, hospital ships, field units. Volunteer women from WAC units. Always more volunteers than positions available</td>
</tr>
<tr>
<td>1980s</td>
<td><strong>ALL VOLUNTEER FORCE</strong> BY 1980 OVER 170,000 WOMEN WERE ON ACTIVE DUTY….8.5% OF US ARMED FORCES ROTC PROGRAMs TRAINED FOR NONTRADITIONAL POSITIONS OPENED &amp; LATER CLOSED</td>
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<td>1983</td>
<td><strong>GRENADA</strong> More than 200 Army women participated in the invasion…but they were not considered as having been in combat. Coast Guard women served aboard ships patrolling the waters around Grenada; and Air Force women flew as pilots, engineers and loadmasters.</td>
</tr>
<tr>
<td>1989</td>
<td><strong>PANAMA</strong> Several hundred Army and Air Force women were a part of this operation. Army women flew Blackhawks ferrying infantry troops and supplies, often under enemy fire. Air Force women flew cargo and refueling missions, also under fire.</td>
</tr>
<tr>
<td>1990s</td>
<td><strong>Persian Gulf Conflict</strong> Almost 41,000 women served in theater. LARGEST SINGLE DEPLOYMENT 13 women were killed and two were taken as prisoners of war.[e.g. Spc. Shoshawna Johnson, of 507th Maintenance; Army Private First Class Jessica Lynch]. AFTER PERSIAN GULF conflict CONGRESS LIFTED BAN ON WOMEN SERVING AS CREW MEMBERS ON COMBAT AIRCRAFT &amp; VESSELS ARGUMENTS AGAINST WOMEN IN COMBAT FOCUS ON THE BELIEF THAT MILITARY WOMEN SHOULD NOT BE PRISONERS OF WAR.</td>
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<td>21st</td>
<td>1998-2000</td>
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**2000**

**Attacks on the Cole** Two women sailors were killed and five were wounded in the terrorist attack on USS *Cole*.

**Afghanistan and Iraq conflicts** About 10 percent of the U.S. Forces currently serving in Afghanistan and Iraq are women.

**SUMMARY**

Did you know that there are almost two million women veterans? From the American Revolution to Panama, Bosnia, Kosovo, Afghanistan and Iraq, women have served in some way in every conflict. Not that they were legal in the early days. History tells us that thirty three thousand women served in World War One and almost 500,000 took part in World War Two. During the Korean era 120,000 women were in uniform and seven thousand were deployed in theater during Viet Nam. During Desert Storm seven per cent of the total U.S. forces deployed were women - over forty thousand of them. On these pages you will find the history and accomplishments of those women who have served this country - *voluntarily* - since it's beginning.

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**WHAT HAVE BEEN THE HIGHLIGHTS OF DIVERSE POPULATIONS OF AMERICAN WOMEN IN THE MILITARY?**

Women of diverse ethnicities have served this nation since its earliest days, through the multiple armed crises that America has been involved with both stateside and abroad. Four major ethnic groups of selected Native American, African American, Hispanic American, and Asian Pacific American women are chronicled as to their achievements and significant contextual events for those achievements in the following slides for the 9th Hawaiian International Education Conference.

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**What are the highlights of events and achievements in the military for Native-American women?**

- **19TH CENTURY:**
  - Sacajawea was a Shoshone woman who actually served as an interpreter for members of the expedition unfamiliar with the Indian language. "Bird Woman’s" service is described in the journals kept by Lewis and Clark during the expedition.


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10/31/2010 Challenges to Diverse Women in the US Armed Forces
What are the highlights of events and achievements in the military for Native-American women?

- **19th CENTURY continued**
  - 1898: SPANISH AMERICAN WAR
    - 4 CATHOLIC SISTERS FROM FORT BERTHOLD, S.DA. WORKED AS NURSES
    - TRANSFERRED FROM JACKSONVILLE, FLA TO HAVANA, CUBA
    - 1 SISTER DIED & BURIED W/ MILITARY HONORS

- **1917: WORLD WAR I**
  - 14 SERVED IN ARMY NURSE CORPS
  - 2 OF 14 SERVED OVERSEAS

- **1941: WORLD WAR II**
  - NEARLY 800 SERVED IN MILITARY
  - SOME STATESIDE
  - SOME W/ ARMY OF OCCUPATION IN GERMANY
  - SOME ASSIGNED TO MEDICAL UNITS SHIPPED TO PACIFIC

First Lieutenant Julia (Nashanany) Reeves, a member of the Potawatomi Indian Tribe of Crandon, Wisconsin, joined the Army Nurse Corps in 1942, and was assigned to one of the first medical Units shipped to the Pacific.

Charlotte Edith (Anderson) Monture of the Iroquois Nation also served as an Army nurse in France.

Alida (Whipple) Fletcher joined the Army during World War II and trained as a medical specialist. She was assigned to the hospital at Camp Stoneman, California, which was an Army port of embarkation for the Pacific.

Elva (Tapedo) Wale, a Kiowa, left her Oklahoma reservation to join the Women's Army Corps. Private Tapedo became an "Air WAC," and worked on Army Air Bases across the United States.
What are the highlights of events and achievements in the military for Native American women?

• 19th CENTURY continued

• 1950s-1960s:
  • FEWER WOMEN FELT THE CALL TO MILITARY SERVICE
  • ARMED SERVICES IN NEED OF WOMANPOWER IN KOREAN CONFLICT
  • GOVERNMENT CONDUCTED EXTENSIVE RECRUITMENT CAMPAIGNS AIMED AT YOUNG WOMEN
  • MANY YOUNG NATIVE AMERICAN WOMEN ENLISTED

• 1970s:
  • INCREASING NUMBERS OF WOMEN ENTERED MILITARY SERVICE

• 1980s:
  • 60 WOMEN SERVED IN THE ESKIMO SCOUTS BY 1980: SPECIAL UNIT OF THE ALASKA NATIONAL GUARD
     - PATROL WESTERN COASTLINE ALASKA & ISLAND SEPARATE ALASKA & RUSSIA

• 1990s:
  • 1,509 NATIVE AMERICAN & NATIVE ALASKA WOMEN SERVIN IN MILITARY FORCES
What are the highlights of events and achievements in the military for African-American women?

- **AMERICAN REVOLUTION**
  - No documented records of women's military service

- **CIVIL WAR**
  - Nursing or domestic chores in medical settings
    - 181 served in convalescent & US government hospitals in MD, VA, NCA
  - Laundering or cooking for soldiers
  - Employment with units of enlisted freed black men
  - Union army paid black women to raise cotton on plantations for Northern government to sell


What are the highlights of events and achievements in the military for African-American women?

- **CIVIL WAR**
  - “Though best known for her work in freeing slaves, after the outbreak of the Civil War, Harriet Tubman also served as a soldier, spy, and a nurse, for a time serving at Fortress Monroe, where Jefferson Davis would later be imprisoned.

  Her experience leading slaves along the Underground Railroad was particularly helpful because she knew the landscape so well. She recruited a group of former slaves to scout the locations of rebel camps and report on the movement of the Confederate troops.

  In 1863, she actually went with Colonel James Montgomery and several black soldiers on a gunboat raid in South Carolina. Because Harriet Tubman had inside information from her scouts, the Union gunboats were able to surprise the Confederate rebels.”

What are the highlights of events and achievements in the military for African-American women?

- **SPANISH AMERICAN WAR**
  - SERVED AS NURSES [32+]
  - US SOUGHT FEMALE YELLOW FEVER “IMMUNES” WHO HAD SURVIVED THE DISEASE
  - CONTRACTED BLACK GRADUATE NURSES [80+]
    - TUSKEGEE INSTITUTE
    - MA GENERAL
    - NEW ORLEANS

- **WORLD WAR I**
  - TRAINED BLACK NURSES ENROLLED IN AMERICAN RED CROSS AT START OF WAR
  - WANTED TO ENTER ARMY OR NAVY NURSE CORPS
  - 18 SERVED IN OHIO & ILLINOIS CAMPS CARING FOR GERMAN POWS AND AFRICAN-AMERICAN SOLDIERS

What are the highlights of events and achievements in the military for African-American women?

- **World War I continued:**
  - The Army recruits and trains 233 bilingual telephone operators to work at switchboards near the front in France.

- **WORLD WAR II:**
  - JAN. 1941, ARMY SET CEILING OF 56 BLACK NURSES FOR THE ARMY
  - JULY 1944 QUOTA FOR BLACK ARMY NURSES ELIMINATED
  - 500+ BLACK ARMY NURSES SERVED

- **1948:**
  - PRESIDENT TRUMAN ELIMINATES SEGREGATION, QUOTAS, DISCRIMINATION IN THE ARMED FORCES

- **1949:**
  - The first African-American women enlist in the Marine Corps
What are the highlights of events and achievements in the military for African-American women?

• WORLD WAR II continued:
  • Black women also enlisted in the WAAC (Women's Army Auxiliary Corps) which became WAC (Women's Army Corps), ...6,520 served
  • the Navy WAVES (Women Accepted for Volunteer Emergency Service),...72 out of 80,000 serving under integrated conditions, and
  • the Coast Guard SPARS
  • Only few enlisted.

• KOREAN & VIETNAM WARS:
  • BLACK WOMEN TOOK THEIR PLACES IN THE WAR ZONE
  • 1979:
    • An Army Nurse Corps officer becomes the first African-American woman brigadier general in the history of the armed forces.
  • 1995:
    • The first African-American woman, an Air Force officer, is promoted to major general.
  • 1999:
    • The first woman and first African-American commands the National Oceanic and Atmospheric Administration Corps (NOAA).
  • 2002:
    • In September, for the first time in its history, the Army National Guard promoted an African-American woman to the rank of brigadier general.

Julia Jeter Cleckley
Newest Unique Firsts for African-American Military Women?

- Command Sgt. Maj. Michele Jones was selected to become the ninth Command Sergeant Major of the Army Reserve. Jones is the first woman to be selected as the top noncommissioned officer in the Army Reserve, as well as the first woman to be chosen as the senior NCO in any of the Army's components.

Chief Master Sergeant Benton is the eighth Command Chief Master Sergeant for the Director, Air National Guard, National Guard Bureau, Washington, D.C. and the first woman. She is responsible for all affairs concerned with the enlisted personnel of the Air National Guard.

What are the highlights of events and achievements in the military for Hispanic-American women?

- REVOLUTIONARY WAR [1775-83]
  - “..... Hispanics have played a role in each of America’s conflicts, including the Revolutionary War. Spanish, Dominican, Puerto Rican and Mexican soldiers and Cuban militiamen in the Louisiana Regiment of Infantry were instrumental in defeating British forces in the Gulf of Mexico region.

- Contributions raised by WOMEN in Havana, Cuba, allowed embattled French and American forces to continue their siege of Yorktown in 1781, ensuring an eventual American victory.”

http://www.army.mil/soldiers/sept94/p52.html
What are the highlights of events and achievements in the military for Hispanic-American women?

• CIVIL WAR [1861-5]
  • “Cuban-born Loretta Janet Velasquez masqueraded as a male Confederate soldier.
  • Velasquez fought at Bull Run, Ball's Bluff and Fort Donelson before she was detected and discharged.
  • Undaunted, she disguised herself again and fought at Shiloh until found out. For the rest of the war she worked as a spy, in both male and female guise.”

• http://www.army.mil/soldiers/sept94/p52.html

What are the highlights of events and achievements in the military for Hispanic-American women?

• CIVIL WAR continued
  • COMMANDER OF NAVAL FORCES AT BATTLE OF MOBILE BAY: DAVID FARRAGUT-Hispanic Heritage
  • ALLEGIANCE OF MEXICAN AMERICANS IN TEXAS DIVIDED UNION/CONFEDERACY
Newest Unique Firsts for Hispanic-American Military Women

- **1990s**
  - **OPERATION DESERT SHIELD & STORM [1990-1]** 20,000 HISPANIC SERVICEMEN AND WOMEN SERVED
    - [http://www.houstonculture.org/hispanic/memorial.html](http://www.houstonculture.org/hispanic/memorial.html)

  - “The first female ever and Hispanic Squadron Commander for the 433rd Aircraft Generation Squadron, Lackland AFB, is Major Wanda I. Echevarria. Major Echevarria commanded the Squadron and led them through the activation of more than 300 reservists during Operation Enduring Freedom. She was their commander from 1998-2002 and is now on duty at Texas Christian University, Det 845, Air Force ROTC, as the Commandant of Cadets.”

What are the highlights of events and achievements in the military for Asian-Pacific-American women?

- **1.8 MILLION SERVED SINCE AMERICAN REVOLUTION**

- **WORLD WAR II:**
  - FIRST ENTERED MILITARY SERVICE
  - **WACs RECRUITED**
    - 50 JAPANESE & CHINESE AMERICAN WOMEN
    - SENT TO MILITARY INTELLIGENCE SERVICE LANGUAGE SCHOOL TO TRAIN AS MILITARY TRANSLATORS
    - 21 WORKED WITH CAPTURED JAPANESE DOCUMENTS
      - MILITARY PLANS
      - INFORMATION ABOUT CONDUCT WAR
  - **WAC TRANSLATORS HELPED US ARMY INTERFACE WITH CHINESE ALLIES**
  - SET UP AIR WAC UNIT
    - AERIAL PHOTO INTERPRETATION
    - AIR TRAFFIC CONTROL
    - WEATHER FORECASTS
What are the highlights of events and achievements in the military for Asian-Pacific-American women?

• WORLD WAR II continued:
  • WOMEN AIR FORCE SERVICE PILOTS [WASP]
  • SMALL NUMBER ENTERED ARMY NURSE CORPS
  • OVER 200 JOINED THE US PUBLIC HEALTH SERVICE CADET NURSE CORPS
  • FILIPINO AMERICAN WOMEN WORKED WITH UNDERGROUND RESISTANCE MOVEMENT FORCES IN PHILIPPINES DURING 3 YEARS OF JAPANESE OCCUPATION IN WW II
  • SMUGGLED FOOD & MEDICINE TO AMERICAN POWs
  • CARRIED INFORMATION ON JAPANESE DEPLOYMENTS
What are the highlights of events and achievements in the military for Asian-Pacific-American women?

- **1950s-60s-70s:**
  - ENTERED MILITARY
  - WORK IN CIVILIAN ORGANIZATIONS AFFILIATED WITH MILITARY

- **1990s:**
  - NEW GENERATION OF WOMEN ENTERED ARMED FORCES
  - ENTER 21ST CENTURY PROUDLY W/ CONTRIBUTIONS FOR 50 YEARS SERVICE

- **2001:**
  - The Army promotes the first woman to brigadier general in the Judge Advocate General’s Corps. She is also the first Asian-Pacific-American woman promoted to brigadier general.

What are some selected cases of challenges to diverse populations of American women in the military?

Women in the American armed forces face challenges stemming from bias against their gender. However, challenges to women of diverse ethnic populations also are confronted with issues pertaining to their backgrounds as Native Americans, African Americans, Hispanic Americans, and Asian Pacific Americans. A brief overview of challenges to women in the American armed forces demonstrates the varieties of problems that women have had to face throughout the nation’s history:

- **CIVIL WAR:**
  - Wages
  - Segregation
- **POST-WORLD WAR I:**
  - Non-Permanency of position
- **WORLD WAR II:**
  - Barred from service
  - Ceiling on numbers; Entry quotas
  - Denied application
  - Segregation
- **POST-WORLD WAR II:**
  - Denied service abroad
  - Non-Implementation of Executive Order
- **1950s:**
  - Denial of Civil Rights
Charity Adams Earley, commander of the 688th Central Postal Directory Battalion in World War II, summarized the history of women in the military when she wrote in 1989: The segregated military offered minimal chances for African-Americans to be promoted. Nonetheless, Charity Adams was one of two women in the WACs to have the rank of major. In 1946, she briefly was promoted to Lieutenant Colonel prior to her retirement. ([http://www.nytimes.com/2002/01/22/us/charity-adams-earley-black-pioneer-in-wacs-dies-at-83.html](http://www.nytimes.com/2002/01/22/us/charity-adams-earley-black-pioneer-in-wacs-dies-at-83.html)

The future of women in the military seems assured. ....... What may be lost in time is the story of how it happened. The barriers of sex and race were, and sometimes still are, very difficult to overcome, the second even more than the first..... During World War II women in the service were often subject to ridicule and disrespect even as they performed satisfactorily.... ([http://www.womensmemorial.org/BBH1998.html#1](http://www.womensmemorial.org/BBH1998.html#1)

![Image of women soldiers](image_url)

The following selected examples demonstrate the types of problems that diverse populations of women have encountered in the American military.

**During the Civil War: SUSIE KING TAYLOR,**

[Nurse, cook, laundress was never paid for her service].

- “The first colored troops did not receive any pay for eighteen months, and the men had to depend wholly on what they received from the commissary... their wives were obliged to support themselves and children by washing for the officers, and making cakes and pies which they sold to the boys in camp. Finally, in 1863, the government decided to give them half pay, but the men would accept none of this.... They preferred rather to give their services to the state, which they did until 1864, when the government granted them full pay, with all back due pay.”
- “I was very happy to know my efforts were successful in camp, and also felt grateful for the appreciation of my service. I gave my services willingly for four years and three months without receiving a dollar. I was glad, however, to be allowed to go with the regiment, to care for the sick and afflicted comrades.” ([http://www.womensmemorial.org/BBH1998.html#1](http://www.womensmemorial.org/BBH1998.html#1)
Post World War I: RESPONSE TO REQUEST FROM CONGRESSMAN SOMERS TO COLONEL DARNELL, ARMY MEDICAL CORPS FOR PERMANENT PLACEMENT OF BLACK WOMEN IN THE MILITARY NURSING CORPS

- “The question of opening the Nurse Corps to... colored nurses has from time to time received the serious consideration of this office; but because of the necessity... of arranging their tours of duty in various regions of the United States as well as in our overseas dependencies [,] and of the difficulty if not impossibility of arranging proper quarters and messing facilities for them [,] their employment has been found impracticable in time of peace. You may rest assured that when military conditions make it practicable... to utilize colored nurses they will not be overlooked.”

(http://www.womensmemorial.org/BBH1998.html#1)

World War II: DOVEY JOHNSON ROUNDTREE

- Johnson applied to the newly formed WAACs in 1942
- Refusal by the recruiter in Charlotte, NCA to give Dovey an application
- Johnson obtained her application in Richmond, VA
- Eventually, Dovey was accepted into the first officer candidate school class of the WAAC
- Johnson was 1 of 36 other African-American women in August, 1942 as part of the first class of women Commissioned as officers

(http://www.womensmemorial.org/BHMSys.html)

World War II: BLACK WOMEN BARRED FROM THE WAVES

- Director Mildred McAfee and Dr. Mary McLeod Bethune helped Secretary of the Navy Forrestal push through the admittance of Black women into the WAVES
- SPARS OPENED TO BLACK WOMEN OCT. 20, 1944
- On October 20, 1944, the SPARS were opened to Black women
- However, the Navy refused to admit Japanese American women throughout World War II

(http://www.womensmemorial.org/BBH1998.html#1)

The post-World War II period witnessed a milestone in the American military as a desegregated organization. However, the process to achieve complete success for that goal was a difficult one.
SELECTED CASES OF CHALLENGES TO DIVERSE POPULATIONS OF WOMEN

• “To facilitate the order, the Truman administration formed an executive committee headed by Charles O. Fahy, to prepare and submit a plan for desegregating the services.
  • Almost two years elapsed, however, before the Fahy Committee submitted its final report.
  • In the interim, the services followed established policy regarding recruiting, training and assigning black personnel.”
  http://www.womensmemorial.org/BHMSys.html

SELECTED CASES OF CHALLENGES TO DIVERSE POPULATIONS OF WOMEN

• RESULTS OF EXECUTIVE ORDER 9981
  • DISCRIMINATORY PRACTICES DID NOT END IMMEDIATELY
  • INITIALLY SOME MILITARY LEADERS WERE RELUCTANT TO IMPLEMENT THE EXECUTIVE ORDER
    • BELIEVED MILITARY WAS NOT A PLACE FOR “SOCIAL EXPERIMENTS”
    • WORRIED THAT UNIT COHESION WOULD BE HARMED IF WHITES & BLACKS FORCED TO TRUST EACH OTHER FOR SUPPORT

http://www.womensmemorial.org/BWOHistory.html
SELECTED CASES OF CHALLENGES TO DIVERSE POPULATIONS OF WOMEN

- In January 1950, the Fahy committee submitted its report, and the Army issued a new directive entitled, "Utilization of Negro Manpower in the Army."
  - This directive announced the elimination of quotas, segregated units, and segregated facilities.
  - The Women's Army Corps (WAC) conformed with the Army directive by revising its administrative policies and assignment procedures.
  - By the middle of that year, WAC training and field units, as well as billeting and messing facilities, were integrated.
WHAT ARE THE CONTEMPORARY CHALLENGES TO WOMEN IN THE AMERICAN ARMED FORCES?

Women in the American armed forces have not only had to contend with the challenges previously alluded to in this paper. They have been confronted with limitations to the extent of their service in the various military agencies. The following slide from the 9th HICE Conference presentation sets down the multiplicity of restrictions that women have had in the military into the 21st century.
American women in the military still encounter challenges to their presence in the armed forces. Contemporary articles in the press emphasize that the barriers outlined above slowly are being withdrawn from women in the military, but there is extensive controversy about them. At this time, multiple other challenges present themselves for women in the military, as pointed out in a 2009 report by Iraq and Afghanistan Veterans of America:

…balancing family life with a military career, inadequate military health care specifically for women, high rates of sexual assault and harassment, and opportunities for career advancement,….


Highlights of the report indicated that [1] “Female troops must deal with challenges their male counterparts don't; [2] “women face inadequate health care, sexual assault, higher divorce rates; [3] “Feminine hygiene products, birth control pills (are) hard to find in theater”; and. [4] “Almost 15% of female vets of recent wars screened positive for sexual trauma.” The report pressed the Pentagon to address women’s areas of concern, since women were leaving the military at a faster rate than the men.
DID YOU KNOW as a result of the progress of the 1990s, women are now excluded from only 9 percent of Army roles—although that figure represents nearly 30 percent of active-duty positions. Army women cannot be assigned to the following occupational fields: infantry, armor, special forces, cannon field artillery and multiple launch rocket artillery. Also closed to women are: Ranger units at the regiment level and below, ground surveillance radar platoons, combat engineer line companies, and short range defense artillery units. In the Air Force, 99 percent of all occupations are open to women. Navy women are only excluded from submarine crews and SEAL teams, special boat unit crews and support positions with the Marine Corps ground combat units. The Marine Corps has opened 92 percent of its occupational fields to women, however 38 percent of positions are closed to women. Closed occupational fields include infantry, tank and assault amphibian vehicles and artillery. All Coast Guard occupations and positions are open to women.

(Source: Women In Military Service For America archives)
http://www1.va.gov/WOMENVET/herstory/DID_YOU_KNOW_MASTER.asp

Section Four Summary

RESEARCH QUESTIONS:
1. Who were the little known or ignored diverse women who have served the military?
2. Why have women enlisted in the armed forces?
3. Why has the American government recruited women into the armed forces?
4. What are selected examples of American Women’s military experiences between the 17th and 21st centuries?
5. What have been the highlights of diverse populations of American women in the military?
6. What are some selected cases of challenges to diverse populations of American women in the military?
7. What are the contemporary challenges to women in the American armed forces?

CONCISE DESCRIPTION OF FINDINGS

1. Women always have been involved with the defense of the safety and security of the nation.
2. Various positions on the home front and overseas have been filled by women to enable men to serve in the military when women were not yet included in the ranks of the nation’s warriors.
3. Gender, color, and ethnicity have been factors in the unequal standings of women and men in the military.
4. Women in the military have not been accorded full recognition for their military service in the realms of salary, medals, and promotions in rank.
5. Military service has become an attraction for American women, but has limited women’s capacities as wives and mothers because of inequitable policies.
LIMITATIONS OF THE STUDY
1. The type of sources used for this study has been limited mostly to internet resources.

2. More secondary sources than primary interviews have been used for this study.

3. The study has been more cursory than an in depth collection of data to respond to the research questions. This is the first iteration of this study.

RECOMMENDATIONS FOR FURTHER RESEARCH
1. Each of the research questions in this study should be addressed with more primary source data.

2. Interviews should be conducted with women who have served in the military and who have not divulged their stories about discrimination because of their gender, ethnicity, and class.

3. Legal cases taken by women in the military against those who have discriminated against them should be reviewed and integrated into history texts.

4. Primary source diaries stored in various collections focused on diverse populations of women who have served in the military should be reviewed and included in educational texts.

5. Women of diverse ethnic populations should be encouraged to write their stories of service in Iraq and Afghanistan.

Section Five [Selected] Reference List:

BOOKS


Norman, Elizabeth M. *Women at War: The Story of Fifty Military Nurses Who Served in Vietnam*, 214 pages

INTERNET WEBSITES

http://www.americanantiquarian.org/Exhibitions/Womanswork/waryears.htm

Harris, LTC. Kathaleen, Black Women's Military Contributions. A short outline on the NABMW history can be found at: National Association of Black Military Women. Contact for the National Association of Black Military Women.


http://www.womensmemorial.org/H&C/h&cwelcome.html


SEE APPENDIX TO FOLLOW

DID YOU KNOW FACTS ABOUT DIVERSE POPULATIONS OF WOMEN IN THE AMERICAN MILITARY

FROM THE DEPARTMENT OF VETERAN AFFAIRS

http://www1.va.gov/WOMENVET/herstory/DID_YOU_KNOW_MASTER.asp
MARCH 16, 2010 - DID YOU KNOW women did not officially serve in the U.S. military until the Army and Navy Nurse Corps were established in 1901 and 1908 respectively. Prior to that time, women served with the armed forces as contract and volunteer nurses, cooks, and laundresses and even in disguise as soldiers. For example, during the American Revolution, Deborah Samson enlisted in the Continental Army as Robert Shurtleff and served as an enlisted soldier for approximately one year.

APRIL 27, 2010 - DID YOU KNOW there are over 50 monuments dedicated to women Veterans or by women Veterans organizations in our VA national cemeteries. Some of VA National Cemetery Administration’s oldest monuments dedicated to women date back to the late 1800s. (Source: VA National Cemetery Administration)

MAY 4, 2010 - DID YOU KNOW the United States Army remained segregated during World War II. A group of African American women played a significant role in maintaining troop morale during the conflict. These women belonged to the 6888th Central Postal Directory Battalion, part of the Women’s Army Auxiliary Corps (WAAC). The 6888th Central Postal Directory Battalion was made up of 855 enlisted African American women and officers. The battalion was commanded by Major Charity Adams Earley, the highest ranking African American woman in the military by the end of the war. The 6888th was the only all African American, all female battalion. It was deployed overseas first to Birmingham, England then later to Rouen, France. When the women arrived in Birmingham in 1943 they saw letters stacked to the ceiling of the temporary post office. Much of the mail had been there for as long as two years waiting to be sent to soldiers in the field. The women were charged with delivering mail to approximately seven million American troops stationed in Europe. The successful delivery of the mail was an important morale booster for men on the front. One difficult task was sorting letters to guarantee that they were sent to the correct “John Smith” or “Tommy Jones”. To ensure delivery, women worked three shifts, seven days a week. Although they were contributing to the war effort in significant way, the women of the 6888th were still kept separate from the other American troops. The women slept in segregated barracks and ate in segregated dining halls. The women of the 6888th Central Postal Directory Battalion played an important role in World War II by carrying out the important task of delivering mail, by boosting military morale, and by making history as the only battalion of African American women to go overseas. (Source: Smithsonian National Postal Museum Web)site: http://www.postalmuseum.si.edu/AfricanAmericanHistory/p7.html#_edn1#_edn1

MAY 25, 2010 - DID YOU KNOW CPT Dovey (Johnson) Roundtree, WAAC/WAC, a native of Charlotte, NC, was a graduate of Spelman College in Atlanta and a protégée of the influential African American educator, Mary Macleod Bethune, when she was selected as a member of the first class of officer candidates of the WAAC in 1942. After the war, CPT Roundtree used the G.I. Bill to attend Howard University Law School. When she graduated with her law degree in 1950, there were only 83 black women lawyers in the United States compared to 6,165 white women. She established a law firm in northwest Washington, DC, to serve the black community there. During the course of her legal career, Roundtree handled several high-profile cases. Sarah Keys v. Carolina Coach Company, a landmark civil rights case involving bus travel across state lines, was decided by the Interstate Commerce Commission in November 1955, the same year as the more famous Rosa Parks incident, which involved a city bus. In its decision on Keyes, the ICC found the practice of designating separate seats for white and
black interstate bus passengers to be “unjust discrimination and undue and unreasonable prejudice and disadvantage … and is therefore unlawful.” (Source: Women In Military Service For America Memorial archives)

**JUNE 22, 2010**  
**-**  
**DID YOU KNOW** the following historical facts about American Women and the Military:

- The first woman awarded a disability pension by Congress for wounds incurred during military service was Margaret Corbin. She took over her fallen husband's cannon in the Battle of Fort Washington during the American Revolution and she herself was wounded.
- During the War of 1812, two women served as nurses aboard United States, Stephen Decatur's flag ship.
- During the Civil War women disguised as men served on both sides. Women also served as spies, nurses—including aboard at least one hospital ship and one, Dr. Mary Walker, received the Congressional Medal of Honor.
- Women have served in the American armed forces for over 100 hundred years--since 1901--when the Army Nurse Corps was established. The Navy Nurse Corps soon followed in 1908.
- Women who were not Nurses were first enlisted in the Navy and Marine Corps during World War I. Only nurses served in the Army during this war; but the Army did hire about 200 civilian women who were fluent in both English and French to serve as telephone operators. These women, often referred to as the "Hello Girls," were later given veterans' status.
- 432 American military women were killed during World War II. 88 were prisoners of war all but one of these in the Pacific Theater.
- 7 women died in the line of duty while serving in theater during the Vietnam War. Their names can be found inscribed on the Vietnam Memorial.
- Almost 41,000 women served in theater during Persian Gulf War. 13 women were killed and two were taken as prisoners of war.
- To date, more than 20,000 women have served as peacekeepers in Bosnia and Kosovo.
- Two women sailors were killed and five were wounded in the terrorist attack on USS Cole.
- About 10 percent of the U.S. Forces currently serving in Afghanistan and Iraq are women.

Source: Women's Research and Education Institution

**AN ADDITIONAL DID YOU KNOW?**

Native Americans have the highest percentage serving in the military than any other group in America.

More than 12,000 Native Americans served during World War I, though they weren't official U.S. citizens.

More than 44,500 served in World War II, a greater per-capita rate than any other ethnic group.

More than 50,000 served in Vietnam, 90 percent of them as volunteers.

SOURCE: Our Women Warriors and Their Ultimate Sacrifice By Brenda Finnicum

http://www.manataka.org/page138.html  
Manataka American Indian Council
Promoting Cultural Competency through Study Abroad Programs
for Higher Education Faculty

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Abstract

In this current globalized era, the requirement for educating culturally competent citizens has become an urgent matter. To achieve this, the first step is to diversify our teaching and learning models so that we can have open-minded students that are “actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one’s environment” (Hunter, White, & Godbey, 2006, p. 270). In this study, the author explains how cultural competency relates to the development of knowledgeable world citizens and studying abroad helps train culturally competent global citizens. The second half of this paper outlines how studying and/or teaching abroad programs for higher education faculty could help enhance institutions and thus students, becoming more competitive in the global economy. Through such programs, institutions will benefit from the increased diversity, and the promotion of study abroad programs for students will be much more effective with faculty members giving first-hand account of their studying/teaching experience abroad.
Promoting Cultural Competency through Study Abroad Programs

for Higher Education Faculty

Introduction

In this current globalized era, the requirement for educating culturally competent citizens has become an urgent matter. To achieve this, the first step is to diversify our teaching and learning models so that we can have open-minded students that are “actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one’s environment” (Hunter, White, & Godbey, 2006, p. 270). Bennett (1993) argues that, “Probably one of the most threatening ideas encountered by students is [this] concept of difference and the implications this concept brings along with it” (p. 181). That is, how we perceive the differences determine the scale and limit of our interactions with other cultures. In this context, intercultural communication competence is the first big step towards creating culturally competent citizens.

Banks (2001) claims for students to become successful in a diverse world, they need to have the ability to communicate and negotiate among diverse cultures. Banks and Banks (1993) use the term ‘ethnic encapsulation’ to refer to the cultural deprivation that results from the limited knowledge of any culture other than one's own. Not knowing other cultures significantly handicaps the attempts to help them. More importantly, misconceptions and stereotypes about other cultures limit the solutions to the problems created by cultural differences. Antal (2002) argues that misunderstandings and conflict occur when people interpret and judge what they see, the tip of the iceberg, according to
their own norms, values, and assumptions. Thus the behavior of others may seem strange, illogical, or “barbaric” (Barnlund, 1998, p. 39).

Howard Gardner (1995), in Leading Minds: An Anatomy of Leadership explains that in order for a leader to lead a country or an organization, he or she needs to be aware of the presence of other opinions, ideas, and alternative solutions to the problems. He claims that traveling abroad “opens one up to the perspectives of different cultures and ideologies” (p. 248). He reports that Winston Churchill traveled widely to Cuba, India, Sudan and South Africa; Chiang Kai-shek traveled to Japan and Soviet Union; Tojo Hideki (prime minister and military leader of Japan during much of the WWII) completed military training in Berlin; Vladimir Lenin first traveled voluntarily and then was exiled to Europe; and Franklin D. Roosevelt made the European tour. Joseph Stalin traveled entirely within the Soviet Union; Mao Zedong traveled widely within his own country but did not go abroad. Young Adolf Hitler traveled only in Germany and Austria. He further explains:

It is more difficult to maintain a monolithic perspective—a simplistic, often exclusionary story—when one has been exposed regularly to contrasting viewpoints. Those individuals who have not traveled widely are therefore in a more favorable position to see everything from the perspective of their compatriots, most of whom are also parochial, if not xenophobic. (p. 249)

However, Gardner notes that the ability to travel is facilitated by the possession of wealth. The decision not to travel is the problem in this context. Even when one has the opportunity to do so, one deliberately might wish not to be exposed to experiences that might complicate his/her view of the world. One of the most important qualities of a leader is his/her adaptation to the world, and thus his/her response to the change. As
Gardner says, “Those who would lead in the world of the future must be aware of, and find ways of coping with, new and often complexifying trends” (p. 303).

**Study Abroad Programs in the U.S.**

Thomas (2006) explains that many of the colleges and universities in the U.S. have developed some form of a study abroad program that enables their students to receive a learning experience outside their homeland. Zachrisson (2004) confirms that study abroad programs continue to grow. *Open Door’s* 2009 report informs that the number of Americans studying abroad increased by 8.5% to 262,416 in the 2007/08 academic year. Europe continued to host the largest share of U.S. students (56%). Latin America hosted 15% and Asia hosted 11% of all American students studying abroad.

With the increasing number of students in study abroad programs across the country, lack of data on the number of faculty members participating in such programs is alarming. Study abroad literature focus on the benefits of studying abroad for students but do not mention that if and how faculty members would benefit from studying and/or teaching abroad. Faculty members’ participation in programs abroad would be an added benefit in promoting of global citizenship and their experiences would contribute to the common knowledge within the societies they live and work. In this study, the author explains how cultural competency relates to the development of knowledgeable world citizens and studying abroad helps train culturally competent global citizens. The second half of this paper outlines how studying and/or teaching abroad programs for higher education faculty could help enhance institutions and thus students, becoming more competitive in the global economy.
Benefits of Studying Abroad

The Commission on the Abraham Lincoln Study Abroad Fellowship Program (2005) explains that participating in study abroad programs does not necessarily produce experts. However, it does start “a process of inculcating awareness of international and intercultural issues [and this process] promises to vastly increase American global literacy” (Tajes & Ortiz, 2010, p. 17).

There is a comprehensive list of research studies on the benefits of study abroad programs for students in the U.S. These studies focus on study abroad programs and explain that study abroad programs enhance students’ worldview and thus cross cultural effectiveness; provide a global perspectives; increase self-reliance self confidence and personal well being (Carsello & Creaser, 1976; Kuh & Kaufman, 1984; Carlson & Widman, 1988; McCabe, 1994; Kitsantas & Meyers, 2002). These and many other similar reports provide evidence to students’ reporting higher levels of openness and flexibility, emotional resilience, and personal autonomy (Kitsantas & Meyers, 2002; Carlson & Widaman, 1988; Nash, 1976; Ward & Kennedy, 1993). Further, findings demonstrated that study abroad programs significantly contribute to the preparation of students to function in a multicultural world (Kitsantas, 2004) and are important in ensuring the future security of the United States, economic prosperity, and skills needed for global leadership. (NAFSA: Association of International Educators, 2008; Bikson & Law, 1994; Lincoln Commission, 2005; NASULGC Task Force of International Education, 2004; Treverton & Bikson, 2003).

Gilson (2010) explains that students who study abroad show characteristics such as “self-confidence, professional competence, and personal ambition” (p. 7). He further
confirms that students returning from study abroad programs hold a broader worldview, are more tolerant and have an increased respect for diverse cultures. Teichler (2004) explains the benefits of studying abroad in three areas. The first is Knowledge Transfer, where knowledge is more frequently and rapidly transferred from one country to another. The second, International Education and Research, provides an understanding of different cultures regarding their socio-cultural, political, economic, and educational systems. There is a high demand in the business world for foreign language proficiency and field knowledge about other countries, and these skills will be even more in demand in the labor market as these students graduate. The third benefit is Border-crossing Communication and Discourse where learning and research in an international setting is one way of experiencing different views, which will then broaden one’s horizon and promote global perspectives as a leap forward in students’ developing critical and reflective thinking skills.

Carlson, Burn, Useem, and Yachimowicz (1991) found that the students participate in study abroad programs to improve their cultural understanding, to improve their career prospects, and join their friends also participating in such programs. They concluded that the students who participated in study abroad programs showed significant differences in global perspectives and cross cultural cosmopolitanism. These results are consistent with that of McCabe (1994), Carlson and Widaman (1988), and Kitsantas and Meyers (2002). Further, students who study abroad benefit from this experience by their increased commitment to peace and international cooperation. They develop a transnational understanding regarding their empathy of viewpoints of other nations (Carlson, Burn, Useem, & Yachimowicz, 1990). Hadis (2005) explains that the
higher education faculty in the U.S. found the students who return from study abroad programs to be more appreciative of different cultures, more mature, independent, and self-aware. That is, students returning from their study abroad experiences provided evidence of positive changes.

Undsey (2005) explains that when students live in and observe a different society than their own with different concepts of social justice where the dignity and worth of individuals and human relationships are more highly valued, it helps U.S. students develop a deeper sense of appreciation for these values. She further commented that:

The study-abroad experience seems to enhance students' self-awareness, especially with respect to recognizing and, at times, challenging their own values, biases, beliefs, and ways of thinking as well as those of their country. In addition, by being exposed to a different culture, they developed more sensitivity to and appreciation of diversity, which they could directly relate to social work practice. (p. 245)

In short, students who participate in study abroad programs come back as different people with different perspectives and most importantly with a greater empathy towards other nations. There is a significant change in their commitment to peace by living in and observing other cultures.

There are various academic, financial, and other personal reasons affecting the number of students participating in study abroad programs and their choice of target country. It is not the intention of this author to analyze the reasons behind the choice of participating in a study abroad program for students or which country to travel, should they choose to participate in one. However, this study is a proposal to the higher education administrators and faculty in the U.S., nevertheless a modest proposal to
promote and encourage “studying and/or teaching abroad” programs for the faculty members in their respective institutions.

Study Abroad Offices in universities across the United States have been promoting their basketful of options for students to study abroad. Independent study abroad programs focus on Europe and faculty-led groups are rather limited in focus and the number of students. It is usually one or two faculty members leading various weekly trips around the world, more so focused on Europe as well. That is, it is not necessarily that the students do not have enough options to choose from, but it is partly lack of faculty participation and their willingness to promote such programs in their classrooms.

However, such trips do not go beyond a sight-seeing experience, whether it is a conference presentation trip or leading a group of students in a study abroad program or a short term research trip. Participation in international conferences or conducting short term research does not necessarily replace a well planned extensive study or teach abroad program for higher education faculty. Bresler and Ardichvili (2002) argue that being a tourist in a foreign country is different than conducting a long term research in a foreign country. The main difference is the time the person spends in the foreign country to include the rhythm, pacing of intensity, and activities involved during that period. For a tourist, taking a photograph would be sufficient to describe what has been happening, but an international scholar should describe the picture within that picture and go far beyond including historical, cultural, and personal reflections regarding the same photo. Another consideration is that people spending longer periods of time in a host country tend to observe from an insider’s perspective. They, at times, are able to participate in the everyday life along with locals. Last but not the least is the purpose of the visit. Purpose
is important in the sense that it shapes the person’s observations and directs-redirects the purpose of the visit and its interpretation. It is not where we go, and who we talk to, but how we go and how we talk that are significant. Kay and Watson (1982) explain that “We must get inside the skin of other people as nearly as we can. We must learn the ‘language of life’ as far as possible. We must ‘make sense’ of their conditioning and concern in their idiom” (p. 133). In order to achieve this, a weekly trip to a country with a group of students would not necessarily suffice.

Study Abroad Programs for Higher Education Faculty

Confirming the benefits of teaching abroad programs for faculty members, Wilson (1984) conducted four studies on the impact of overseas faculty exchanges and found that such exchanges also enhanced their classroom teaching upon their return. Garson (2005), after spending a year teaching in Cairo, Egypt, explains that she has “learned to be more patient, compassionate, and more tolerant… try to be more aware of my own expectations and those of others” (p. 325). She further inserts that global teaching is letting go of much what people think they know so that they can be open to new understandings. Cushner (2007) explains the impact of international experience within the framework of teacher education through “situative theory” (Putnam & Borko, 2000, as cited in Cushner, 2007, p. 36). According to situative theory, the context in which the learning by individuals occurs is an integral to one’s cognition. Students with international experience develop alternative perspectives, thus becoming global citizens. With all the proven evidence of the positive impact of study abroad for students, Hser (2005) argues that, “Many university administrators do not support internationalization
even though there is an increased awareness of the impact of global change on the university” (p. 39).

Dewey and Duff (2009) explain four types of barriers in getting faculty members to be more involved in internationalization of their campuses. The first barrier is the availability of the information and transfer of information across departments. This is mostly due to the lack of connection between international programs departments of universities and their academic departments. The second barrier is that funding is rather difficult for any type of international involvement. The third barrier is policy and regulation challenges. For example, it is expected of tenure track or tenured faculty members to contribute to the university and the community through service and scholarly work. These policies limit faculty members’ involvement with international work. The last barrier is that institutional support in regards to staff to facilitate such programs for the faculty.

However, if we agree with what the current literature suggests, participation in study abroad programs enhances academic, social and cultural skills of students, makes them aware of transnational issues, and makes them better leaders of tomorrow, I propose to send higher education faculty to study or teach abroad. If we want more students to participate in study abroad programs, first we need to educate our faculty. Sending faculty members to programs outside the continental United States would greatly enhance their academic capabilities, and also send a positive and encouraging message to students with their instructors being role-models. How can we expect a strong promotion of study abroad programs in U.S. classrooms if instructors have not experienced a study/teach abroad program first hand? I argue that if teachers promote such study abroad programs
to their students in their classrooms, while giving account of first-hand experience, the
number of students participating in study abroad programs, in any given institution,
would increase. “Inspiring students to study abroad is certainly not the only reason”
(Hulstrand, 2009, p. 48) but we also need the engagement of faculty and administration in
such programs to promote the peace by interacting with different cultures in their own
countries and carrying the intercultural dialogue to different platforms.

Challenges and Recommendations

Sending faculty abroad is a challenge for institutions and a significant
commitment for the faculty. However, when calculate the cost and benefit of such
programs, institutions will recognize the urgency of cultivating culturally competent
faculty and students. With a rather aggressive job market and the urgency of the need for
cultural competence for the students, it is imperative that we look at the issues through
‘problem solving’ perspective. In this part, the author explains the limitations when
implementing such programs for higher education faculty and proposes multiple solutions:

1) Tenure Track assistant professors can be required to spend a semester
abroad teaching or studying abroad (i.e. learning a language) by adding study/teach
abroad criteria to the promotion system for acquiring tenure. While the [assistant]
professor is spending a semester (or two) abroad, a faculty member from the sister
institution could be invited to teach his/her classes, so, the U.S. institutions would not
need to hire an adjunct professor to take over his/her classes (cost concerns would also be
eliminated). This way, while U.S. institution could benefit from having its faculty
member enhance his/her academic, social and cultural skills and gain a global perspective,
students could benefit from having a foreign professor who would bring a different
perspective. This exchange would help establish new partnerships with different institutions across the world, given the experience and expertise a foreign professor would bring to such host institutions.

2) Universities could promote faculty members’ spending his/her sabbatical leave at a foreign country – studying or teaching. This could be done with various incentives such as providing travel and research funding support. Institutions can facilitate the process by helping the faculty member locate a foreign institution where he or she can spend a semester/year doing research and/or teaching and/or participating in professional development programs including language programs.

Limitations for the Faculty

Family responsibilities are a big concern for faculty members considering spending a semester or a year abroad. However, once the study/teach abroad becomes a requirement for promotion of junior faculty, they will know from the beginning that they will have to study-teach abroad once they accept the employment. With institutional support, they will have to make the necessary arrangements for their family sometime during the probational period of their employment. And of course, institutional support regarding the financial arrangements in this case is imperative. For example, when promoting study-teach abroad programs among faculty, incentives could include paying for the traveling expenses for the family and helping them find schools in the host country for their children (If they do not want their children to change schools, summer programs could be arranged, which could also enhance their children’s social, cultural, and academic skills).
Promoting Cultural Competency

Conclusion

Exchange programs, sabbatical leaves, professional development semesters, foreign language programs, are just few of the many possible programs for higher education faculty. They could spend a semester or a year at a university, a private research institution, a think-tank, or a government institution. Alternative programs and institutions could be found to make their experiences academically, socially, and culturally productive and enhancing. The questions here is, are U.S. institutions willing to support such programs, mostly financially, and are the U.S. higher education faculty willing to model a “global citizen” for their students? The internationalization of U.S. campuses is not only for the benefit of recruiting and retaining international students, but also for providing opportunities for current faculty members to improve their understanding of the world.

It is explained through this study that study/teach abroad programs have benefits to institutions, individuals, and to the society in general. Sending faculty members abroad whether to study or to teach would help promote study abroad programs to students while also enriching students’ classroom learning as faculty members’ share their experiences from abroad. Through interaction with different cultures, negative stereotypes could be overcome, which will then contribute to the peace process. There are many considerations while planning to study/teach abroad programs for higher education faculty, but, with necessary commitment and serious planning by universities, it is possible.
Promoting Cultural Competency

References


NASULGC Task Force of International Education. (2004). *A call to leadership: The presidential role in internationalizing the university.* Final report to the National Association of State Universities and Land Grant Colleges.


Shortcomings of Multicultural Education

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Shortcomings of Multicultural Education

Abstract

Banks (2001) claims for students to become successful in a diverse world, they need to have the ability to communicate and negotiate among diverse cultures. Some argue that when the cultural diversity and global tolerance are promoted within multicultural education, traditional elitism and its shortcomings would be overcome (Schugurensky, 2002). Others argue that multicultural education hinders the assimilation efforts and creating a divisive society (Bernstein, 1994).

With the shifting cultural texture and demographics of the United States (J. A. Banks, 2006b; Irvine, 2003), redefining multicultural education has become imperative. There are many views on the benefits or shortcomings of the multiculturalization of education. The question is not whether a multicultural education should be adopted but it is rather what we understand from multicultural education and how we are going to initiate such a reform within an educational system when we cannot even define ‘multicultural.’ It starts with a deep exploration of ‘I’ regarding our intercultural communication competence.

This study explores intercultural consciousness and leadership developmental progression model developed by Karim (2003). Through this model, he explains intercultural consciousness and how it can be integrated in a leadership model. In this study, the assumptions and suppositions given by Karim (2003) are explained and solutions are offered stemming from these assumptions and suppositions.

Keywords: Multicultural education, Intercultural communication.
Shortcomings of Multicultural Education

Introduction

With the shifting cultural texture and demographics of the United States (J. A. Banks, 2006b; Irvine, 2003), redefining multicultural education has become imperative. According to the data provided by the National Center for Education Statistics (NCES), between 1979 and 2008, the number of school-aged children (children ages 5-17) who spoke a language other than English at home increased from 3.8 to 10.9 million, or from 9 to 21 percent of the population in this age range (NCES, 2009). NCES (2010) reports that in 2007-2008, 58% of public school teachers of grades 9 through 12 are females with 83.5% defined as belonging to “White” race/ethnicity. Hispanics constituted the 6.6% and Blacks 6.9% of all teacher population of public school teachers of grades 9 through 12. The implications of the difference between the number of students with diverse backgrounds and the number of diverse teachers available to meet the needs of these students are certainly worth exploring. In order to further understand these implications, this paper attempts to define (and redefine) multicultural education, explain its shortcomings, and offer recommendations for further discussion.

Multiple Definitions of Multicultural Education

With the emphasis on minority learning, Gibson’s (1976) survey outlined five models where culture and education are explored in a combined fashion. 1) Multicultural education for cross cultural understanding was designed to teach that there are differences among cultures and that the teaching should be designed so that the emphasis on respecting one another’s culture is apparent. 2) Culturally responsive education was developed mostly for K-12 education to include the cultures of the minority students in the curriculum and adapt teaching strategies accordingly to fit the needs and expectations of these students. 3) Bicultural education was adopted mostly to emphasize the importance of teaching languages and the skills needed to be
able to function in the other cultures efficiently. In this, the language and culture of the minority students are reinforced in the curriculum and through the teaching methods used. 4) *Cultural pluralism* was specifically designed to strengthen the socio-cultural, political, economic, and educational participation of minority students within societies. In this, it is important to note that the cultures do not mix but simply find a way to live with each other through providing equal opportunities to every member of the society. 5) *Multicultural education as an experience of the individuals in the society* designed to help the society to work well harmoniously and respectfully.

Even though Ogbu (1992) had suggested that multicultural education has yet to be defined by the scholars, there has been a sufficient number of definitions to justify an action. Banks (1993) explained that the multicultural education started in the United States during the civil rights movement of the 1960s. Since then, there has been a wealth of interest and research on multicultural education (J. Banks, 1993; J. A. Banks, 2001a, 2001b, 2004, 2006a, 2007; J. A. Banks & Banks, 2001; Cochran-Smith, 2001; Ladson-Billings, 1995, 1999a, 1999b; Ladson-Billings, 2003, 2006; Perry, Moore, Acosta, Edwards, & Frey, 2006; C. Sleeter, 2008, 2009; C. Sleeter & Stillman, 2005; C. E. Sleeter, 1991, 2001, 2008; C. E. Sleeter & Bernal, 2004).

Banks and Banks (2001) define multicultural education as:

> an idea, an educational reform movement, and a process whose major goal is to change the structure of educational institutions so that male and female students, exceptional students, and students who are members of diverse racial, ethnic, language, and cultural groups will have an equal chance to achieve academically in school. (p. 1)

They further explained that, "the term multicultural education describes a wide variety of programs and practices related to educational equity, women, ethnic groups, language minorities, low-income groups, and people with disabilities" (p. 6). Multicultural education may mean
making changes within the curriculum in one school but a total change leadership in another school.

Gay (2000) and Ladson-Billings (2004) defined multicultural education as adopting a culturally responsive pedagogy with trained instructors facilitating it. Nieto (1996) defined multicultural education as “antiracist education” which is “a process important for all students” (p. 307). Jay and Jones (2005) defined multicultural education as “the common term used to describe the type of pluralist education” where “its advocates are seeking for all children receiving an education, pre-K through college” (p. 3). The National Association of Multicultural Education (NAME) described multicultural education as a “philosophical concept built on the ideals of freedom, justice, equality, equity, and human dignity as acknowledged in various documents, such as the U.S. Declaration of Independence, constitutions of South Africa and the United States, and the Universal Declaration of Human Rights adopted by the United Nations” (http://www.nameorg.org/resolutions/definition.html). Kahn (2008) described multicultural education as a “process, a philosophy, a concept, which is dynamic, multifaceted, and polemic” (p. 531).

Benefits and Shortcomings of Multicultural Education: An Overview

Nieto (2004) explained that the increase in cultural/ethnic diversity has caused many educators to recognize and own the need to expand their understanding of multicultural education, especially in public schools. With a very long history of immigration of people from many different cultural groups, the need for multicultural education and embracing diversity has become increasingly urgent. Smith (2009) asserted that success or failure of multicultural education depends on the effective preparation of teachers and administrators. When the teachers and administrators understand the learning needs of students and recognize how these needs can
be different than the needs of the students from the dominant culture, then the actual learning occurs. That is, when “we really see, know the students we must teach” (Delpit, 1995, p. 183), we start making a difference in the lives of these students. In order to achieve this, teacher preparation programs are responsible for designing programs that are appropriate and in line with the needs of these teacher candidates. These programs do not only need to challenge teacher candidates to leave their “comfort zones” but the programs themselves need to examine and expand their knowledge and understanding of diverse cultures these teacher candidates will serve (Ball, 2000; Cruz, 1999; Garcia & Willis, 2001; Gay, 2002).

Some argued that when the cultural diversity and global tolerance are promoted within multicultural education, traditional elitism and its shortcomings would be overcome (Schugurensky, 2002). Others argued that multicultural education hinders the assimilation efforts and creates a divisive society (Bernstein, 1994). Some further claimed that a good liberal education embodies a rather mono-cultural education, where national origins and race are not confused with culture as a learned attribute (Bernstein, 1994; Bloom, 1994; Souza, 1991; Grant & Graham, 1994; Chavez, 1994).

One significant shortcoming of intercultural communication competence research and the multiculturalization of education attempts is that it focuses on majority interacting with minority groups (Giles & Evans, 1986; Glaser, 1994; Taylor, 1998). Exceptions to this include Sigelman and Welch (1993) and Sigelman, et. al. (1996) studying the racial attitudes of Blacks toward whites and Powers and Ellison (1995) studying Blacks’ convictions on interracial dating and friendship. All these studies focused on Black/African American and White/European American populations. Many ethnic and racial groups (Black/African Americans, Latino, Asian Americans,
and White/European Americans, etc.) that form the basis of today’s multicultural environment are ignored (Stein & Rinden, 2000; Hood & Morris, 1997).

Advocating for multicultural education, as it is defined and practiced today in U.S. schools, whether K-12 or higher, has become a shallow application of a bicultural education. Bicultural, in this study, is defined as interactions between African-Americans and European-Americans in certain States and Hispanics and European-Americans in certain States. ‘Shallow’ in this context is defined as the poor and misguided attempts to multiculturalize the education. One example of the underestimation of the significance of a multicultural education is even though multicultural education is a necessary ingredient of quality education, it is perceived by most educators as to be embraced in times of crisis or simply a luxury (Banks & Banks, 2002).

A scholar and practitioner Nieto (2000) limits the shortcomings of the multicultural education to the “color-blindness”:

Many teachers and schools, in an attempt to be color-blind, do not want to acknowledge cultural or racial differences … Although it sounds fair and honest and ethical, the opposite may actually be true … color-blindness may result in refusing to accept differences and therefore accepting the dominant culture as the norm. (p. 138)

It is the lack of the ability “to relate and communicate effectively when individuals involved in the interaction do not share the same culture, ethnicity, language, or other salient variables” (Hains, Lynch, & Winton, 2000, p. 2). Another strong advocate of so-called multicultural education is Lisa Delpit. She argues that educational reforms are not designed with children of color in mind (Delpit, 1995).

Delpit (1995), Nieto (2000), Banks and Banks (2002), Fuller (1992), and many other scholars argue that it is rather the mono-cultural curriculum and the shortcomings of teacher education programs that are mainly composed of female European Americans that create the
achievement gap. Fuller (1992) compiled the statistics revealing that the majority of students in teacher education programs are European-American, middle-class females, products of suburbs, small cities or rural areas. Dilg (1995) warns that white teachers’ approach to multicultural education (mostly the curriculum aspect of multicultural education) as an outsider carries the danger of ignorance.

Despite increasing ethnic diversity in the United States, many educators do not seem to understand that multicultural education is the broader understanding, involvement, and appreciation of more than two cultures. Jay (2003) explained that “Despite a tendency to equate ‘Americanness’ with ‘Whiteness’ by individuals both outside and inside the United States, the United States is comprised of many different racial, ethnic, linguistic, and cultural groups” (p. 3). Contrary to the popular discourse of creating equity within the current education system, King (1991) argued that culturally relevant teaching that is successful helps produce a relevant black personality. His argument is relevant in the sense that culture is significant for individual and group identity. It “gives people a sense of who they are, of belonging, of how they should behave and of what they should not be doing” (Harris & Moran, 1991, p. 12).

With all the shortcomings of the application of so-called multicultural education, the author argues, that the focus, as it is presented in the current literature, is on why the children of African-American population in the U.S. schools are not excelling in their classes comparable to the children of European-American populations. There are facts and the author does not argue against these facts where African-American students score low on the standardized tests. For example, Garcia (1994) argues that research on African-American students tends to focus on dropouts, literacy gaps, and educational delinquency. Another example to arguing the dominance of the White race is Critical Race Theorists’ argument that official school curricula
are designed to maintain a “White supremacist master script” and they are “culturally specific artifacts” (Delgado, 1995, p. 21). Regarding instruction, Delgado argued that the “current instructional strategies presume that African-American students are deficient” (p. 22). When the African-American/Black students are given tests, Gould (1981) argued that it is a movement to legitimate African-American students’ deficiency. Tate (1997) further commented that the current multicultural paradigm, currently popular in the U.S., exists to benefit Whites. The question here is whether Whites are promoting advances for Blacks when only Blacks promote White interests (Bell, 1980).

In order for learning to occur in classrooms, we need to examine a wide variety of perspectives, including our own (Curtis, 1998). Lawrence (2005) claimed that for an antiracist multicultural education to be more than superficially effective, it must go beyond the lack of multicultural ingredients in the curriculum, policy and structure issues within schools and how school personnel, specifically teachers, interact with students and with each other (see also Banks & Banks, 1995; Lee, 1995; Nieto, 2000). It is the innate rejection of culture difference as threatening as it is because “it challenges an individual to reconsider ethnocentric views of the world and negotiate each intercultural encounter with an open mind and as a unique experience” (Mahoney & Schamber, 2004, p. 312).

Through this study, I postulate that the solution to the challenges of establishing a multicultural education lies in the understanding of the relationship between the individuals rather than implementation of a policy model or educational reform within an educational system. An education system, which does not recognize its problems and challenges as they are, rather than creating superficial challenges and solutions, is bound to fail in the long run.
However, it should also be noted that intercultural communication and thus research is problematic as members of cultural groups may be blinded to significant aspects of their own culture. This is also a limitation of an education system where educators “represent ethnically diverse individuals and groups in all strata of human accomplishment instead of typecasting particular groups as dependent and helpless victims who make limited contributions of significance” (Banks & Banks, 2002, p. 33).

**Multicultural Education through Development of Intercultural Communication Competence**

I argue that even though the curriculum, teacher education, and policies within the current education system have shortcomings, learning occurs in a system where intercultural communication competence is valued. With the most culturally sensitive curriculum and appropriate legislations regarding teacher education, intercultural communication competence remains the first big step towards success.

Karim (2003) developed a Leadership Developmental Progression Model. In this model, he made nine assumptions and suppositions about human tendencies and inclinations. Through this model, he explained intercultural consciousness and how it can be integrated in a leadership model. In this study, these assumptions and suppositions given by Karim (2003) will be explained and solutions will be offered stemming from these assumptions and suppositions. Relevance of intercultural competence and thus consciousness in achieving multiculturalism in education will be explained further in this study.
Leadership Developmental Progression Model

Karim (2003) explained that:

Intercultural consciousness goes beyond mere recognition and knowledge of cultural differences and language acquisition (in case of language differences). Intercultural consciousness is a state of mind that requires holistic engagement of one's cognitions, behaviors, emotions, and beliefs. It requires extensive self-reflection and critical self-analysis. It demands intentional inquiry and comprehension of the lived experience and world view of the ‘Other’ [Said (1979) defines “other” as people that are alien to the West]. It requires patience, tolerance of uncertainty, creativity, and flexibility in behaviors and thinking. (p. 37)

These nine assumptions and suppositions developed by Karim (2003) are:

1. Most people are culturally encapsulated and ethnocentric in their world view.
2. People tend to behave differently in their dealings and action with in-groups versus out-groups.
3. People feel cognitively, emotionally, and behaviorally challenged in unfamiliar situations and settings.
4. People prefer to avoid uncertainty and reduce anxiety.
5. People tend to behave in self-protective ways if they perceive threats to their psychosocial identity.
6. People attempt to reduce cognitive dissonance.
7. People repeat or avoid behaviors and experiences that have pleasant or unpleasant outcomes, respectively.
8. People's evaluation of self and others is influenced by violation or confirmation of their expectation, and their attribution processes.

9. Most people perceive themselves as morally decent, interpersonally sensitive, and socially just. (p.35)

**Intercultural Consciousness**

The rest of this study will focus on explaining these assumptions and suppositions and offer a starting point, which is understanding ‘why we do what we do’. It begins with an exploration of the ‘self’.

1. *Most people are culturally encapsulated and ethnocentric in their world view.*

   Banks and Banks (1993) use the term “ethnic encapsulation” to refer to the cultural deprivation that results from the limited knowledge of any culture other than one's own. Not knowing other cultures significantly handicaps the attempts to help them. More importantly, misconceptions and stereotypes about other cultures limit the solutions. Antal (2002) argued that misunderstandings and conflict occur when people interpret and judge what they see, the tip of the iceberg, according to their own norms, values, and assumptions. Thus the behavior of others may seem strange, illogical, or “barbaric” (Barnlund, 1998, p. 39). Teachers, students, and administrators who have limited (and are often misinformed and stereotyping) knowledge of other cultures are part of the problem rather than part of a solution. *Do I know enough about other cultures?*

2. *People tend to behave differently in their dealings and action with in-groups versus out-groups.*

   According to social identity theory, people are attracted to others who are similar to themselves because this similarity reinforces their self-image (Tajfel, 1982) and individuals
Shortcomings of Multicultural Education

perceive and treat in-group members more favorably than out-group members. An essential part of intercultural communication is sincerity. When in-group interaction differs from out-group interaction sincerity of the individuals becomes questionable.

We need to understand that intercultural communication requires a great deal of accountability between what we say and how we act. A big step is how close these two are to each other. *Am I doing what I am saying? Am I “walking the talk”?*

3. People feel cognitively, emotionally, and behaviorally challenged in unfamiliar situations and settings.

Once we place a young female European American in a classroom where she is called ‘White’ rather than ‘Madam’, or ‘Miss’, it is rather unfair to expect her to disengage herself from her ‘convictions’ if there is any. That is, calling the teacher ‘White’ enforces the difference and widens the gap. Educated in a system where there were only ‘similar cultures’, we cannot expect her to grow as a teacher, while also disregarding the treatment she is getting from students and teachers of color. Rather than blaming the ‘young female European-American teacher from the suburbs,’ we need to understand that with the education and life experiences she had, more help needs to be extended to her, especially during her first few years in the profession. Once you add the pressure of being a new teacher to the pressure of racial sensitivity, it is therefore natural for a teacher of any color to be less effective.

Macphee (1997) argued that rural children do receive images of socio cultural diversity mostly through the media, but, and these images alone cannot provide a complete or accurate portrayal of any cultural group. Barta and Grindler (1996) explained that despite the teacher's best intentions, the fact that cultural differences are not always perceived positively, particularly when viewed from the perspective of the mainstream culture [in some institutions, the Black
population forms the mainstream culture, in some the Hispanic population, and in others the White population] and bias against diversity, not diversity itself, is the cause of the turmoil. What am I expecting when I educate the educators and do not take responsibility of my teachings? How informed am I about ‘diversity’? What is my perception of “diversity”?  

4. People prefer to avoid uncertainty and reduce anxiety.

Hofstede and Hofstede (2005) defined Uncertainty Avoidance as the “extent to which the members of a culture feel threatened by ambiguous or unknown situations” (p. 167). There is tolerance for ambiguity and chaos in weak uncertainty avoidance cultures whereas in strong uncertainty avoidance cultures, there is a need for precision and formalization. However, tolerance for ambiguity and avoiding uncertainty create a system where it becomes a diversion and an excuse for the failure as avoidance of uncertainty reduces anxiety and creates a superficial cultural shield. That is, once you do not see it, it does not exist. Identifying the problem is not sufficient but taking responsibility for and acting upon it is the big step towards the solution. What am I doing to face the truth and accept the differences?  

5. People tend to behave in self-protective ways if they perceive threats to their psychosocial identity.

This is related to above discussions of uncertainty avoidance and the fear of the unknown. With the limited knowledge on different cultures, people tend to form a protective shell around them and avoid change. That is, if someone needs to change, it has to be the ‘other’, rather than ‘I’. If someone violates the space we are living in, we tend to be defensive and this defensiveness leads to more failures.  

The individualistic characteristic of the U.S. society is also significant. Hofstede and Hofstede (2005) explained that “Individualism pertains to societies in which the ties between
individuals are loose: everyone is expected to look after himself and herself and his or her immediate family” (p. 76). If a culture, other than my own, violates my space, and if I know that it is here to stay, I will defend myself and protect my own culture. Why am I being defensive?

What is the threat?

6. People attempt to reduce cognitive dissonance.

“Cognitive dissonance” as defined by Merriam-Webster Online dictionary is “psychological conflict resulting from incongruous beliefs and attitudes held simultaneously”. It is also in accordance with uncertainty avoidance where people also avoid the unknown.

Rothman (1997) exerts that cultural misunderstandings are often experienced as conflicts. These conflicts are seen as threats not only to goal achievement, but also to the sense of self respect, competence and identity of the people involved.

If there is a problem, it is not because of me, but because of the ‘other’ and I do not take any responsibility in its creation and growth. How responsible am I for the creation and growth of this problem?

7. People repeat or avoid behaviors and experiences that have pleasant or unpleasant outcomes, respectively.

People tend to avoid situations where they have encountered unpleasant outcomes and repeat the behaviors where they were previously rewarded / appreciated in the society. It is the expectations of the society and norms within the society that determine the behaviors of individuals. By repeating the popular discourse of being a strong supporter of a multicultural education, blaming either the curriculum or the new generation (mostly young female European-American) teachers, I will be accepted into an elite group where such discourse does not create a conflict and thus I am legally, culturally, socially, and psychologically accepted into the system.
Therefore, I will keep on doing what I am doing and I will not step outside the social and political norms of the society. Should I go outside the line by initiating a rather provocative discussion and face losing my place in the society?

8. People's evaluation of self and others is influenced by violation or confirmation of their expectation, and their attribution processes.

Social expectations and norms have been discussed above. People tend to repeat their actions if these actions have been confirmed by the society. Then, the definitions and cultural labels attributed to other cultures are natural outcomes of such confirmations. If others are not behaving in the way that I am expecting them to do, then, it is my responsibility to define them as nonconformists, creating an unnecessary conflict and division within the society. Vygotsky (1986) argued that learning does not take place in cognitive isolation, but within the context of activities and social interaction likely informed by the day-to-day contingencies of culture. Who am I? What are my expectations from the society and what does society expect from me?

9. Most people perceive themselves as morally decent, interpersonally sensitive, and socially just.

People tend to justify their behaviors through various situations they have previously encountered. It is the selective perception and acceptance of the partial truth as it is psychologically comforting. It is the avoidance of understanding of ‘I’ and accountability that it brings. Since our childhood, we have been blaming others, for example, our sister or brother for breaking mom’s most valuable vase. When we are young, it is our siblings. When we are older, it is other people, but never ‘I’.

While an advocate of the popular discourse, Lewis (2001) explained, “Color-blindness enables all members of the community to avoid confronting the racial realities that surround
them, to avoid facing their own racist presumptions and understandings, and to avoid dealing with racist events” (p. 801), it is rather questionable whether such attributes can be expanded to the overall society. Nieto (2000) argued that multicultural education “challenges and rejects racism and other forms of discrimination in schools and society and accepts” and “affirms the pluralism (ethnic, racial, linguistic, religious, economic, and gender among others) that students, their communities, and teachers reflect” (p. 305). She did not only argue that multicultural education rejects racism, she also confirmed the importance of teachers’ cultures in the learning process. *Am I truly sensitive to the racial elements in the culture I am living, including the cultural differences of the dominant race? What are my standards of judging “the other”? What is “morally decent” and “socially just” for me? Have I ever met a person identifying himself/herself as “racist”?*

**Discussion and Conclusion**

Bennett (1993) argued that, “Probably one of the most threatening ideas encountered by students is this concept of difference and the implications this concept brings along with it” (p. 181). That is, how we perceive the differences determine the scale and limit of our interactions with other cultures. In this context, intercultural communication competence is the first big step towards creating a culturally sensitive education. “Exploring the construct of cultural difference is fundamental to learning about other cultures” (Mahoney & Schamber, 2004, p. 311) and we need to start with a close look at our intercultural communication competence. Are we communicating our sincere attempts to understand other cultures effectively, or are we simply blinding ourselves with our own convictions on what is right for the students?

The solution is not simply to create a culturally responsive pedagogy with a curriculum designed with children of color in mind, and turning young, female, white suburban teachers into
culturally competent and responsive educators. I do not argue the relevance of such discourses in the current education system. However, what I am arguing is that these do not constitute the essence of the solution but it is, rather, an understanding of ‘who I am’, and ‘why I do what I do’ as to start the ‘change’.

It is also not necessarily the information provided by the schools that will enhance our intercultural communication competence but an understanding of why we do what we do will. Gudykunst (1998) explained that intercultural competence includes not only knowledge of the culture and language, but also affective and behavioral skills. Examples to such affective and behavioral skills are empathy, human warmth, charisma, and the ability to manage anxiety and uncertainty. There is no question that racism is a big concern and dominance of a single culture and presents a real threat for any education system. However, not belonging to the mainstream culture should not justify the failure of the minority education.

From a pedagogical point of view, cultural sensitivity provides a road map to multiculturalization of education and thus equality. From a political point of view, ‘divide and rule’ style of management applies where schools, through singling out the differences (unique characteristics), are creating culturally distinct groups. Through these divisive policies, it becomes easier to focus on a problem where political sensitivity becomes a handicap. School management focuses on maintaining a superficially equal education rather than focusing on the learning outcomes of students from all cultures within the system. In order to have a better understanding, we need to take a close look at the policies as how an educational ideology is transferred to procedures, and regarding application, and how these procedures are practiced.

To achieve multiculturalism in education, we need to have a clear definition of what we understand from ‘multicultural education’. Through a clear definition, we can make the
necessary changes in the policies. After we make the necessary changes in the policies, we need to have leaders with strong intercultural communication skills in order to communicate the vision of a multicultural education. The process of defining multicultural education, making the necessary changes in the policies, and finding a leader to communicate these can be achieved through serious and sincere applications of each of these steps, respectively. However, before we start to ‘change’ the world, we need to understand ‘why I do what I do.’ Whoever you are, wherever you are, whatever you want to accomplish, it all begins with an understanding of ‘I’.
Shortcomings of Multicultural Education

References


Shortcomings of Multicultural Education


College Anonymous Confession Board (ACB) Activity for Select Ohio Public and Private Higher Education Institutions

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Abstract
The recent proliferation of college anonymous confession boards (ACBs) as a component of social networking touches higher education and presents implications for administrators, student services professionals, faculty, and students. It is important to understand the characteristics of college ACBs and how they affect college students to contemplate institutional roles and responsibilities. This study examines college anonymous confession board (ACB) activity for 20 higher education institutions in Ohio over a twelve month period and reports the posting and reply activity recorded in two phases to discover the level of activity present on an
ACB for select Ohio higher education institutions. In addition to the level of participation discovered, results of a content analysis of the postings and replies reveal the nature and scope of the discussions occurring on these college sites. The potential implications and challenges from college ACB participation and the responsibilities of those in higher education to consider their extent of involvement are discussed.

**Purpose of the Study**

Originally conceived as a forum for college and university students to exercise free speech without fear of retribution, college ACBs have quickly evolved into an ethical and legal grey area of higher education. Given that ACBs are a recent occurrence at many campuses across the United States, it is important for administrators, student affairs professionals, faculty, and students to consider potential implications on the higher education experience. ACBs present problems that continue to plague many colleges and universities despite the desire to prevent their spread and usage. In addition to worrying about classes, extracurricular activities, work, and other typical college issues, students must also be concerned that they do not appear in postings on such sites. Administrators and faculty in higher education institutions must be aware that these sites exist and the extent to which they have infiltrated their campuses and impact students. Only with this awareness can colleges and universities be prepared to manage their response and help students fight the verbal attacks taking place on these boards. Investigating the proliferation of college ACBs and the participation level and impact on higher education institutions in the state of Ohio provided the impetus for this research. Results may provide insights to administrators, faculty, and students to assist in developing meaningful strategies to address the impact of these ACBs on colleges and universities.

The research questions for the study include:
1) What is the activity level of a college ACB in select Ohio higher education institutions?

2) How do Ohio public and private institutions compare in their level of anonymous confession board activity?

3) What are the most discussed topics for those selected Ohio higher education institutions?

4) Specific to Greek life, are college ACB postings for those selected institutions more positive or negative in nature and tone?

**Perspectives and Conceptual/Theoretical Frameworks**

Anonymous confession boards created for higher education students purport to offer a venue for open discussion and dialogue about campus life, sexuality, religion, politics, and any other topics of interest to college and university students. Perhaps the best definition of an ACB is provided by the mission statement of the College Anonymous Confession Board (ACB) as: “The College ACB or College Anonymous Confession Board seeks to give students a place to vent, rant, and talk to college peers in an environment free from social constraints and about subjects that might otherwise be taboo.” (College ACB, 2009, para. 2). According to Morgan (2008), anonymous confession boards allow users to post information to the internet and promise that they will remain unnamed. Similar to a celebrity gossip site, college ACBs generally focus on topics such as the sex lives of students and rumors surrounding Greek societies (Morgan, 2008). Juicy Campus, a college ACB which eventually shut down due to economic reasons, did not even require that its users register for an account with the site (Morgan, 2008; Storch, 2009). What makes these sites especially unsettling is that those who use them often times provide the names of those being discussed (Morgan, 2008). As a result, they can be devastating for those involved. For example, one Juicy Campus post identified a Yale sophomore by name and provided a link to a website where one could watch him in a pornographic movie with three
other men (Morgan, 2008). Any perusal of College ACB, a current anonymous confession site, will uncover posts discussing the biggest slut on campus, fraternity hazing, and drinking habits (www.collegeacb.com). Some students who have been defamed by these sites have been so devastated that they have resorted to self-harming and suicidal behavior (Storch, 2009).

Given the impact and apparently the staying power of anonymous confession boards, those at any higher education institution should be concerned with how to contend with the impact of college ACBs on students and student life. However, doing so appears to be no easy task. One may think that an institution could simply block the site to help eliminate its impact. However, Storch (2009) argues that this is largely impossible and ineffective. These sites are not hosted on the network of any college, and banning them may lead to the requirement that all offensive sites be prohibited by a particular institution (Storch, 2009). Furthermore, this type of action also involves the issue of freedom of speech and may also encourage more students to visit the sites (Storch, 2009). Legal remedy appears absent as there is no avenue available to sue the websites or their owners due to protection granted to them by The Communications Decency Act (“Gossip and Slander,” 2008). According to Bleiberg and Storch (2009), the best way to handle ACBs could possibly be to simply educate students and provide them help with determining who posted offensive material and pursuing legal action against them.

**Study Methodology and Results**

**Methods**

To sample the amount of ACB usage within the state of Ohio, the most active collegiate ACB, College Anonymous Confession Board (www.collegeacb.com), was selected for participation calculation and content analysis. Data collection and analysis were divided into two phases to investigate activity over time and research was conducted in two phases. Phase
one involved activity on College ACB for postings occurring June 1, 2009 to January 2, 2010. Phase two focused on activity from those same boards from January 3, 2010 through July 31, 2010. Aggregating data from Phase One and Phase Two provided data for one year of College ACB activity for the selected institutions.

Higher education institutions identified for the study included both public and private colleges and universities in the state of Ohio. Initially 12 public institutions and 21 private institutions were selected for analysis (n=30), however a review of College ACB revealed that one public and 12 private institutions did not have a board on College ACB and were eliminated from the study, leaving 11 and 9 institutions respectively (n= 20). Data were collected for each of these institutions recording the number of overall posting and replies occurring within each institution’s section of the College ACB website during the identified time period. Table 1 presents data for public institutions and Table 2 highlights data for private institutions.

Table 1

<table>
<thead>
<tr>
<th>Public Institutions with College ACB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institution</strong></td>
</tr>
<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Cleveland State University</td>
</tr>
<tr>
<td>Bowling Green State University</td>
</tr>
<tr>
<td>Kent State University</td>
</tr>
<tr>
<td>Miami University of Ohio</td>
</tr>
<tr>
<td>NEOUCOM</td>
</tr>
<tr>
<td>The Ohio State University</td>
</tr>
<tr>
<td>Ohio University</td>
</tr>
<tr>
<td>The University of Akron</td>
</tr>
<tr>
<td>University of Cincinnati</td>
</tr>
<tr>
<td>The University of Toledo</td>
</tr>
<tr>
<td>Wright State University</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
</tr>
</tbody>
</table>

Table 2
Private Institutions with College ACB

<table>
<thead>
<tr>
<th>Institution</th>
<th>Phase One Total</th>
<th>Phase Two Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital University</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Case Western Reserve University</td>
<td>93</td>
<td>214</td>
<td>307</td>
</tr>
<tr>
<td>The College of Wooster</td>
<td>22</td>
<td>45</td>
<td>67</td>
</tr>
<tr>
<td>John Carroll University</td>
<td>105</td>
<td>127</td>
<td>232</td>
</tr>
<tr>
<td>Kenyon College</td>
<td>9</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>Oberlin College</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>The University of Findley</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>University of Dayton</td>
<td>12</td>
<td>36</td>
<td>48</td>
</tr>
<tr>
<td>Xavier University</td>
<td>21</td>
<td>53</td>
<td>74</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>271</strong></td>
<td><strong>529</strong></td>
<td><strong>800</strong></td>
</tr>
</tbody>
</table>

To analyze the content of the postings, eight categories were specified to classify discussion content. The categories selected were: sex, drugs, professors, parties, off-campus activities, advice for students, Greek life, and postings related to student organizations. A content analysis of all discussion board postings for each institution revealed the nature and tenor of the posting. If a posting or reply pertained to one or more of the categories, the posting was dually counted in each classification. To provide more specific data concerning Greek life postings, those identified posts were judged to be either “positive” or “negative” based on the message and content.

Results

Of the 20 institutions examined for both Phase One and Phase Two, only 19 had active boards on College ACB as of the final day of the study. While some postings were recorded for one institution, during Phase Two, it had no active board as of August 27, 2010. Of the 20 institutions, 14 institutions had active sections (defined as six or more postings and replies) during Phase One, and 15 institutions had active sessions as defined as six or more postings and
replies during Phase Two. Posting and reply activity per institution ranged from four to 3,524 during both phases of data collection. Especially noteworthy were Kent State University and Miami University of Ohio, boasting total postings of 642 and 3,524 respectively. Of the 5,783 total postings and replies for all institutions, public institutions exhibited greater activity with a total of 4,983 postings while public institutions recorded 800 postings. Although the breakdown of the number of participating institutions was fairly equal (11 public and 9 private), public institutions clearly demonstrated a higher level of activity which may be attributed to the high levels of activity of Kent State University and Miami University of Ohio.

The content analysis performed revealed that the nature of the postings and replies focused overwhelmingly on sex and negative aspects of Greek life, again with Kent State University and Miami University of Ohio disproportionately contributing to those totals. Clearly, students with an interest in participating in ACBs do so to discuss those two topics as postings for other topics were significantly less frequent.

Conclusions and Implications

While overall use of college ACBs in the Ohio institutions examined is not yet widespread, activity over the 12 month period studied indicates that institutional activity is increasing overall. Further, the malicious nature of many of the postings has increased considerably over this period and suggests a troubling trend. Very few of the postings contained information that one may find useful. For example, there were very few postings related to college advice, student organizations, off-campus activities, parties, and professors. In contrast, most postings and replies dealt with the topics of sex and Greek life. Although the topic of Greek life could be useful if used in a positive manner, many of these postings were used to speak negatively about rival fraternities or sororities.
From a student perspective, several disturbing issues emerge relative to ACB activity. Undoubtedly the most obvious concern is an anonymous posting containing false or exaggerated information. Along with the disturbing nature of some of the posts, the fact that posts do not expire contributes to the concern that these malevolent rants may persist in perpetuity. It is possible that a college ACB post could be viewed by a potential employer, spouse, or acquaintance – with damaging consequences. Especially when a post contains the name and/or a picture of the student targeted, safety issues are of paramount concern. Several student groups have recognized the negative impact of these sites and have organized to block access at several colleges and universities, including Pepperdine, Columbia, and Yale (Morgan, 2008). However, to date no institution as has blocked access to these sites from campus computers (Young, 2008). To do so would be a potential violation of the first amendment and oppose the objective of higher education as providing a place for unlimited exploration and access to information. It may also appear as a move toward censorship by higher education administrators. Even if access to campus computers was blocked, administrators have no authority to block access and participation from off campus computers.

Questions persist regarding institutional responsibility. The dilemma for administrators creating educational programs aimed at ACBs is whether this will only increase interest and traffic by drawing greater attention through protest (Young, 2008). Faculty may wonder whether to discuss these boards and student responsibility as part of their advising responsibilities. Student affairs professionals should consider their obligation to inform and educate students about their ethical responsibility and accountability if they choose to participate in a college ACB. Although the question of educating and possibly inadvertently encouraging use is probably a valid concern, ignoring the issue does nothing to assist students understand the nature
and scope of ACBs for those who initiate the postings or fall victim to their effects. One suggestion to incorporate student information and education may be to introduce this issue through the institution’s student code of conduct as one of many expectations related to student behavior. Subsequent investigation and analysis of student conduct violations related to ACB participation through student judicial affairs offices could reveal the institutional effect.

Given the destructive nature of the postings found as a result of this research, future research should be conducted concerning the effects that these websites can have on students and campus communities specifically in regard to areas such as student life and student judicial affairs. Additionally, research should also be conducted to see if these trends can be demonstrated in other states and nationally.
References


Professional Development in the Digital Age: A Framework for Blended Communities of Practice

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Abstract

The need for sustainable, meaningful teacher professional development to support rising professional demands remains an ongoing challenge for educators. The use of current technologies, such as online learning systems, to leverage the development of learning communities, including communities of practice (CoPs), where teachers with a common interest engage in continuous interaction and knowledge sharing (Wenger, 2000), is a rising trend. The increasingly popular blended CoP model (National Staff Development Council, 2008; Wenger, 2000), allows teachers to build trust and community in-person, while extending knowledge sharing online in an anytime, anyplace environment. Blended CoPs are purported to promote ongoing and meaningful professional development (National Staff Development Council, 2008). Yet, further research is needed to determine how to effectively leverage current technologies to create truly blended communities that enhance teacher learning and professional practice.

In-depth case studies of two developing blended CoPs in a large, urban school district explored the role the blended environment played in supporting the CoPs in accomplishing their goals. The objectives of the case studies were to (1) identify elements of CoP culture, facilitation, design, discourse and patterns of communication that supported and hindered the accomplishment of CoP goals, and (2) establish a set of recommendations to assist developers and leaders in the creation of sustainable, successful blended teacher learning communities. Data collection for each CoP spanned a four month period and included: four online and four in-person observations; semi-structured interviews with the leaders and five selected participants based on low, average or high levels of engagement; and initial and final reflective surveys. The results of the case studies were used to develop a preliminary framework for administrators and teachers interested in establishing truly blended CoPs. The framework includes 16 recommended key components with suggested elements for culture, facilitation, design, discourse and patterns of communication; and includes how these components might look in the blended environment. While more research is needed to determine the validity of the framework, the framework presents a starting point for district administrators and CoP leaders interested in providing sustainable, meaningful teacher professional development using an in-person and online blended model.
Introduction

The demands placed on schools and teachers are consistently increasing due to advances in technology, increasingly diverse student populations, and enhanced standards and accountability (Darling-Hammond, 1998; Garet, Porter, Desimone, Birman, & Yoon, 2001). As a result, sustainable and meaningful professional development is essential. Professional development can increase teachers’ skills for teaching today’s students, but teacher professional development must be more than just a group of training workshops, institutes, meetings or in-service days. Instead, it must be a process where learning how to put knowledge into practice is supported within a community of teachers, administrators, and staff developers (Schlager & Fusco, 2003). According to the National Staff Development Council,

Staff development that has as its goal high levels of learning for all students, teachers, and administrators requires a form of professional learning that is quite different from the workshop-driven approach. The most powerful forms of staff development occur in ongoing teams that meet on a regular basis, preferably several times a week, for the purposes of learning, joint lesson planning, and problem solving. These teams, often called learning communities or communities of practice, operate with a commitment to the norms of continuous improvement and experimentation and engage their members in improving their daily work to advance the achievement of school district and school goals for student learning. (Learning Communities, 2008)

The traditional forms of staff development mentioned previously do not follow the National Staff Development Council’s belief in collaborative and continuous learning, and are commonly criticized as being ineffective in providing teachers with the activities, content and time needed to increase their knowledge and develop meaningful changes in classroom practices (Darling-
Hammond, 1998; Garet et al., 2001). The traditional forms of staff development previously mentioned are often problematic, as studies show that teachers who spend more time studying teaching, especially in their own practice, are more effective overall, particularly in teaching higher-order thinking skills and for meeting the needs of diverse learners (Druva & Anderson, 1983, as cited in Darling-Hammond & Ball, 1997). For instance, a meta-analysis of 65 research articles on science teacher learning and outcomes for students by Druva and Anderson (1983), found that teachers’ effectiveness, defined by what teachers understand about the material and about the teaching discipline more broadly, depended on the amount and kind of teacher education, including the content area training they had, and on the types of professional development opportunities they experience later in their careers. A great deal of what teachers encounter in traditional forms of staff development “does not consider them as learners, is not designed to help them develop over time, does not focus on the content or the students whom they teach, and does not offer opportunity for focused analysis and reflection” (Darling-Hammond & Ball, 1997, p. 16).

One reason for this disconnect is that often districts and schools “must choose between serving larger numbers of teachers with less focused and sustained professional development or providing higher quality activities for fewer teachers” (Desimone, Porter, Garet, Yoon, & Birman, 2002, p. 105). Desimone et al. suggest that this is a profound problem in improving teaching practice, and that in order to transform teaching instruction, schools and districts need to focus their professional development programs on smaller numbers of teachers, for longer periods of time, instead of trying to train larger groups of teachers in short-lived, superficial professional development workshops. In a three-year longitudinal study on the effects of professional development on teaching instruction, Desimone, et al. found that teachers must
engage in active learning on a continuous basis, where they immerse themselves in the process of creating knowledge with others and are not just recipients of information. Teachers must interact with their colleagues regarding their work and student learning continuously, in order to develop a deeper understanding of how children learn, and to develop effective teaching practices (Desimone, et al.).

Problem Statement

The rising need for teachers to participate in meaningful, ongoing and sustainable professional staff development in order to reach the needs of a diverse student population must support continuous learning for teachers and it must be relevant to their practice of teaching. Furthermore, the new knowledge and skills acquired must reach the classroom to promote student learning. Traditional forms of professional development that employ a “one-size-fits-all” approach often fail to reach teachers in these ways, resulting in lack of participation, engagement, and sometimes even complete withdrawal, in the professional development programs. Teacher participation in staff development means that teachers are not just idly listening and receiving information, but are choosing to actively take part and contribute to the experience; whereas engagement entails more effort for contributing and connecting to the professional development. This includes both taking and giving knowledge, at a deeper and more profound level (Clark, 1999). If teachers do not value the professional development and are not engaged in the learning process, teachers are less likely to choose to participate in the continuous learning and problem solving endorsed by the National Staff Development Council (2008); resulting in a disconnect between the professional development and teacher learning. When this disconnect happens, there is often no direct impact on the teacher or his/her teaching practices. Therefore, there is a continued need to find innovative ways to engage teachers in professional
learning that affects professional practice in positive ways; that focuses on long-term, sustainable
teacher learning, such as professional learning communities or communities of practice
recommended by the National Staff Development Council (2008).

Technology offers an innovative way to engage teachers in professional learning that is
relevant to their teaching practice. As the use of technology continues to grow in education, the
importance of learning how to leverage technology to help facilitate alternative ways of reaching
teachers for professional staff development also continues to grow. This includes learning the
facilitating and hindering factors of the use of different types of technologies for professional
development that will enhance teaching practices, such as the use of the Internet to create online
learning communities of teachers. The next section explains the development of learning
communities and the use of technology as a way to leverage and enhance professional
development and emphasizes that presently, not enough is known about how to utilize
technology to reach its greatest potential in supporting and facilitating alternative forms of
professional development (Barab, Schatz, & Scheckler, 2004; Russell & Schneiderheinze, 2005).

Review of Literature

Information and Communication Technologies (ICT) and digital technologies have supported the
evolution of different types of learning, including online learning environments, and
collaborative learning communities (Barab, Schatz, & Scheckler, 2004; Friesen & Clifford,
2003; Laferriere, Lamon, & Chan, 2006; Schlager & Fusco, 2003). The advent of online
technologies, such as the Internet, produces opportunity to carry out the need for innovative
professional development, that reaches teachers in more collaborative and constructivist ways,
which is shown to support instructional improvements amongst teachers (Borko, 2004). The use
of online learning communities, if done correctly, can transform the learning environment for
teachers. As noted by the National Staff Development Council (NSDC), online learning communities “provide new structures and media for reflecting, communicating, and acting; facilitate modeling and visualization; allow for construction and discovery of knowledge; expand access to information, networks, people, and ideas; and increase the flexibility of time and places for learning” (2001, p. 15). A community, whether online or in-person, contains elements such as mutual trust and interdependence among members, a sense of belonging and connectedness, shared values and goals, and overlapping histories between members (Rovai, 2002).

An essential component of online learning communities is collaboration among participants (Laferriere et al., 2006; Lock, 2006; Schlager & Fusco, 2003). Although there are many different types of learning communities, the term learning community used in this study represents a group of teachers with similar interests and goals that collaborate in learning about and enhancing their teaching practice. As the NSDC (2008) suggested, the most powerful forms of staff development occur in ongoing collaborative teams that meet on a regular basis. A Community of Practice (CoP) is one such learning community, with the goal of increasing knowledge about everyday practice. Teachers who are members of learning communities, such as Communities of Practice (Lave & Wenger, 1991), are likely to meet, collaborate and share knowledge regularly. This non-traditional sharing of knowledge is likely to focus on problem solving and improving daily practice, allowing teachers to create meaning in the learning process (NSDC, 2008).

CoPs are social learning systems (Wenger, 2000), where the knowledge shared by a group of people is much greater than a single individual’s knowledge. In a CoP, a group of people with a common interest in practice, such as a group of teachers, comes together to both give and take knowledge from each other on a continual basis. According to Wenger, there are
four main characteristics of a CoP. Those characteristics are, (a) that the group share a common interest in practice; (b) that knowledge is shared in the context of a community, where mutual communication and trust is apparent; (c) that the knowledge shared and/or the need for new knowledge revolves around a common topic or interest, which entails meaning-making; and (d) that the participants within the community share a minimum level of knowledge within the particular field, which gives them the notion of identity within the group. Sustainable and meaningful professional staff development, where teachers are in an environment of shared knowledge, should lead to improved classroom teaching practices and enhanced student achievement.

Learning communities, such as CoPs, can happen in many different settings; as Rovai (2002) proposed, community is setting specific, and can be created in either a physical or virtual setting. Some found that it is difficult to build a community in a purely online environment (Barab et al., 2004; Friesen & Clifford, 2003; Hur & Hara, 2007), and that face-to-face interactions, as well as online community building are more likely to make online Communities of Practice successful in building community. A hybrid, or blended online community, has elements of both online and in-person communication for its members and may be a more feasible way to instill a “we all create, we all learn” model (Barab et al.). Persistence is viewed as teacher participation within the CoP that is continuous and ongoing. Meaningful participation is viewed as teachers both sharing and receiving knowledge related to current teaching practices and reflection for each teacher, where what is learned actually affects teaching practice. In-person training coupled with a 24/7, anytime, anyplace online environment may be the key to persistent and meaningful participation in a blended CoP. A second argument for the use of a blended approach to building community online is that the greatest problem with virtual
communities is withdrawal and attrition (Johnson, 2001). By including a face-to-face component, participants are more likely to develop trust and community, which can promote their choice and willingness to continue within the CoP.

Although much of the literature purports that a blended or hybrid approach to professional learning communities, such as a CoP, can enrich professional development in meaningful ways, there is little empirical research that supports these ideas (Hew & Hara, 2006, 2007). Further research of blended online communities and how these communities affect teacher learning and professional staff development are needed. There is a gap in the literature on if, and how, the use of online technologies along with in-person professional development supports meaningful and sustainable teacher learning, and whether teacher learning in this environment affects teachers in positive ways. Furthermore, much of the research on blended online learning is tied to higher education; there is very little research regarding the use of blended online learning to facilitate online learning communities for professional staff development in the K-12 setting (Hew & Hara, 2006). Furthermore, research on CoPs to date in both in-person and in online environments has relied heavily on the use of the qualitative case study method (Hew & Hara, 2006, 2007; Johnson, 2001); however, no studies have focused on blended CoPs with teachers, using an online learning management system, such as Blackboard.

**Purpose Statement**

The purpose of this study was to complete in-depth case studies of two developing blended CoPs in a large, urban school district to explore the role the blended environment played in supporting the CoPs in accomplishing their goals. The objectives of the case studies were to (1) identify elements of CoP culture, facilitation, design, discourse and patterns of communication that supported and hindered the accomplishment of CoP goals, and (2) establish
a set of recommendations to assist developers and leaders in the creation of sustainable, successful blended teacher learning communities.

Methods

This multiple case study focused on two groups implementing a blended method of professional development in a large, urban, southern California school district. The ethnic make-up of the district was made up predominantly of 81.7% Hispanic, 6.3% African American, and 5.8% Caucasian. The English learner population was 40.9%, and 77.2% of the student population were on free and reduced lunch. A total of 80.6% participated in some kind of compensatory education (Education Data Partnership, “District Reports,” 2010). Furthermore, 23 of 44 schools (52%) were named as a Program Improvement school, based on the school’s Adequate Yearly Progress (AYP), under No Child Left Behind. Although the district continued to make progress in meeting NCLB requirements, it was in the third year of district Program Improvement (California Department of Education, “AYP Reports,” 2009). All of these statistics were higher than the County average, and show a resounding need for teachers in the district to be highly skilled and competent in their work.

The district began implementing the blended CoP model in 2007-2008 for professional development to reach student needs, using the Blackboard Learning Management System (LMS). Researcher Jennifer Wagner was put as the lead teacher specialist responsible for training and supporting the use of Blackboard for professional development and classroom practice. At the end of year one, 11 professional development groups met and used Blackboard in some capacity to facilitate ongoing communication and sharing of resources. In 2008-2009, the researcher selected the two most highly developed groups that showed the most promise in implementing a blended CoP. Both groups targeted district priority areas for student
achievement. The first group (Math, Science & Technology) included 34 secondary math and science teachers (70% female and the average years teaching experience was 6.6) focused on best practices and integrating technology into their content areas. The second group (Teaching Teacher Specialists) included 23 teachers (18 elementary, six secondary; 87% female; and an average of 13 years teaching experience). The teaching teacher specialists focused on the development of literacy for all and increasing the academic achievement of the English learner population.

Data collection and analyses for each group included two phases across a four-month period as displayed in figure 1 below.

*Figure 1. Data Collection Phases*

The objective of phase one was to understand and contextualize each group in terms of it’s blended CoP development by (1) interviewing each CoP leader; (2) conducting an
anonymous survey through Survey Monkey, regarding initial engagement (based on Shin and Chan’s [2004] 5-point likert scale) and group goals, participation levels, types of activities, levels of communication, and early perceived value for members; (3) and observing online and in-person meetings and activities. This phase also informed the selection of members to interview in phase 2. Table 1 summarizes the teacher leaders for each group.

Table 1. Summary of Group Leader Characteristics

<table>
<thead>
<tr>
<th>Department</th>
<th>Gender</th>
<th>Grade Levels Taught</th>
<th>Content Area</th>
<th>Teach. Exp.</th>
<th>Teach. Spec/Admin Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Services</td>
<td>Female</td>
<td>Secondary</td>
<td>Math</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Instructional Services</td>
<td>Female</td>
<td>Secondary</td>
<td>Science</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Instructional Technology</td>
<td>Female</td>
<td>Elementary</td>
<td>Multiple Subjects/Technology</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Instructional Services</td>
<td>Female</td>
<td>Elementary</td>
<td>Multiple Subjects/ELD</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

The objectives of phase two were to continue to determine the goals of each group, and member perceptions of how culture, facilitation, design, discourse and patterns of communication affected the accomplishment of these goals. This phase also focused on the extent to which members valued and participated in the group (or not) and the benefits and challenges they experienced. Five members per group were selected for in-depth interviews based on their levels of engagement (low, semi and high) as shown in Table 2.
Table 2. Selected Participants (Reflects ratio of females to males in each group)

<table>
<thead>
<tr>
<th>Math, Science &amp; Technology Group</th>
<th>Level of Engagement</th>
<th>Gender</th>
<th>Grade Level</th>
<th>Content Area</th>
<th>Teach. Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Female</td>
<td>10&lt;sup&gt;th&lt;/sup&gt; – 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chemistry/Biology</td>
<td>1 public ed.; 7 private ed.</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Female</td>
<td>8&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Physical Science</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Semi</td>
<td>Female</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Math</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Semi</td>
<td>Female</td>
<td>6&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Math</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>Male</td>
<td>7&lt;sup&gt;th&lt;/sup&gt; – 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Math</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching Teacher Specialists Group</th>
<th>Level of Engagement</th>
<th>Gender</th>
<th>Grade Level</th>
<th>Content Area</th>
<th>Teach. Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Female</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Multiple Subjects/ELD</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Female</td>
<td>K-6 support</td>
<td>Out of classroom K-6 support</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Semi</td>
<td>Female</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Multiple Subjects</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Semi</td>
<td>Female</td>
<td>10&lt;sup&gt;th&lt;/sup&gt; – 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Geometry and Statistics</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>Male</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Multiple Subjects</td>
<td>11</td>
</tr>
</tbody>
</table>

These participants were also followed during online and in-person observations. At the end of the year, all members of both groups were asked to complete an anonymous final reflection using Survey Monkey. This reflection asked them about their experiences and included open-ended questions on goals, practice, community, value, levels of communication, and recommended changes (if any) to the blended environment. The survey also asked for input regarding the emerging supporting and hindering themes found during the course of data collection. Themes were stated and participants were asked to agree or disagree and explain why.
The final reflection provided valuable data that was cross-referenced with all other data sources in the final analysis of the groups.

Table 3 describes the data sources and analysis methods used to determine the role the blended environment played in supporting the groups in accomplishing their goals and the elements of culture, facilitation, design, discourse and patterns of communication that supported and hindered these goals.

Table 3. *Data Collection and Analysis Matrix*

<table>
<thead>
<tr>
<th>Research Question: What role does the blended environment have in supporting developing Communities of Practice in accomplishing their goals?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ 1A:</strong> What are the <strong>goals</strong> of each CoP?</td>
</tr>
<tr>
<td>Data Sources</td>
</tr>
</tbody>
</table>
| Initial online anonymous survey | • Reviewed initial survey to identify group and individual goals of all participants  
  • Organized in tables including frequencies |
| Leader interviews (4 for MST, 1 for TTS) and Participant interviews (5 for each CoP) | • Reviewed all interview transcripts to identify perceived group and individual goals of those interviewed  
  • Compared the alignment of goals between initial survey, and leaders and participants interviewed |
| Open-ended anonymous final reflection | • Reviewed the final reflection to identify group and individual goals at the end of data collection, as well as themes that supported and hindered the accomplishment of those goals  
  • Compared the alignment of goals between initial survey and final reflection (3.5 month time period) |
| Final Analysis | • Compared goal data within and across CoPs  
  • Data analyzed and organized using Excel |

**RQ 1B:** How did **facilitation, design factors, culture, discourse** and **patterns of communication** impact the group?

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>Data Analysis Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial online anonymous survey</td>
<td>• Reviewed and analyzed all data points to learn about the five factors of each CoP that affected the accomplishment of CoP goals</td>
</tr>
<tr>
<td>Leader interviews (4 for Alpha, 1 for Beta)</td>
<td>• Reviewed data to gain context of the five factors, in both in-person and online environments of each CoP utilizing both inductive and deductive codes</td>
</tr>
<tr>
<td>Participant interviews (5 for each CoP)</td>
<td>• Compared and confronted data within and across CoPs</td>
</tr>
<tr>
<td>In-person observations (4 for each CoP)</td>
<td>• Data analyzed using analytical memos and write-ups, MS Excel for organizing codes into factors and frequencies of codes, then moved to HyperResearch to code all data points</td>
</tr>
<tr>
<td>Online observations (2 for each CoP)</td>
<td>Open-ended anonymous final reflection</td>
</tr>
</tbody>
</table>

Both Excel and HyperResearch were used to code the data and the Constant Comparative Method (Lincoln & Guba, 1985) was applied to identify and confront emerging themes within and across datasets. The themes were then compiled into a set of recommendations to assist developers and leaders in the creation of sustainable, successful blended teacher learning communities.

**Results and Discussion**

According to Johnson (2001), two important aspects to a CoP are collaborative learning and negotiated goals for the group as whole. Adult learning theory also suggests that continued learning for adults depends on attaining satisfaction, especially regarding making progress towards individual learning goals (Butler, 1992). Group goals as well as individual goals are essential to a sustainable professional development community, as they help to keep the community focused on the learning and the work of the group. Also important to a learning community, such as a CoP, is that goals, norms and expectations are established within rather than outside the group, in a top-down way.

Results indicated the goals for each group remained consistent over time yet shifted in priorities. The math, science and technology group focused on integrating teaching in their content area and developing community for sharing and collaboration, and the members’
individual goals coincided with group goals. The teaching teacher specialist group focused on increasing the academic achievement and reclassification of ELs, providing support and professional development to staff at school sites, and sharing and collaborating on best practices, and member individual goals echoed group goals, with two notable exceptions. First, most set sharing and collaborating with group members on best practices as their primary goal. Second, many desired to be the first to try new district initiatives at their site. The priorities for the math science and technology group shifted from integrating technology into their curriculum at the beginning of the year to community building and collaboration amongst members toward the end of the year. One explanation for the shift is that the level of collaboration amongst members, both online and in-person, declined as the year progressed, leading members to feel that there was more of a need for collaboration at the end. The priorities for the teaching teacher specialist group shifted from supporting the academic achievement of English Learners at their respective school sites to developing balanced literacy modules for district-wide deployment for professional development. Members conveyed that these shifts contributed to the sustainability of the group over time. At the end of the study, 88% of the math, science and technology members felt the group goals were accomplished and 95% felt their individual goals were met. Likewise, 90% of the teaching teacher specialists felt the group goals were accomplished and 78% felt their individual goals were met.

Members indicated that culture, facilitation, design and discourse and patterns of communication all impacted the accomplishment of group goals. Salient elements related to these factors are identified in Table 4.
Table 4. Factors that Impact Accomplishing Goals of each CoP

<table>
<thead>
<tr>
<th>Factors Impacting CoP</th>
<th>Elements of Each Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>• Values</td>
</tr>
<tr>
<td></td>
<td>• Norms and expectations</td>
</tr>
<tr>
<td></td>
<td>• Boundaries</td>
</tr>
<tr>
<td></td>
<td>• Power relations</td>
</tr>
<tr>
<td></td>
<td>• Roles and responsibilities</td>
</tr>
<tr>
<td>Facilitation</td>
<td>• Leadership style, levels of control, support and communication</td>
</tr>
<tr>
<td></td>
<td>• Perception of leaders from participants and themselves</td>
</tr>
<tr>
<td></td>
<td>• Perceptions of CoP by leaders</td>
</tr>
<tr>
<td></td>
<td>• Background, experiences, expertise, personality</td>
</tr>
<tr>
<td>Design</td>
<td>• The organization and sequencing of the professional development</td>
</tr>
<tr>
<td></td>
<td>• Types of agenda items and activities, and planned order</td>
</tr>
<tr>
<td></td>
<td>• Groupings when doing activities/learning; ex. small or whole groups</td>
</tr>
<tr>
<td></td>
<td>• Use or omission of tools online in Blackboard</td>
</tr>
<tr>
<td></td>
<td>• Organization and design of Blackboard</td>
</tr>
<tr>
<td>Discourse &amp; Patterns of Communication</td>
<td>• Topics of conversations and how they occur (verbally, written, etc.)</td>
</tr>
<tr>
<td></td>
<td>• Social interactions based on learning content/topics</td>
</tr>
<tr>
<td></td>
<td>• Kinds and frequencies of interactions participants have</td>
</tr>
<tr>
<td></td>
<td>• Kinds of input/contributions participants provide/make</td>
</tr>
<tr>
<td></td>
<td>• Who is involved in interactions, with whom, and to what extent</td>
</tr>
<tr>
<td></td>
<td>• Who initiates interactions</td>
</tr>
<tr>
<td></td>
<td>• Who concludes interactions</td>
</tr>
<tr>
<td></td>
<td>• Who converses with whom</td>
</tr>
<tr>
<td></td>
<td>• How participants perceive each other and how these perceptions impact others</td>
</tr>
</tbody>
</table>

**Culture.** The culture of a community for professional development revolves around negotiated goals, norms and expectations, community development, relationships that involve collaboration and trust, and knowledge sharing (Hew & Hara, 2007; Johnson, 2001; Rovai, 2002; Wenger, 2000). The culture of both CoPs was largely established by leadership, and was not negotiated as a group. Goals, norms and expectations were disseminated to participants, instead of created within the CoP. The lack of shared input into goals, norms, and expectations appeared to produce a level of frustration for participants in both groups, and the inability to share in leadership and have equal input hindered goal accomplishment in each CoP. As Johnson posited, “The negotiated process helps to establish leadership and ownership over process and problems; thus, increasing both interest and learning (p. 47).”
A distinct characteristic of a true CoP is that the participants make decisions regarding the direction that it takes; decisions do not come from a top-down, external entity, but from within the community itself (Hew & Hara, 2007; Wenger, 2000). Although there must be a leader who begins the process of facilitation within the CoP, leadership should be shared amongst members, and eventually natural leaders will emerge within the community, if allowed (Johnson, 2001). Notably, the role of a community coordinator or facilitator is critical for the day-to-day work to progress (Wenger, 2000). That role was fulfilled by four teacher specialist leaders in the math, science and technology group and by a program administrator in the teaching teacher specialist group. They each were able to facilitate the on-going activities of the groups, yet as Wenger suggested, community needs many different types of leaders in order to progress, such as thought leaders, networkers, people who document what occurs, initiators, as well as others. In both groups, leadership never relinquished control over all of the workings of the CoP, and thus, did not allow for other teacher leaders to emerge. Leaders set the agendas, set the tone of the CoP, chose the topics to be covered, as well as the types of activities that would occur. Although both CoP leaders encouraged discussion and input during activities, there appeared to be very little co-facilitation or shared leadership when it came to what took place within the CoP. As a result, the experience became more like a long-term professional development training program, than a true community of practice.

**Facilitation.** One contribution to the literature is that the different types of leadership within each CoP affected relationships and accountability. The math, science and technology group leadership was comprised of teacher specialists, who were teachers on special assignment during the 2008-2009 school year. Leaders and participants perceived each other as equals, since the specialist leaders held no real power over the teachers. There was no way for leadership to
hold the participants accountable for participating and engaging in the community. Yet, the almost equal level of power between the group leaders and the teachers allowed for high levels of trust and rapport amongst the community.

The teaching teacher specialists’ group leadership on the other hand, was a district program administrator, who had to navigate between being their primary professional developer and being their supervisor, with administrative power over them. Along with being evaluated by their site principals, the leader also evaluated teachers on supporting the group program. She commented on how challenging that navigation was, and brought in other trainers to give the members outside knowledge and perspective. The higher level of power that she held, and the fact that leadership shifted from the previous year, affected relations. Towards the beginning, members did not necessarily trust her and were slow to open up. As the year progressed member trust increased and stronger relationships were established.

**Design.** There are several important features for effective professional development, such as it is sustaining and intensive; it is connected to and derived from teachers’ work with their students (data driven); it is content focused, and focused around solving specific problems in practice; and it includes opportunities for collaboration, coaching, modeling and hands-on learning (Darling-Hammond, 1998; Greene, 2004; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Another aspect of effective professional development is that it is focused on the specific needs of the adult learners, with the ability to differentiate the professional development as needed (Butler, 1992). The online component adds another dimension to the professional development, and should include further structured opportunities for learning and collaboration, including scaffolding in order for learners to feel comfortable in that environment.
Each group had some elements of effective professional development, yet there were certain gaps within the design of the environments. For the math, science and technology group, a common in-person meeting comprised of an introduction to the meeting/training, a lecture-style presentation that included discussion, and then hands-on activities that frequently incorporated modeling and group activities. A typical in-person teaching teacher specialists’ group meeting comprised of a community building activity, a presentation/training given by leadership or an outside trainer, and then small group activities and whole group discussions usually linked to district initiatives, English learners, or literacy. There was very little room for the groups to stray from the agenda, which was detrimental to both groups. Teachers wanted more time to share and collaborate with each other in small groups, and they wanted more input into what occurred within the community. Teachers also wanted more time for informal communication, feeling that informal conversations were where unexpected learning and sharing took place. This traditional top-down environment, was also found online for both groups, and was detrimental to a collaborative, knowledge-sharing environment (Friesen & Clifford, 2003; Laferriere et al., 2006). The key is to strive for both leader and teacher participant ownership of the community, where everyone can share knowledge equally.

Furthermore, there was a general lack of differentiation for the members in both groups. Instead, a more “one size fits all” model was utilized. Teachers wanted much more differentiation, to fit their specific needs. Although modeling and hands-on learning occurred for the math, science and technology group, there was very little evidence of either for the teaching teacher specialists’ group. The lack of structure and differentiation online for both groups hindered the use of Blackboard. Technology alone can not bring about change in teaching and learning for teachers, (Laferriere et al., 2006), instead much more time and energy must be spent
in making the online environment a valuable and useful tool for collaboration in a blended CoP. More training in how to utilize the online environment effectively was needed for both leadership and participants.

CoPs must not be designed for one specific purpose, but should be able to evolve naturally over several years (Johnson, 2001; Koch & Fusco, 2008; Wenger, 1998). Both groups were designed for a specific purpose, with room for evolution of the community. They were also still very much in the beginning stages of developing as a CoP, in-between what Wenger calls the coalescing stage and the active stage. The coalescing stage is where participants recognize the potential, explore connectedness, define joint projects or learning, and negotiate community. In the active stage, participants engage in developing practice, where there are joint activities, artifacts are created, and interest, commitment and relationships are continually renewed. CoPs exist and evolve over a period of years, not days, and the groups had not yet reached their potential. In order for teachers to develop and advance in practice that ultimately enhances student achievement, change must be slow, steady, and sustained over long periods of time (Darling-Hammond, 1998; Friesen & Clifford, 2003). More longitudinal research is needed to capture changes over time.

Lock (2006) and Johnson (2001) found that online communities, by their very nature, must be deliberately designed, yet true community cannot be deliberately created or defined; “communities of practice emerge within the designed community via the ways their participants interact and use the designed community (Johnson, p. 53).” Virtual communities must be designed, such as deciding on what type of communication technology will be used, [e.g. Blackboard], but there must be a legitimate task and practice-oriented reasons for teachers to participate in the designed online environment (Johnson). Both groups utilized Blackboard as an
extension to what occurred in-person, however there were very little legitimate task or practice-oriented activities designed in Blackboard; it was more open-ended when it came to what was discussed, and who participated. The discussions were not focused on specific tasks or development of artifacts, which was one thing that participants in both groups wanted more of, a more legitimate and meaningful reason for participating in Blackboard.

One drawback to utilizing online environments is that the teachers or facilitators do not intuitively understand how to construct an online environment so that the quality of the learning is equal to that of being face-to-face (Dehler, 2004). The facilitators in both groups knew how to navigate through Blackboard technologically, but they did not intuitively understand how to utilize Blackboard in a pedagogical, or andragogical, sense (Knowles, 1980). Therefore, there was a need for much more support and training in online teaching/facilitating pedagogy, which would have ultimately supported the use of the Blackboard environment in online collaboration (Johnson, 2001). The current study established that technology was seen as a barrier for teacher participants as well. Scaffolding (Vygotsky, 1978), was needed for both facilitator and teacher participant learning to ensure that they had the skills needed to successfully navigate through, and utilize the online environment for meaningful communication and collaboration.

**Discourse and Patterns of Communication.** Discourse was defined as the topics of conversations and learning in the group and how they occurred. Closely matched to discourse, are the patterns of communication, which was defined as the social interactions based on learning the content and topics of discourse. The notion of *discourse communities*, “groups in which expressions of thought, either written or spoken, share characteristics of vocabulary, communicative intent, subject matter, form of presentation, etc. (Chalmers & Keown, 2006),” applies to both groups studied. In a CoP, a collective vocabulary and discourse is key to the act
of sharing knowledge and improving in common practice. It was evident that the groups, shown by the topics introduced and discussed both in-person and online to a certain extent, possessed a shared discourse, that supported the group goals. Also, the content and knowledge shared (discourse topics) were leadership driven, which goes against the framework of a CoP, where leadership is shared within and amongst all members.

The math, science and technology group in-person topics centered around specific teaching strategies and classroom management (usually given in lecture-style presentations), and on learning how to integrate the technology that was given to them into their teaching practices. New technology was usually learned through modeling and hands-on training by leadership or by outside “expert” trainers. Both approaches are consistent with recent research that indicates teachers are more likely to try new teaching strategies that have been modeled for them in professional development settings (Wei, et al., 2009). Similarly, teachers commonly convey that professional development is most valuable when it provides opportunities for “hands-on” work that builds their knowledge of academic content and how to teach it to their students (Wei, et al.). The teaching teacher specialists’ group in-person topics were more presentation/discussion-based, with little hands-on or modeling evident.

The teaching teacher specialists’ discourse was also conducive to the perceived goals of the community, and centered around supporting the academic achievement of English learners, literacy, and providing support as a coach/leader at their school sites. Evident in both groups was that the majority of online discussions, which most often centered on aspects of technology for the math, science and technology group and on ELs and literacy for the teaching teacher specialists’ group occurred during the first half of the year, indicating a decline in communication amongst members in the online environment. Common reasons for the decline
were: lack of leadership presence, lack of time, and too many outside responsibilities. One of the key structural supports for teachers engaging in professional learning is the allocation of time for such activities within teachers’ work day/work week (Wei, et al., 2009). For the teaching teacher specialists’ group, this was the norm for in-person meetings, but for the math, science and technology group, in-person meetings were established on Saturdays, which was found to be challenging for many. There was no apparent time allocated for continuing communication and collaboration online; for example, Blackboard was an add-on to their professional learning, with the expectation that teachers would participate on their own time. Some teachers expressed wanting time within their structured group meetings, to be able to work with Blackboard. What would have helped to continue communication online was if the blended environment was truly a blend, where working and communicating online took the place of some in-person meetings, instead of Blackboard being an addition to all meeting days.

Communication online was found to be surface level for most participants, with no deep level of engagement; however, in each community there was a small group of teachers who persisted in communicating online, and who participated in deeper levels of discussions. Communication in the face-to-face environment was most often initiated by leadership, and centered on the topics of discourse outlined above. The most effective communication was found to be face-to-face interactions in both communities, although this may be related to the fact that the groups were still in the development stage, and were still trying to learn how to best utilize a blended environment. Even though in-person was the environment of choice, Blackboard was widely found to hold value as a communication and collaboration tool. The district was essentially in the midst of a paradigm shift in communication for professional development, moving from traditional face-to-face methods, to incorporating an online component that would
allow for on-going communication, and continuous connection to the community. The fact that accessing Blackboard regularly was not yet a habit, and was still so new to the culture of the district, most likely affected the level of communication in Blackboard. A longitudinal study would help reveal more success in a blended professional development CoP as the use of the online environment becomes more of a standard within the school district.

**Communities of Practice (CoPs)?** A resounding question throughout the study was whether each group was in fact a CoP, as they related to the framework established by Wenger (1998, 2000) and extended to online CoPs by Johnson (2001). Arguably, neither group was a true community of practice, although each exhibited some elements of a CoP. Table 5 indicates the framework elements, and the degree to which each group met that element, from a ‘yes’ signifying that the element was met, to ‘some evidence’ but not enough to be fully established, to ‘no’ evidence of that element in the group.

Table 5. *Comparison of CoP Frameworks*

<table>
<thead>
<tr>
<th>Wenger’s Four CoP Characteristics (2000)</th>
<th>MST</th>
<th>TTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practice</strong>: the group shares a common interest in practice.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Community</strong>: knowledge is shared in the context of a community, where mutual communication and trust is apparent.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
<tr>
<td><strong>Meaning</strong>: the knowledge shared and/or the need for new knowledge revolves around a common topic or interest, which entails meaning making.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
<tr>
<td><strong>Identity</strong>: the participants within the community share a minimum level of knowledge within the particular field, which gives them the notion of identity within the group.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Johnson’s Eight Online CoP Characteristics (2001)</th>
<th>MST</th>
<th>TTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expertise</strong>: there are different levels of expertise.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Tasks</strong>: tasks and communication are authentic.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
<tr>
<td><strong>Fluid movement</strong>: from novice to expert.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
<tr>
<td><strong>Constructivist approach</strong>: including the use of open-ended questions, facilitation, collaborative learning, and negotiated goals.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
<tr>
<td><strong>Shared knowledge</strong>: community knowledge is greater than individual knowledge, and the collective knowledge of the group and individuals’ knowledge each advance.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
<tr>
<td><strong>Trust</strong>: CoP must have an environment of safety and trust.</td>
<td>Some evidence</td>
<td>Some evidence</td>
</tr>
</tbody>
</table>
Conclusions and Implications.

Supporting and hindering themes for culture, facilitation, design and discourse and patterns of communication were used to develop a preliminary framework with 16 recommendations designed to help school, district and professional development leaders (1) understand how to create a model for the design and development of effective blended learning communities; and (2) potentially increase student achievement through teachers’ continuous learning, knowledge-sharing and transference of both knowledge and skills to the classroom. This blended CoP framework is provided in Table 6.

Table 6. Framework for Establishing a Blended Community of Practice (CoP)

<table>
<thead>
<tr>
<th>Recommendations for Establishing a Blended Community of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Culture</strong></td>
</tr>
<tr>
<td><strong>Key Component</strong></td>
</tr>
<tr>
<td>Voluntary membership</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Negotiated goals, norms and expectations</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Accountability to the group</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

**Facilitation**

<table>
<thead>
<tr>
<th>Key Component</th>
<th>Within Blended Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitation: participants within the CoP drive the direction that it takes; it does not come from a top-down, external entity, but from within the community itself</td>
<td>No</td>
</tr>
</tbody>
</table>
### Negotiated, shared Facilitation

- Ensure facilitation by leaders and members is collectively negotiated, agreed upon, revisited, and re-established throughout the life of the program.
- Have leadership support and encourage fluid and dynamic facilitation.
- Encourage members to provide input into all aspects of CoP activities (e.g., topics covered, types of activities, who designs and provides information).
- Have members facilitate discussions and content in both aspects of the blended environment. Provide members opportunities to take on new leadership roles as they gain new knowledge and expertise.

### Sense of Community and Trust must be established and nurtured

- Facilitate continuous opportunities and activities for relationship and trust building.
- Provide ample time and means for members to get to know each other and connect names to faces and roles, such as opportunities to share personal and professional information (e.g., through discourse, narratives and media such as pictures, voice and video).
- Provide members with opportunities to engage in informal conversations during each session.
- Facilitate small group, task-oriented activities with many opportunities for open-ended discussion.
- Model and support active participation and established group norms to promote trust and deep levels of communication.
- Ensure that members, including subgroups, share in the decision making of critical aspects of the program.
- Provide ongoing opportunities for feedback and ensure all members view content and activities as relevant and engaging.
- Limit access to continuous members and invited guests.

### Effective and on-going facilitation from leadership

- Continuously solicit member participation and feedback.
- Personally contact members who disengage to learn about issues and encourage them to come back.
- Use evidence to reflect on what is occurring and modify, as needed.
- Encourage natural leaders to emerge and take on various roles.
- If multiple leaders exist, allow time for planning and reflection as a team; and take time to establish and model positive relationships.

### Design

<table>
<thead>
<tr>
<th>Key Component</th>
<th>Within Blended Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Negotiated Design</strong></td>
<td>• Ensure design and management of blended environment are collectively negotiated through the life of the program.</td>
</tr>
<tr>
<td></td>
<td>• Allow members to take an active role in how the blended environment is designed and managed; including what tools will be used online.</td>
</tr>
<tr>
<td></td>
<td>• Experiment with new designs and tools to keep both environments active and evolving.</td>
</tr>
<tr>
<td><strong>Members are physically close in proximity</strong></td>
<td>• Recruit membership from the same school site to allow for more informal meeting and discussions to promote a sense of community.</td>
</tr>
<tr>
<td></td>
<td>• Build on prior relations among members to enhance relationships and trust.</td>
</tr>
<tr>
<td><strong>Built in time for CoP within teachers’ work day or week</strong></td>
<td>• Provide convenient meeting times and locations (e.g., at school sites, during common planning times, after school, during already scheduled PD times, asynchronously online, and/or synchronously in online ‘classroom environment’).</td>
</tr>
<tr>
<td></td>
<td>• Provide time during in-person meetings to model and practice working with the online environment to support and encourage its ongoing use.</td>
</tr>
<tr>
<td>Structured, organized and task-oriented (based on collective group goals)</td>
<td>Hold members accountable for continually sharing and providing feedback on artifacts, strategies, experiences, and ideas within an established time frame set by the group.</td>
</tr>
<tr>
<td>Continuous Support</td>
<td>Select leadership that members will consider friendly, approachable and supportive.</td>
</tr>
<tr>
<td>Long-term, years not days</td>
<td>Encourage primary leaders, facilitators, and members to remain fairly constant over time (not year to year), and allow for new membership aligned with PD goals.</td>
</tr>
</tbody>
</table>

**Discourse**

<table>
<thead>
<tr>
<th>Key Component</th>
<th>Within Blended Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>Have members set flexible agendas that allow time for desired activities, such as informal conversations and group work.</td>
</tr>
<tr>
<td>Scaffolding of learning for all members</td>
<td>Revisit and expand learning topics over time.</td>
</tr>
<tr>
<td></td>
<td>Provide leaders and members with technical support, as needed.</td>
</tr>
<tr>
<td>Differentiated learning opportunities and tasks based on levels of experience and needs</td>
<td>Establish a true blended PD environment by utilizing the online environment instead of meeting in-person on a regular basis and ensure activities are relevant, engaging and seamless.</td>
</tr>
<tr>
<td></td>
<td>Differentiate trainings, sessions and activities based on participants’ knowledge, skills and needs, and allow for members with particular skills and expertise to share that knowledge.</td>
</tr>
</tbody>
</table>
Modeling and hands-on learning opportunities

- Have facilitators model how to collaborate and engage in deep levels of discourse in the blended environment.
- Provide members opportunities to learn to utilize new online tools while in-person.
- Focus on concrete, practical models (such as how to teach a concept or skill in the classroom or at a school site) that can be utilized right away, rather than abstract, theoretical principals.
- Provide hands-on activities that allow teachers to experience what their students (or other teachers) will experience when they teach the concept or skill.

While more research is needed to determine the validity of the framework, the framework presents a starting point for district administrators and CoP leaders interested in providing sustainable, meaningful teacher professional development using an in-person and online blended model.

**Significance of the Study**

The need to create sustainable and productive communities of practice for teacher professional development has become increasingly important in finding new, innovative ways to reach teachers for continued learning of their craft. The idea of online collaborative learning communities, such as a CoP, to increase teachers’ knowledge and skill sets, and to help professional development become more supportable and sustainable, has been increasingly present in the literature; although both Schlager and Fusco (2003) and Laferriere et al. (2006) suggested that despite the enthusiasm given to the use of technology in education, the potential of online/e-learning environments to transform and improve teacher learning and practice is neither sufficiently explored nor well understood. The education system as a whole is far from reaching the potential impact of web-based technology as a tool in teaching and learning (Russell & Schneiderheinze, 2005).

The implications of how online learning communities increase teacher knowledge sharing and learning and thus, increase their ability to better teach their students is suggested, but hard evidence in the form of empirical data is difficult to find. Although many studies discuss online learning in a college environment, more studies are needed to learn how communities of practice
impact teachers involved in professional staff development online in a K-12 setting; especially in how communities of teachers are developed and maintained, what factors contribute to the sustainability and success of the communities, what is valuable to teachers in this environment, and whether teachers gain anything from participating in a blended online teacher community.

As the need for quality professional staff development continues to grow, it is undeniably important to conduct further research on whether the use of online learning environments can help to leverage teacher learning, by helping to create learning communities. The current study added to the body of knowledge on the creation of blended communities of practice for teacher learning, by gleaning the supporting and hindering themes of culture, facilitation, design, discourse and patterns of communication in implementing successful blended CoPs. The study further added to the body of knowledge of blended CoPs, by compiling a list of 16 recommended key components, including specific elements for the blended environment for each key component. While more research must be conducted to learn the effectiveness of putting the 16 key components into practice within a blended learning community for teacher professional development is needed, the 16 recommendations show promise as to establishing concrete methods of practice for community leaders in advancing teacher learning to ultimately support student academic achievement.

The current study was especially significant to the school district in which it took place, as it helped in understanding how to create a model for the design and development of effective blended CoPs, that will potentially increase student achievement through teachers’ continuous learning, knowledge-sharing and transference of both knowledge and skills to the classroom. The research presented in this paper was the dissertation work of Jennifer M. Wagner from the UC, Irvine and Cal Poly, Pomona Joint Ed.D. program.
References


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I.D. #1579

TOPIC AREA: Counselor Education

PRESENTATION FORMAT: Presentation at a paper Session of work-in-progress research and report

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THE FOLLOWING IS AN ABSTRACT AND THE RESEARCH IN PROGRESS WHICH SHOULD BE COMPLETED BY OCT. 17, THE REQUIRED FINAL DATE FOR SUBMISSION.

TITLE

ENRICHING SOCIAL WORK POLICY AND COUNSELING COURSES WITH UNDERSTANDINGS AND KNOWLEDGE ABOUT ISLAM

ABSTRACT-

Social work clinical counselors and policy shapers are increasingly being called upon to effectively service the increasing number of Muslim students and clients in need of counseling and social welfare services. It is important to understand the context of Islam and activate...
cultural competency to more effectively provide these services. This paper will use a four dimensional ecological model as the basis for understanding, assessment, and intervention to improve counseling and policy services for Muslims.

RATIONALE
The National Association of Social Workers (NASW) Code of Ethics calls for culturally competent practice by the social worker in a society marked by ethnic and religious diversity. With the increased presence and expansion of the Muslim population in the United States, relevant social welfare policy formulations and clinical need be based on greater substantive understanding and knowledge of relevant Islamic world views and experiences. As noted by Crabtree “…many social work practitioners lack the basic knowledge they need to be able to work more confidently with Muslim communities.” The objective of this paper will be to enhance cultural competency for enriching units on diversity in social work welfare policy and counseling courses, and to provide guidance on issues a professional should take into account when working with Muslim populations.

The ecological/environmental model of analysis, assessment and intervention, effectively used in many Human Behavior in Social Environment (HBSE) courses, is an effective social work and counseling assistance model for understanding and knowledge with Moslem clients. The model used in this paper is based on that ecological lens and provides an essential persistent analytical guideline for working with all culture groups.

The SWK ecological/environmental model has four interactive dimensions which encompass the essential characteristics shaping human identity and behavior: #1 institutional, #2 psychological, #3 biological, and #4 the cultural/family. These four dimensions shown in the following illustration can applied for use with Muslim clientele, but also serve as a persistent model for cultural competency to generate analysis, understanding, and intervention at stages for enhancing course and practice effectiveness. In this paper, emphasis will be on essential components of each of these four dimensions for use with Muslim populations.
The relevance of each of these four analytical dimensions for a particular individual varies with his/her particular culture and individual time and space situation. However, using this model to secure information provides the social worker with a persistent analytical framework for enhanced cultural competency in policy making and clinical work with clients.

**QUADRANT OF FOUR DIMENSIONS OF ANALYTICAL MODEL: INSTITUTIONAL, PSYCHOLOGICAL, BIOPHYSICAL, CULTURAL**

**ANALYTICAL MODEL FOR THE SOCIAL WORKER - HBSE MUSLIM QUADRANT**

To understand and most effectively work with Muslim populations a social worker or counselor should approach this task by referring to interactions between four ecological dimensions shaping human identity as used in Human Behavior and the Social Environment (HBSE) courses: Institutional, Psychological, Biological/Natural, and Cultural. These four identity shapers can be used as probes by social workers for analysis, assessment, and potential interventions with Muslim groups or Muslim individuals in the environment, with due recognition to the potential cultural diversity within the Muslim religion (Stambler-9/5/10)

<table>
<thead>
<tr>
<th>WHAT INSTITUTIONAL ENVIRONMENT SIGNIFICANTLY AFFECTS COUNSELING OF MOSLEMS?</th>
<th>PSYCHOLOGY</th>
<th>WHAT THEORIES OF MUSLIM DEVELOPMENT SHOULD SHAPE COUNSELING MUSLIMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTIONAL</td>
<td>-BEHAVIOR, &amp; EDUCATION</td>
<td>--Western Developmental psychology models (i.e. Maslow &amp; Erikson) as cultural imperialism with bias toward individualism</td>
</tr>
<tr>
<td>--MACRO-DEMOGRAPHICS</td>
<td>-GROUP, UMMA</td>
<td>--In what way does the Muslim religion shape personality? To what end?</td>
</tr>
<tr>
<td>--GOVT. POLITICS</td>
<td>-IMPORTANCE OF GROUP &amp; FAMILY</td>
<td>--Stages of individual development within the Muslim religion</td>
</tr>
<tr>
<td>--VIEWS OF INSTITUTIONAL DISCRIMINATION/OPPRESSION, RACISM</td>
<td>-IDENTITY, COMMUNITY OVER INDIVIDUAL</td>
<td></td>
</tr>
<tr>
<td>--HISTORY, SERVICES &amp; RESOURCES</td>
<td>-DEVELOPMENTAL STAGES</td>
<td></td>
</tr>
<tr>
<td>--STRUCTURAL CAUSATIONS IN A SOCIAL ENVIRONMENT</td>
<td>(Interventions?)</td>
<td></td>
</tr>
<tr>
<td>--CLASH OF CIVILIZATIONS?</td>
<td>-PERSONAL STRENGTHS AND ASSETS</td>
<td></td>
</tr>
<tr>
<td>-ORGANIC VIEW</td>
<td>-SPIRITUAL &amp; RELIGIOUS DIMENSIONS</td>
<td></td>
</tr>
<tr>
<td>--ISLAMIC RESPONSE TO SECULARISM</td>
<td>--ISLAMIC CONCEPTS SHAPING PERSONALITY (tawhid/ Oneness, stages of development, the self, the unconscious, psychological adjustment, fitting in to society)</td>
<td></td>
</tr>
<tr>
<td>--ASSIMILATION, SEPARATION, OR DOMINATION?</td>
<td>--SOCIAL CONSTRUCT OF THE WORLD</td>
<td></td>
</tr>
<tr>
<td>HISTORICAL STAGES MUSLIM IMMIGR.</td>
<td></td>
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<tr>
<td>--9/11/01 &amp; TERRORIST ATTACKS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--ISLAMIC CONTRIBUTIONS TO ART, SCIENCE, LITERATURE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PERSON IN THE ENVIRONMENT (PIE)**

**MUSLIM IDENTITY**

Hans Kung (Swiss theologian), Islam

“No peace among the nations without peace among religions.

No peace among the religions without dialogue between the religions.

No dialogue between the religions without investigation of the foundations of the religions.”

**BIO-PHYSICAL CONCEPT OF NATURE**

**GENETIC, BIOLOGICAL, PHYSICAL**

(GENES? GENDER, RACE)

**RACIAL PROFILING A CULTURAL REACTION TO MUSLIMS**
Students in my social work are requested to select and research topics related to their choice of components from any one of the four dimensions (institutional, psychological, biological and/or cultural), and report on the relevance of their research for shaping cultural competency on Islam, as related to the text chapter on diversity.

Applying this model, what should a social worker know about Muslims to effectively work with that population?

**DIMENSION #1 INSTITUTIONAL DIMENSION**

1. **DEMOGRAPHICS IN ARAB AND MUSLIM WORLDS**

Of overarching importance for applying this ecological/environmental model with the Muslim population is the religious/spiritual dimension which permeates all aspects of the Muslim world. Belief in Islam and adherence to the Qur’an as the word of God, with Mohammad as his Prophet, is a total embracing system which guides and direct observant Muslims in all aspects their behavior, thinking, and socially constructed realities. For the observant, the Qur’an is viewed as unchanging truths by God in a separate metaphysical time overlaying human
history, providing guidance for all aspects of life, and metaphorically relating events to universal truths. Given the reality of this dominant and all embracing world view, the social worker should be culturally sensitive to the religion of Islam, the ways this lens may differ from a secular perspective, and the metaphorical value system for Muslims who find meaning in historical events and relationships which they feel link to metaphysical truths.

A Western oriented and secular social worker working on Muslim issues should learn as much as he/she can about Islam, but recognize personal limitations and be prepared, where relevant, to refer the client or policy to an Imam (a Muslim religious leader and counselor), or if they are born in the USA to a Muslim social worker who can relate to the concern from a religious experiential perspective.

A social worker should draw a distinction between Islamic principles and practices and those grounded in specific Muslim cultures and recognize diversity in the culture practices of Muslims from different countries. (Crabtree, 4) Arabs today number about 285 million spread over 22 Arab countries in North Africa and the Middle East. Many non-Arab nations have adopted Islam leading to a total of 1.3 billion Muslim people worldwide. The majority of Arabs are Muslims, but the majority of Muslims are not Arabs but Indonesians, Malaysians, Iranians, Turks, etc. In counseling American Muslims, Kobieisy (2004) notes there is need to recognize the multiplicity of cultural environments from which people of the Moslem religion come, ranging from a more moderate Islam and Asian culture to Saudi Arabia’s more intense type of Islam.

Effective SWK requires understanding that there is great diversity in the cultural and ethnic composition of these Muslim groups, although there is a common core of the highly defined and structured Islamic religion, and a view of Umma (the transcending concept of Muslim family); Shahada, the profession of faith- Muslims submit and pray to one God; Siyam – fasting on the holy month of Ramadan; learning to control one’s instincts; Salah-praying and submitting to the will of God five times a day; Zakat: a tax devoted to providing financial help to the poor, to emphasize with the people and offer help; and the Hajj: pilgrimage to Mecca. (Kobiesy, 116)
By the year 2015, Gisela Web notes (Webb, n.d.) Islam is expected to be the second largest religion in the United States, following the largest, Christianity. Currently, there are approximately four million Muslims in the United States, and approximately 650 Mosques. Muslims in the United States have come from multi sources. Two-thirds of Muslims in the United States are either foreign born and their descendants, with the other one-third, those who have been born in America, mostly black. (Web, n.d.) The major constituents of Islam in America who see themselves as orthodox or traditional Muslims, are those immigrants bringing Islam from their home countries and African Americans, most of whom are converts, and the Sufi groups of “spiritual co-fraternities.” Facing identity issues in a secular society, all the Muslim groups are involved with the central question of how to define themselves and Islam in an American society of pluralism and diversity, where separation of church and state and a strong secular dimension shape American identity. Also, Muslims face concern of understanding how issues are shaped in a globalized society where there is an Islamic revival, or re-islamization, and neo-fundamentalism which “…combines technical modernism, deculturalization, the “…rejection of both traditional Muslim and modern Western cultures, resulting from westernized Muslims asserting their identity in a secularized and non-Muslim society.” (Roy, 2007) <cup.columbia.edu/static/interview-roy-oliver-globalized>

2 INSTITUTIONAL DIMENSIONS:

CLASH OF CIVILIZATIONS OR A MESHING OF COMMON VALUES?

Samuel Huntington noted in 1996 that there is “Clash of Civilization” between the West and Islam, but not all analysts agree with the actuality or inevitability of a clash. Hans Kung, the erudite Catholic Swiss theologian has written numerous respected scholarly books, including volumes on Christianity, Judaism, and Islam. In his voluminous well balanced book on Islam, Kung relates the existential situation facing Muslims with the existential problem facing other religions in the contemporary world, recognizing that the religious dimension in Islam has unique features. (p. 22).

Like Judaism and Christianity, in this transitional phase of world history Islam is involved in a fundamental conflict of tradition and innovation; how this can finally be resolved in a balanced way is an open question. As with Judaism and Christianity, so
with Islam, one asks oneself whether this religion will succeed in preserving its religious ‘substance’, its essence’, despite all the differences and conflicts, despite all the different strands and schools and the battles between traditionalists and modernists, (can) at the same time reshape itself for a new generation. Will the Islamic peoples, who are caught up in a tremendous crisis of existence at the height of modernity as a result of their confrontation with Western imperialism and colonialism and with European science and economics, technology and democracy, succeed in accepting the challenge of a new era and work creatively toward a new post-modern form of Islam? In this globalized world, all the great religions are in transition from the crisis of modernity into a ‘postmodernity’ of some kind (or under whatever name) and are thus exposed to the same kind of structural problems. (Kung, 22)

In addition to this linkage of Islam with general religious problems of postmodernity and secularization facing other religions, Kung notes the distinctive feature of Islam, which this author feels should be of particular significance for the social worker. Islam and Muslims face an additional problem in that their religion is enmeshed with the civil sphere.

...for the great majority of Muslims even today, Islam is not simply a part of life, what secularized people are fond of calling the ‘religious factor’. For believing Muslims, their life and religion, religion and culture, are interwoven in a lively way as are their religion and politics. Islam seeks an all-embracing view of life, an all pervasive attitude and a way of life which determines everything. (Kung, 24)

Given this distinctive reality of Islam, the social worker should be sensitized to the profession’s secular roots and predispositions. There has been an attempt at the bridging of this chasm created by a secular society by fundamentalist Christian social workers, and Muslim social workers.

**INSTITUTIONAL DIMENSION:**

There is a new social context facing Islam and the west. Olivier Roy (2007), notes that the encounter between Islam and the West has long existed, dating back from the beginnings of Islam. However in recent years Islam has been facing a new situation with Muslim populations moving to and taking root in Western societies. The West has been using two models in responding to these increases in Muslim populations, assimilation and integration (Roy, 2007, x) Roy notes that,
English speaking countries like the US, United Kingdom and Canada as well as Northern Europe have focused on a multicultural model by supporting cultural pluralism for including the Muslim population, while France has stressed the assimilationist model. The secular societies of the West have confronted incoming Moslem populations with a new set of values: freedom of expression, democracy, separation of church and state, human rights and women’s rights, not characteristic in Muslim societies. This Western environment is challenging for varied and nuanced groups of Muslims as a new reality of secular society and responses are still being formulated and adjusted to by the Muslim groups,

…for a minority in western societies which have been secularized by: a separation of church and state; because civil society no longer defines itself through faith and religious practice (the United Kingdom, Germany and the Scandinavian countries); or because of a convergence of self-definition and political practice as in France laicite. In turn, the secular societies to which Moslems have migrated, have confronted Islam with two types of responses: multiculturalism in which religion remains embedded in culture as in England and the USA, and assimilationism as in state enforced secularism in France in which religion is clearly decoupled from culture and national loyalties, and which rejects the Anglo-Saxon multiculturalism view as either one destroying national unity or an instrument of ghettoization. Both types of responses by the West require religious adjustments both in the receiving countries and by the incoming Moslem populations which have to work out how one should live as a Moslem in a secular culture, how a Moslem should react when confronted by secularism. How one relates to separating religion from culture. (Roy, 2007)

The new social environment poses a third pessimistic response model of rejectionism by Western societies. This third response ignores both multi-culturalism and assimilationism, and contends that integration of Muslims into Western Society is not possible. This view has been presented by some European politicians, and among others by the Danish psychologist Nicolai Sennels, 2009, who was involved in hundreds of hours of research and therapy with 150 young Muslims in the Copenhagen youth Jail. It is his contention that,
…Muslims don’t understand our Western way of trying to handle conflicts through dialogue. They are raised in a culture with very clear outer authorities and consequences. Western tradition using compromises and inner reflection as primary means of handling outer and inner conflicts is seen as weak in Muslim culture (not religion). To a great extent they simply don’t understand this softer and more humanistic way of handling social affairs. In the context of social work and politics, this means they need more borders and stronger consequences to be able to adjust their behavior. (the Opinionator April 5, 2010, p. ?).

Sennels indicates that the strong and proud Muslim culture makes it very difficult for Muslims to adapt their values. He notes, “In Germany, only 12 percent of their 3.5 million Muslims see themselves as more German than Muslim; in France and Denmark, only 14 percent of the Muslim populations respectively see themselves as more French or Danish than Muslim.”

(The issue of national secular identity vs. religious domination is the issue of the ground zero Mosque being publicly debated on 9/11/10. This could serve as an important indicator if Muslims are ready to forgo what is clearly their constitutional right to build a Mosque on ground zero, but refrain from this religious triumphalism to build a Mosque to Allah by submitting to strong American national of the sacredness of the area. Should political Islam triumph over American identity? 9/11/10)

.4 INSTITUTIONAL DIMENSION:
AMERICAN CONTEXT FOR ISLAM

Islam in America has developed special features. In American Islam, Timani notes, that, “…Black Muslims have adopted (a) puritanical form of Islam that has only recently begun to challenge the more moderate and balanced form of the religion that Muslim immigrants have brought with them to America.” (Timani, 108) (check to validate this as a valid portrayal) He contends that small communities of Muslims in America were Americanized and assimilated.

“…when Anglo conformity was promoted as the norm for citizenship and the Protestant establishment determined what is American… (These Muslims) followed the patterns of immigration and assimilation that refashioned them into American citizens. …The result was that their names were anglicized, their children attended public schools (making it easier and
faster for them to Americanize) and they became ignorant of important Islamic practices.”

(Timani, 110)

Timani contends that the Black Muslims under Elijah Mohammad were a movement of un-Islamic nature entrenched in issues of race relations and discrimination against blacks and presented a unique version of Islam, not supported by the mainstream Moslems. He also notes that Islam in America reflects primarily the waves of Muslims who came to America in the 1960’s, 1970’s and 1980’s. They came to America partly because of the relaxed immigration laws but also because, “…the rise of secularism and nationalism in their homelands that drove many of them into exile.” The secular and nationalist Muslims ruled their countries and cracked down on the Muslim Brotherhood which contended that, ”Islam is the solution,” and that Islamic laws should replace those with increasingly Western emphasis in their societies. According to Timani, the crackdown on the Brotherhood, “…led to the mass migration of well-educated middle class and devout Muslims who were unable to express their political views in countries that were becoming increasingly dangerous and hostile to them.” (112 - CHECK TO DETERMINE IF THIS IS AN ACCURATE DESCRIPTION OF THE SITUATION)

According to Timani (2010) Muslims in the USA have pursued a tolerant, pluralistic and democratic Islam and attempted, “ to tailor an Islam that fits America without compromising their religious beliefs.” He claims that Muslims ran from their nations because they wanted to practice Islam without state control, and that Muslims in America “Admire the American democracy, pluralism culture and religious tolerance and freedom of worship provided in American society (Timani, 113) TO CHECK THIS OUT)

5 INSTITUTIONAL DIMENSIONS:

HISTORICAL CONTEXT OF INTERNATIONAL SOCIAL WORK: TRADITIONAL AND ALTERNATIVE PERSPECTIVES (SCHRIVER, 500)

Social workers should understand that the historical contexts of social work contribute to shaping the perspective of social workers, and social work issues when working with immigrant populations, many of whom today are Muslims.

There are four distinguishable phases in the history of International social work suggested by Mayadas and Elliot (1997, 162)
.1 **Phase One** - The early Pioneers 1880’s-1940’s

The early part of this phase focused on the transfer of new social welfare approaches from Europe to the United States through: The Charity Organization societies of giving aid to the poor through poor relief, through women volunteers to investigate and verify the circumstances for poor relief. The Charity Organization societies focused on individual treatment to rehabilitate clients and insure that they were self-sufficient. (Mary Richmond) The Settlement House Movement of Jane Addams was not concerned with individual treatment but with neighborhoods and activities that helped poor people, focused on adult education, youth clubs, recreational activities that catered to the needs of deprived peoples living in the slums. In this period of time (preceding the large migration of Muslim populations) social workers focused primarily on socio-economic deprivations and urban encounters of rural populations.

.2 During phase two (1940’s-1970’s) professional application of social work was characterized by cultural imperialism, exporting models of social work from the United States to other countries. According to Schriver (501) “The underlying values remained primarily paternalistic, ethnocentric, and colonialistic, and services were based primarily on social control, remedial, medical and crisis-oriented approaches. Social work was not particularly sensitive to the cultural differences between the United States and the countries to which it exported a social work education model based on practice with individuals, even though many of the cultures of the other counties were more collective and group focused (Mayadas and Elliot, 1977, 176 (as reported in Schriver, p. 501)

.3 Phase three was a reconceptualization and indigenization of social work (1970’s-1990’s). A period of rejection by developing countries of the Western focused model for a, “…more radical liberationist and social development oriented model. Including “values of regionalization, polarization, separation and localization” (Mayadas and Elliot, 1997, 177)

.4 The current 21st century Phase Four has social work becoming more, “…social development oriented, comprehensive, and sensitive to the needs of the cultural and social contexts of different countries and regions and greater cultural competencies.”
For Western raised and educated social workers, Schriver notes there have been a number of issues raised including:

.1 the universality of social work values;
.2 the nature of social work itself—whether the profession should be committed to remedial, activist, or developmental forms of practice;
.3 The dominance and “professional imperialism” of Western influences on social work and stress on social work in the developing world freeing itself from the ‘in-built’ assumptions and cultural biases of first world theories and models of practice and the need to develop indigenous models;
.4 The idea that “social work is a Western invention and the product of modernity. The notion of progressive change fits this paradigm. The question as to “whether or not, for example, Western perspectives and practice are really responsive to the personal and social needs of the populations of other regions.” (Schriver 502)
.5 “Indigenization is postmodern to the extent that it questions the dominance of ‘social work as a Western invention’ and seeks to relate it to local culture, history and political, social and economic development.” (Schriver, 502) The Western model is ethnocentric, and the issue of nations and peoples developing their own models based on local needs and practice fits in with the need to indigenize social work for Muslim populations.

.6 Issue of multiculturalism vs. universalization of social work values (cultures with collectivist values on issues of kinship, community networks and extended family systems (Gray and Fook, 2004, p. 627. In Schriver, p. 502).
.7 With the heavy Muslim immigration that has marked US population changes during the past 20 years, I would add, the need for social workers to attune themselves to human behavior developed in Muslim societies with socially constructed realities which differ from those of Western societies.

**DIMENSION #2  PSYCHOLOGICAL DIMENSION**

ISSUE OF APPLICABILITY OF THE WESTERN SOCIAL WORK MODEL TO MUSLIM POPULATIONS
The question raised by Barise is whether or not secular–based social work can integrate spirituality and mesh with Islam which is holistic and does not perceive a Cartesian dichotomy between flesh and religion. The professional field of social work with roots in the 19th century has developed and functions in the secular world, and requires modifications for adaptation to Muslim populations in their religious world. In his article Barise, notes that, “Professional social work was initiated in the Western world in the early twentieth century on the basis of a secular, euro-centric world view. Thus social work is shaped by socio-cultural contexts... the West provides a core base of the social work discipline.” (Barise, 2)

Barise notes other differences between the Islamic perspective in Canada and Canadian concepts of social work as they relate to, “…the nature of spirituality and its scope, the nature and hierarchy of human needs, the source of help, the nature of problems and their solutions, to name but a few,” (Barise, 16) and suggests that the social work analysis and intervention suggested by Saleeby’s strength-based perspective is most compatible with the teaching of Islam and their guided life, and that the traditional secular-based social work should be shaped to fit in with the Islamic religious world view.

The role of the Imam in meeting the (2005) mental health needs of the Moslem populations is indicated in an article by Osman (2005, 133)

Although Imams have little formal training in counseling, they are asked to help congregants who come to them with mental health and social service issues. Imams need more support from mental health professionals to fulfill a potentially vital role in improving access to services for the minority Muslim communities in which there currently appear to be unmet psychosocial needs.

How do Western social work values relate to a Muslim world view? The chart below has been developed for this paper, based on narrative and quotations from David Hodge in his article on Social Work and Islam, (Jan. 2008)

<table>
<thead>
<tr>
<th>WEST</th>
<th>ISLAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>THERAPEUTIC STRATEGIES</td>
<td>“WESTERN COUNSELING PROJECT...IS SUPPORTED BY A PARTICULAR SET OF EPISTEMOLOGICAL DERIVED VALUES REGARDING WHAT CONSTITUTES APPROPRIATE HUMAN FUNCTIONING”</td>
</tr>
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<td></td>
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<tr>
<td><strong>HODGE</strong></td>
<td><strong>THERAPIES DISCUSSED INCLUDE:</strong> PSYCHOANALYTIC; GROUP; STRENGTHS BASED, &amp; COGNITIVE</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>VALUES</strong></td>
<td><strong>INDIVIDUALISM, SELF-DETERMINATION, INDEPENDNCE, SELF-EXPRESSION, EGALITARIAN GENDER ROLES, EXPLICIT COMMUNICATION THAT CLEARLY EXPRESSES INDIVIDUAL OPINION AND IDENTITY ROOTED IN WORK AND LOVE.”</strong> THE ROLE OF INDIVIDUAL SELF IN THERAPY, OBJECTIVES RAISING CLIENTS LEVEL OF SELF-UNDERSTANDING SECULAR AND VARIOUS RELIGIOUS VALUES</td>
</tr>
<tr>
<td><strong>PRACTICES</strong></td>
<td><strong>FIVE PILLARS OF OBLIGATORY PRACTICE</strong></td>
</tr>
<tr>
<td><strong>THEORISTS</strong></td>
<td>FREUD, MASLOW</td>
</tr>
<tr>
<td><strong>NATURE OF LIFE</strong></td>
<td><strong>DICHOTOMIZED INTO PRIVATE DIMENSION (SPIRITUAL) &amp; PUBLIC (SECULAR)</strong> SEPARATION OF CHURCH AND STATE</td>
</tr>
<tr>
<td><strong>PRIORITIES</strong></td>
<td><strong>SELF-ACTUALIZATION, INDIVIDUAL (MASLOW)</strong></td>
</tr>
<tr>
<td><strong>PSYCHOANALYTIC APPROACHES</strong></td>
<td><strong>EXPLORATION OF INTRAPSYCHIC CONFLICTS AS AN ELUCIDATION OF PSYCHODYNAMIC INSIGHTS.</strong></td>
</tr>
<tr>
<td><strong>Common Features</strong></td>
<td><strong>HISTORICAL CONTEXTS: Renaissance; Reformation; Bible; Judeo-Christian heritage; Concept of diversity; Concept of freedom of choice; Religion-state separation; Separation of metaphysical values from positive (human produced) law</strong></td>
</tr>
<tr>
<td>examples of how people should conduct themselves, read by Muslims in close connection with the Qur’an.</td>
<td></td>
</tr>
</tbody>
</table>

| Shari’a-The way of life a written Muslim law guide. Not the word of God but divinely inspired extends of the teachings of the Qur’an and Hadith. Formulated in the seventh century seeking to inspire legal practice with Islamic principles and referred to as Islamic family law. Open to interpretations, and transformation on the basis of socio-cultural texts. Islam can be defined as submission & giving one’s whole self over to God. Unifying umma for a common Islamic discourse. |

| Arab language and history are central to Muslims since Islam was revealed to an Arab prophet, Mohammad and the Qur’an was written in Arabic. Islam provides strict rules and laws, the Shari’a based on the Qur’an and the prophets life (Sunna) of just faith and prayer but legislation pertaining to almost every issue in life Islam is a social religion that suggests a balanced
order in society. Finding legal ways to satisfy the sexual instinct of me through polygamy, and the sexual control of women through veiling (Dwairy, 148)

**DIMENSION #2 PSYCHOLOGICAL DIMENSION:**
**STRUCTURED STAGES FOR MOSLEM COUNSELING**

The social worker should become familiar with system of counseling connected with Islam as a highly structured format and although comparable to some western counseling approaches, requires insider knowledge of Islam and the religious rituals. The Western secular practitioner has paradigms of psychoanalysis, behaviorism, and humanism from which to select intervention methodology. These theoretical systems have been modified with diversity dimensions of culture, gender, identity and religion that influence the counseling encounter. This author feels the counseling journey requires someone well versed in Islam to negotiate. Somayah Abdullah refers to the three categories of counseling intervention (which are stages) located within Islamic doctrine. The first category is the Muslim personal law (MPL) which regulates family life. This in one of the most common ways of seeking assistance in which a religious leader, Imam, is consulted for counsel on social and mental health issues, and/or marital and family problems. The second category of counseling provided by the Islamic religious system is traditional healing based on a model of spirit (jinn) it includes many different forms and is practiced by local healers. The third category is Sufism, the mystical tradition of Islam. Sufism reflects the mystical tradition of Islamic personal and spiritual development in relation to the divine, and in a wider sense, “... is an interiorization of Islam based on a vision of the unity of God in everything including self actualization” (Abdullah, 49)

Each of these counseling categories provides a framework and knowledge of counseling for working with Muslim clients, and requires the practitioner to be steeped in Islamic tradition.
Clearly, a practicing Muslim would hesitate leaving religious based counseling from God connected practitioners to choose a secularized deliverer as opposed to the God based intervention model.

The Muslim frame is that of three systems, with expertise for practitioners required in at least one of the categories MPL, Jinn, or Sufism which are entrenched in Muslim communal life and merge Qur’anic texts, the Sunna (the Prophetic example) and Shariah (Islamic law) “People within Muslim communities have divergent views on these systems but, Muslims across a range of social strata participate in these services; often they choose them above traditional secular services because of their Islamic basis and only when they fail the client would secular services be an option” (Abdulla, 44)

**DIMENSION #2 PSYCHOLOGICAL DIMENSIONS - COUNSELING**

**CRABTREE ISLAM AND SOCIAL WORK**

.1. Notes major “…concerns…regarding the question of the social integration Muslim minority ethnic groups in the West.”

2. Saeed et al. (1999) argue that the “concept of ummah (the university community of the faithful means that a global Islamic community supercedes national and ethnic identities” (3?)

3. In an interesting British govt. proposal to deal with radical Islamists Members of extremist groups have not “clearly” committed a crime would receive therapy and counseling under new Government plans to “deradicalise” religious fanatics. (Kirkup, ?)

**PSYCHOLOGICAL DIMENSION:**

**IN WHAT WAY SHOULD THEORIES OF MUSLIM DEVELOPMENT AND PSYCHOLOGY SHAPE SOCIAL WORK WITH MUSLIMS**

Is the Western developmental psychology model of Maslow by a western imposition with a bias toward individualism? (Saeed et.al.),
Personal Strengths And Assets: Western and Muslim Perceptions

There are significant different values and viewpoints which differentiate Western and Muslim perceptions of the self, and consequently affect the value of social work therapeutic intervention. Hodge and Nadir note that from a Muslim perspective, many helping professionals do not respect Islamic values and this bias is reflected in the therapeutic modalities used by counselors and social workers. They note that Western counseling intervention modes reflect Freud and Maslow’s emphasis on therapy directed toward self-actualization and self-efficacy and utilize strategies directed toward raising the client’s level of self-understanding. The Western assumptions are seen as dichotomous and split the secular from the spiritual or religious. Western epistemological assumptions of “…individualism, self-determination, independence, self-expression, egalitarian gender roles, communication expressing individual opinion” are not viewed as congruent with Muslim holistic values in which the religious and …spiritual informs all aspects of existence.” (Hodge and Nadir, 2008)

Western perceptions of suitable therapeutic interventions for the dysfunction reflect assumption about personal development stages of a healthy person should go through various life stages on the road to self-actualization, a secular concept on the meaning of life. This different perception of stages of development requires that cultural competency education for social workers include counseling strategies and developing social work skills with better relevance of culturally competent practice models.

Mental health work with Muslims is problematic because often mental health concerns such as depression, anxiety, and psychosis are, “…still viewed in a shameful manner in many Muslim communities. Often such issues are dealt with privately in the home or with the help of extended family. “ (Khaja, 2008, 2) These issues also can be met with extreme resistance and anger. Khaja relates that in Saudi Arabia and Pakistan a stigma still exists because mental illness is seen as an affliction of evil spirits, and that “Muslim mental health patients in such areas are reported to have been chained, burned, beaten or undergone exorcisms.” (Khaja, 2)
Teaching social work students to assist Muslim clients requires that they learn about the tenets of the Moslem religion and how Muslim families function.

In Western counseling techniques the focus might be on people realizing strengths, coping mechanisms, dealing with past conflicts, and finding solution… in Muslim counseling methods we try to help families in a deeply holistic manner…(with a ) focus on balance between mind and body, focusing on spirit, mind, soul, intellect, body and emotion connected area, because if one is not functioning well there is need to focus on inner tranquility with a strict diet, fasting, prayer and meditation. The objective should be to have a balance of physical, emotion, spiritual and mental health. (Khaja, 4) Other gender counseling also poses problems of occupying private space together, or looking directly at a counselor of the opposite sex, or shaking hands.

Focus on healing one’s heart is seen as the ultimate form of healing with mental health problems often viewed as resulting from a sick or dead heart. “It is believed that a person with a sick heart is focused on materialistic things in this world such as “lust”, “desire”, and worshipping material things, and as noted Farid, as a consequence, they will suffer deeply (Khaja, 4). He reports on four areas of particularly poisonous for the heart: talking a great deal without praise of God, uttering evil words, glances of the eye that become focused on things more beautiful than worship. He also suggests eating tiny portions of food to encourage humbleness of the soul and reduce temptations. (Farid, 20??) For the Western trained social worker, direct eye contact is considered respectful and a sign that you are giving your client undivided attention, trust and self-esteem. For the Muslim client, direct eye contact may be seen as a lack of respect and lack of humility. Cleanliness is crucial for Muslims and associated with religious values. Muslims will want to wash their hands, face and forearms, and feet before praying.

SENNELS, NICOLAI Muslims and Westerners: The Psychological Differences

<table>
<thead>
<tr>
<th>ANGER</th>
<th>MUSLIMS</th>
<th>WESTERNERS</th>
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<tbody>
<tr>
<td>LOCUS OF CONTROL</td>
<td>There is another strong difference between the people of Western and Muslim cultures; their locus of</td>
<td>There is another strong difference between the people of Western and Muslim cultures; their locus of control. Locus of control</td>
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</tbody>
</table>
control. Locus of control is a **psychological** term describing whether people experience their life influenced mainly, by internal or external factors.

<table>
<thead>
<tr>
<th>Self reflection vs. consequence</th>
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<tbody>
<tr>
<td>Muslim identity</td>
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<tr>
<td>Honor</td>
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### DIMENSION #2- PSYCHOLOGIOCAL:

COUNSELING MODELS EFFECTIVE WITH MOSLEM CLIENTS

Kobeisy (p. 103-105) has developed a comparison of different counseling models and their effectiveness: cases with Muslim clients. (Kobeisy refers to the Sue, Arredonon and McDavis (1992) components for the culturally competent counselor)

1. “counselor awareness of his or her own assumptions, values, and biases”- beliefs and attitudes factor
2. “the understanding of the worldview of the culturally different client”; ---the knowledge factor
3. “the development of appropriate intervention strategies and techniques- the skill factor (Dwairy counseling Arab and Muslim Clients)

**Characteristics Of Arab And Muslim Clients Of Significance For The Counselor**

Otto Klienberg and Martha Wolfenstein have suggested a concept of cultural behavior clusters but recognize the range of diversity within these clusters. Dwairy refers to these as psycho-cultural differentiations.
There are common psycho-cultural features among Arab and Muslim clients which differentiate them from Western clients.

“Arab/Muslim clients” are less autonomous than Western clients. The former tend to focus on external circumstances and have difficulty addressing internal and personal issues. Terms such as self, self actualization, ego, opinion and feeling, have a collective meaning for them. They are preoccupied with duties, expectations and them approval of other and family issues.” (Dwairy, 2008, 147)

Authoritarian and Collective Cultures

The social system of both the Arab and Muslim worlds tend to be collective and authoritarian. The individual is very submissive to the family and norms and the family is ruled by patriarchal hierarchical authority. Political rights in Muslim societies are limited and the individual tends to rely on family and tribe rather than the state. “The individual is expected to serve the collective in order to receive the family support necessary for his or her survival and most citizens of Arab/Muslim countries rely on the family fore than the state in issues of child care, education, finding jobs, protection, and so on.” (Dwairy, 149) (Note how this explains home schooling growth for Muslim families)

The implication for counseling is that objectives of self fulfillment should not be set as the goals. “In this social system, two polarized options are open to individuals: (1) to be submissive in order to gain vital collective support, or (2) to relinquish the collective support in favor of self-fulfillment” Most Arab/Muslims will be submissive in order to gain vital collective support, rather than favor self-fulfillment. (Dwairy, 149)

(The exposure that takes place in Muslims to Western values of science, technology and individualism, can result in both a negative mixture of antagonism and rage, and a positive identification and glorification of Western values. Muslims vary in their rage against the West and their glorification of the West. (Dwairy, 149)

PSYCHOSOCIAL DEVELOPMENTAL CONCEPTS

Western theories of development emphasize a separation-individuation process that normally ends in the individual developing an independent identity after adolescence,...” and that an accurate and positive theoretical framework for the individual life-span is movement toward those goals. Whether its Freud or Erikson, the
formation of an independent ego identity from full dependency to full independency is the healthy direction in an individualistic society. In Western society, dependency of an adult is considered a personality dependency disorder whereas in collectivist authoritarian culture, autonomy and independency is seen as a disorder. The separation – individuation process is not the goal for Arab adolescents because, “…their identity is enmeshed in that of the family, to which they are always loyal.” (Dawari, 151)

The development of individualism in Western society goes along with the concept of personality. In Arab/ Muslim societies, “…the concept of personality is in the interpersonal domain rather than the intrapsychic one with, “…norms, values, rules, and familial authority, rather than personality,” explaining the behavior of an individual. (Dwairy, 151) In Arab/Muslim families, Dwairy contends that the interpersonal domain rather than the intrapsychic domain provides the main dynamic and the appropriate social coping skills for this type of conflict deals with personal needs vs. family control rather than defense mechanisms that manipulate the ego and superego. The collective personality in the Arab/Muslim society behaves in the context of social layers defined contextually in social roles, gender, age and professions, rather than as a consistent individual across social situations.

Among most Arab/Muslims,

“…the individual and the family, the mind and the body, reality and imagination are not distinguishable entities. Patterned disorder that are described in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) are not Displayed clearly among Arab/Muslims. For instance, depression which is considered in the West to be a mood disorder clearly characterized by sad feelings, hopelessness and helplessness, is manifested among Arab/Muslims in somatic complaints, frequently with no feelings of sadness hopelessness, and helplessness (Al-Issa, 1989, in Dwairy, 153).

Many Arab/Musims have a different concept of reality from that of Westerners. And consider visions and dreams as true reality rather than the physical one and on the basis of dreams and visions, they make crucial decisions in their lives (Dwairy, 1977)

“Almost all counseling and psychotherapeutic intervention (except for behavior therapy) aim to resolve the intrapsychic order while revealing unconscious (typically forbidden) contents, and help the client to accomplish self-actualization.” (Dwairi, 153)
COUNSELING AND SOCIAL WORK INTERVENTIONS BASED ON THE ARAB/MUSLIM IDENTITY (KOBEISY, 134-135)

“A Comparison Between Different Counseling Models and their Effectiveness Cases With Muslim Clients”

<table>
<thead>
<tr>
<th>THE COUNSELING MODEL</th>
<th>ISSUES THAT WORK BEST WITH MUSLIMS</th>
<th>COUNSELOR’S CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoral Counseling</td>
<td>Grief, death, natural disasters, illness, tragedies, etc. All issues related to or connected with faith and religion. This model works well with refugees who left their countries as a result of natural disasters or civil wars or who lost loved ones in wars</td>
<td>This approach requires the counselor to be a Muslim. If the counselor is not a Muslim, Muslim clients may be skeptical and unaccepting.</td>
</tr>
<tr>
<td>Educational counseling</td>
<td>Communication within family, career counseling. Skill development, budgeting, parenting, husband-wife relations, etc.</td>
<td>Same sex counselors. If male counselors are assigned female counselors, they may show resistance and eventually withdraw.</td>
</tr>
<tr>
<td>Medical Counseling</td>
<td>Any condition caused by chemical imbalance or requiring medication such as depression, anxiety, obsessive compulsive disorder, etc.</td>
<td>Counselors need to be highly trustworthy to keep the client’s confidence. Most Muslim clients do not prefer a Muslim counselor, psychologist or psychiatrist for the fear of losing confidentiality.</td>
</tr>
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COUNSELING APPROACHES AND THEIR USE WITH MUSLIM CLIENTS

<table>
<thead>
<tr>
<th>THE COUNSELING</th>
<th>KEY CREATORS &amp; PROONENTS</th>
<th>WHAT IT DOES</th>
<th>RECOMMENDED FOR</th>
<th>NOT HELPFUL FOR</th>
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### APPROACH

| Psychoanalytical | Sigmund Freud | this treatment has several benefits as well. The therapist offers an empathetic and nonjudgmental environment where the client can feel safe in revealing feelings or actions that have led to stress or tension in his or her life. Oftentimes, simply sharing these burdens with another person can have a beneficial influence. |

| Adlerian | |
| Person-centered | |
| Behavior | |
| Existential | |
| Gesalt | |
| Transactional | |
| Rational –emotive and cognitive behavior therapy | helps patients to understand the thoughts and feelings that |
influence behaviors. CBT is commonly used to treat a wide range of disorders, including phobias, addiction, depression and anxiety. Cognitive behavior therapy is generally short-term and focused on helping clients deal with a very specific problem. During the course of treatment, people learn how to identify and change destructive or disturbing thought patterns that have a negative influence on behavior.
Islamic Counselling & Psychotherapy
Trends in Theory Development

According to Abdullah,

“It is not unusual to find that counselling professionals find themselves at a loss to intervene effectively with clients who adhere to an Islamic value system especially when it is at variance with their own. For the client this situation is commonly experienced as an inability on the side of the practitioner to fully understand him/her. Given that Islamic counselling is not yet in a form where its actual implementation can be monitored, it first requires guidelines that can be integrated into a theoretical framework, a purpose to which this article is directed.”

Islamic counselling is not a new concept. When studying its historical location, a distinction may be made between cultural and professional modes of Islamic counselling. In the former, counselling is not an explicit exercise, but alluded to in the religio-cultural rituals of Muslim communities. In the case of the latter, we set Islamic counselling as a formal discourse, comparable with mainstream, predominantly western counselling paradigms. (Abdullah(???)Islamic Counselling)

In professional terms, Islamic counselling would be a confluence of counselling and psychotherapy with the central tenets of Islam. This is acceptable in as far as it provides a broad purpose for Islamic counselling by linking it with an overarching intent of helping clients attain positive change in their lives. However, as counselling theories take on various philosophical positions such an analysis can become quite problematic. This is especially so given the nature and scope of Islam as a religious worldview, and debates on Islamic counselling that call for the rejection of western
counselling theories. Application of Islamic principles to theories outside the realm of Islam or using concepts from mainstream counselling to inform an Islamic approach is therefore discouraged.

In such arguments it is often asserted that Western psychology is devoid of religion and foster distorted concepts of humankind that are rooted in materialism. Counselling that is based on Islam is then forwarded as a feasible alternative. Writers of such positions do simultaneously concede that western psychotherapy and psychiatry has its merits in dealing with psychological suffering and behavior modification. What is proposed then is that Muslims use the positive aspects of western counselling, integrate it with the spiritual, and develop Islamic psycho-spiritual counselling methodologies that would facilitate positive change in Muslim clients. Exploring the Qur'an, the Sirah of the Prophet and his traditions, as well as the biographies of the Prophet's companions, will provide detailed instructions for implementing successful therapy. In the main, though, it is Sufism (tasawwuf), the mystical tradition of Islam, which is credited with providing the basis for Islamic psychology. It is forwarded as the main frame of reference from which to develop a professional Islamic counselling approach.

**RELIGION AFFECTS PERSONALITY**

Islam and personality

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Almost every traditional personality theorist had something to say about religion, but the topic of how religious beliefs might affect individuals’ views of human nature remains largely unstudied. All religions, however, contain certain implicit ideas regarding personality that are likely to impact individual behavior. This article draws on Islamic sources to consider what a practicing Muslim might believe about motivation, personality development, the self, the unconscious, psychological adjustment, and the individual and society. In general terms, understanding these beliefs can be useful in the broader study of how cultural issues affect personality. More specifically, understanding Islamic beliefs related to personality can assist in planning for the provision of psychological services to Muslims, as well as understanding the psychological perspectives of Muslims who are not extremists.

When psychology speaks, for instance, of the motif of the virgin birth, it is only concerned with the fact that there is such an idea, but it is not concerned with the question whether such an idea is true or false in any other sense. The idea is psychologically true inasmuch as it exists. Psychological existence is subjective in so far as an idea occurs in only one individual. But it is objective in so far as that idea is shared by a society—by a consensus gentium. ——Carl Jung, The Autonomy of the Unconscious, 1938

Smither, Robert & Khorsandi Alireza .(2009). The implicit personality theory of Islam

Psychology of Religion and Spirituality Vol. 1, No. 2, 81–96

“All religions contain certain implicit ideas regarding personality that are likely to impact individual behavior. This article draws on Islamic sources to consider what a practicing Muslim might believe about motivation, personality development, the self, the unconscious, psychological adjustment, and the individual and society.”

Jung’s views, unlike those of Freud, recognized the impact of religious culture on personality developments of the individual.
The Qur’an (the Muslim word of God) and the Hadith (sunna) anecdotes and sayings from the life of Mohammad) which 
Ereredacted 810-870CE)

**EXAMPLES OF SIMILARITIES AND DIFFERENCES WITH REGARD TO TRADITIONAL PERSONALITY THEORIES**  

<table>
<thead>
<tr>
<th>PSYCHOLOGICAL CONCEPTS</th>
<th>Islamic view</th>
<th>Similar to:</th>
<th>Different from:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HUMAN MOTIVATION</strong></td>
<td>The experience of tawhid, or the Oneness of God, gives meaning to life and leads to an ethical social order on Earth.</td>
<td>Analytic psychology’s emphasis on finding meaning through the collective unconscious; humanistic psychology’s emphasis on self-actualization; object relations’ hypothesis of the True Self</td>
<td>Evolutionary psychology’s emphasis on fulfilling the biological drive toward reproduction</td>
</tr>
<tr>
<td><strong>PERSONALITY DEVELOPMENT</strong></td>
<td>Human development proceeds through three stages related</td>
<td>Analytic psychology’s emphasis on the four stages of life with special</td>
<td>Personal constructs theory and cognitive social learning, which emphasize</td>
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<tr>
<td>THE SELF</td>
<td>The self controls individual behavior, causes guilt when negative behaviors occur, but holds the potential for leading to tranquility and tawhid.</td>
<td>Psychoanalysis, ego psychology, and interpersonal theory in terms of keeping control of behavior; analytic psychology and humanistic psychology in terms of transcending the personal self</td>
<td>Personal constructs theory and cognitive social learning do not emphasize a self as the center of personality</td>
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<td>THE UNCONSCIOUS</td>
<td>Unconscious motivations for behavior are less important than</td>
<td>Learning theory, existential psychology, and humanistic</td>
<td>Psychoanalysis and analytic psychology and their argument that</td>
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<td>PSYCHOLOGICAL ADJUSTMENT</td>
<td>The need to sacrifice</td>
<td>Although psychosocial</td>
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<td>conscious choices.</td>
<td>psychology put little or no emphasis on unconscious motivations</td>
<td>conscious motives are less important than unconscious motives</td>
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<td>Well-adjusted individuals fit in with their community and do not experience feelings of tension between personal desires and the demands of society.</td>
<td>Psychosocial theory and its emphasis on the psychological stress that occurs when individuals do not feel they fit into the culture with which they identify; Horneyan, interpersonal, and socioanalytic theory’s emphasis on the importance of positive social relations</td>
<td>Psychoanalysis, analytic psychology, and humanistic psychology and their argument that society’s requirement for individuals to subordinate aspects of their personalities to the demands of society creates psychological stress</td>
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**THE INDIVIDUAL AND SOCIETY**
| individualism in the interests of the community of believers. | theory recognizes the importance of fitting into one’s culture, the desirability of subordinating individualism to culture is not stressed in any traditional personality theory | theories |

**BIBLIOGRAPHY IN PROGRESS FOR SWK WITH MUSLIM POPULATIONS (9/7/10, 11/5/10)**


Amanullah, Zahed. (2007, Nov. 16) Muslim youth work has yet to be understood (Retrieved May 11, 2010- <http://www.altmuslim.com/a/a/n/2620>)

[PDF] Teaching Effective Counseling Strategies: Healing the Muslim Heart


Farid, Ahmed, The Purification Of The Soul (n.d.) simplyislam.com (retrieved 6/10/10)

Gulam, Hyder, (_


Gulam, Hyder, a Muslim lawyer and nurse in Australia


Monica McGoldrick, Joe Giordano, and Nydia Garcia-Preto .. Overview: Ethnicity and Family Therapy, Greek Families, Kyle D. Killian and Anna M. Agathangelou ..

Osman, M Ali —( 2005) The Imam's Role in Meeting the Counseling Needs of Muslim Communities in the United States. Osman M. Ali, M.D., Glen Milstein, Ph.D. and Peter M. Marzuk, ..


Podinkunju- Hussain, Shifa (n.d.) Working With Muslims & Suggestions for Counseling. 103-106


Roy, Olivier. (2005) Globalization and Islam


Sennels, Nicolai. (2009). Among criminal Muslims: A psychologist’s experience from Copenhagen


THE FOLLOWING IS THE ADDENDUM OF CATEGORIES TO BE FURTHER RESEARCHED AND DEVELOPED (11/5/10)

DIMENSION #3

BIOLOGICAL SHAPERS OF MUSLIM IDENTITY

ARE THERE ANY BIOLOGICAL OR NATURE FACTORS THAT SHOULD SHAPE HEALTH REALTED SOCIAL WORK WITH MOSLEMS?

NOTE: THE FOLLOWING ARE INITIAL VIEWS ON THE BIOLOGY RELATED CATEGORY IN THE QUADRANT AND QUESTIONS FOR FURTHER RESEARCH CONSIDERATION

There are bio-physical characteristics related to the Muslim religion mediated by cultural backgrounds of the clients about which social workers should be aware when working with Muslims in a health care setting. Hyder Gulam, a Muslim lawyer and nurse in Australia refers to factors of importance: (Gulam, 2003, 84)

.1 Where possible, health care should be administered by someone of the same sex as the patient;
.2 In the context of body modesty, “Muslims generally wear clothing that does not reveal the shape of their bodies” and hospital clothing should meet this requirement;
.3 The right hand should be used to feed or administer medication because the left hand is considered unclean;
.4 Unnecessary touching between people of the opposite sex should be avoided;


.5 The male considers the beard as an important religious symbol, and permission is needed for shaving by another male;

.6 Prayers may be performed while lying down or while seated by the Moslem patient, and the healthcare worker should not disturb the Muslim patient in these positions if they are at prayer.

.7 Because the Moslem holy day is Friday, patient visits on that day probably will be greater than expected.

.8 For the newborn child, it is important to have prayer calls by a learned person (an Imam, Mufti or Sheik) recited in each ear soon after birth, and head shaven on the seventh day (or thereabouts) after birth.

.9 The practice of circumcision is performed on all male children as a religious rite. Genital mutilation as a cultural practice among some African Moslem, has no basis in the Islamic faith.

(Barise, Abdullahi *Social Work with Muslims: Insights from the Teachings of Islam* ... Ph.D. Associate Professor College of Arts and Sciences, ... *Social Work with Muslims: Insights from the Teachings of Islam* ...

NOTE THE MOSLIM VIEW OF MIND-BODY CONNECTION )

**DIMENSION #4 FAMILY CULTURAL SHAPERS OF MUSLIM IDENTITY**

(THE FOLLOWING IS AN OUTLINE FOR FURTHER RESEARCH CONSIDERATION)

Mezzo- The Immediate Culture

Family, Work, Culture, Religion, Neighborhood, Local Economy & Resources, Co-Workers

(Interventions?)

Religion- Five Pillars Of Islam
- Geographical Diversity of Moslem Locations
- Reasons For Migrating To USA
- Length of Time In The USA
- Degree of Acculturation
- Types of Schooling In USA - Assimilationist Or Separationist
- Islamic Values & Concern With Losing Islamic Values
- Religious Conflicts With Secular Values
- Sunni/Shiite
Religious Stereotypes & View Of Islam as The Superior Religion
Dhimni And Infidel Concepts
- Spiritual Prejudices
- View On Organic Connection Between Mosque And State
Responding To Perceived Discrimination
- Social Group
- Concept Of Umma –
  Family
Kin Network & Extended Family

WHAT CULTURAL FACTORS SHOULD BE CONSIDERED FOR SHAPING MUSLIM COUNSELING?

.1 issue of religion or culture
.2 view on connection between mosque and state
.3 five pillars of Islam
.4 Islamic values and concerns about losing Islamic values
.5 length of time in the US and reasons and values in migrating
.6 degree of acculturation
.7 types of schooling in USA- assimilationist or separationist
.8 Islamic values & concern with losing Islamic values;
.9 concerns on how to deal with a secular society -religious conflicts with secular values
.10 view on the outsider dhimni and infidel concepts
.11 responding to perceived discrimination and 9/11
.12 primary/secondary social group
.13 concept of umma –
.14 kin network & extended family

The family is the critical decisive force determining major decision in life choices “Decisions concerning clothing, social activity, marriage, housing, size of family, and child rearing are made within the family context where the individual has only minimal space for personal choice. Within this system…a person learns to be helpless as an individual, avoids personal initiative or challenges, and expects matters to be arranged by some external force. To maintain the cohesion of the collective system, authentic self-expression of feelings is not welcome; instead, one is
expected to express what others anticipate. This way of communication within the collective is directed by values of respect (Ihtiram) fulfilling social duties (wajib), and pleasing others and avoiding confrontations (mosayara). Emotional expressions on good or bad occasions, such as marriage or death, are very much ruled by social norms, (Dwairy, 150)

**MUSLIM TEEN AGE PROGRAM**

In 2007, (Sadek Hamid) referred to the development of a culturally directed social work program at the University of Chester in Britain with the development of a first British degree program in Muslim Youth Social Work which specifically is tuned in to cultural and religious aspect of the environment which shape Muslim youth behavior in Great Britain.

“There are three relationships critical for defining Moslem identity particularly important to understand middle Eastern Muslim culture. The first is the relationship of umma- or nation which comprises all Moslems viewing them as brothers and sisters in the larger religious family. This identity related to the religious group is significant for understanding the importance of faith for the Muslim identity. Separation from the faith is not only separating from God but also from the larger religious family. Relating to a family is of central importance to Muslim identity. Ones actions reflects on the family and can bring shame or honor to the family as a whole. Muslims live not only to please their god but also to please their family. The third relationship is a perspective of their religion as it differs from other religions. They view other religions as immoral and helps bring clarity to a dimension of their extremism. These Muslims want to avoid being led away by a corruption of their faith by immorality and mainstream culture and are willing to use force and laws to keep their people practicing pure Islam (McGoldrick, 2005)

**FAMILIES**

Islam provides a common core of basic values for the family. Values recognized by the Koran include the following (Shriver p. 308- based on Hall and Livingstone, p. 144) “hospitality and generosity in giving and spending; respect for elders and parents; wealth and preeminence of male children; subordination of women to men; modesty; intensive religiosity; equality of all human beings; and health and strength”

2 Hodge notes (2055, p. 165, as quoted in Schriver p. 309)

The basic unit for Muslims if the family…However, “family” is often conceptualized broadly to include relatives or even broadly, the whole Islamic community. It is the family, most specifically the husband and wife, that is understood to be responsible for
reproducing spiritual and social values. Thus, family, both nuclear and extended, is essential to the spiritual and social health of the broader umma (community).

Yet, although Islam provides a common core of basic values

“...It is very important to understand that Moslem/Arab families have significant diversity in terms of which and to what extent values within Islam are emphasized” (Schriver, 309 reference to Hall and Livingstone, p. 143). “No particular set of beliefs and values exists that is representative of all Moslems” (Hodge, 2005, p. 164 as quoted in Schriver p. 309, and there are variations and differences in degree in which the various tenets of Islam are perceived and practiced by different individuals (Schriver, 499)

Schriver notes (p. 309) that there diversity among Moslem/Arab families to the degree with which they have behaviors and: Arab families place a high value on the patriarchal arrangement that extends to the roles, obligations, and status of family members; family is the major basis for identity with family welfare superseding the welfare of the individual. The family is a “…reference point for behavior and spiritual directives. “

Family Structure
The religion of Islam influences the family structure of Muslim families

Arab families place high value on spirituality in the form of Islam. The patriarchal arrangement is its traditional family structure … (most) who follow Islam conform to a hierarchical organization of authority that extends to roles, obligations, and status. The welfare of the family supersedes the welfare of the individual, making the family the basis of identity… and a reference point for behavior and spiritual directives. (Hall and Livingstone, 2006, 143) (AS REFERENCED IN JOE SCHRIVER, P. 309)

Schriver- (p. 309) refers to Al-Krenawi and Graham, 2000, p. 299) - “In summary, Al-Krenwi and Graham suggest that social workers who work with Muslim families should:

Have an understanding of Muslim family arrangements as more hierarchical and less flexible; Have an understanding of the implications of gender construction within Muslim society, which limits women’s movements outside the home; Appreciate that the client may be reluctant to work with a practitioner of the opposite sex; 4. Have a basic understanding of Islam… and Islamic traditions as well as their common practices and implications
There are seven common beliefs that are included in the Islamic world view (Rehman and Dziegielewski, 2003, 33) In Schriver p. 499
The belief in one God Allah...as the one and only Creator/Sustainer of the heavens and the earth; the belief in the Divine Will (Al-Qadr/fatalism); the belief in the angels of Allah; the belief in the revealed books of Allah (the Torah, the Psalms, the Qur’an and the Gospel; the belief in the messengers of Allah (prophets); the belief in the day of judgment; and the belief in life after death
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(A WORK IN PROGRESS)

TITLE

RELIGIOUS AFFILIATED MUSLIM CHARTER SCHOOLS: CHALLENGES TO THE ROLE OF EDUCATION IN ASSIMILATION AND INTEGRATION OF YOUTH INTO AMERICAN SOCIETY

ABSTRACT (Limit 100 words) Public support for charters with religious affiliation is radically changing the nature of American public education and society and challenging our practice of religion-state separation. In 2010, there were 4,936 publicly supported charter schools operational in forty-one states, with over 1,665,779 million students. The number of charters currently is increasing, encouraged by President
Obama’s Race to the Top education program Among these public supported charter schools are culture based schools of Christian, Jewish, or Muslim religious affiliation. In particular, religious affiliation of 375 Muslim charter schools poses a unique problem for the principle of separation and public support for schools role in Americanizing, assimilating and integrating youth of different cultures into American society. Up to 90 of these Muslim culture schools with public support in 20 states are reportedly connected to the Turkish Islamist Fetullah Gulen Community.

#1 RELIGION IN THE PUBLIC SCHOOLS

Religious values are reflected in the public education system in the American community From the time of the founding of the public school system in the 1850’s, schools have reflected the characteristics of their demographic communities.

The Protestant Christian faith has been dominant until now and so have the Christmas songs, programs and public prayer at graduation ceremonies. With the shifting demographics the issue of these Protestant Christian practices has become more of a legal issue. There has been a demographic shift with the growth of other religions. Currently only 25% of immigrants are Protestant and world religions such as Islam, Orthodox Christianity, Buddhism and Hinduism now account for 2.5% of the U.S. population.” (Marshall, p. )

With the increased migration and education of Muslims in the United States, we can expect that Muslim communities also will be represented in the public school system. Given these changing demographics “Every week, we see legal cases involving schools and religion all over the United States.” (Marshall, p. )

The connection between schools and their communities in the USA, MAKES disconnecting schools from the religions of their communities difficult at best. With the recent expanded Muslim immigration and the establishment of their communities, schools have been affected by the Muslim religious world view, and the linkage of schools and Islam by the schools which serve Muslim populations which serve the Muslim populations, and view of serving Allah through a linkage between education and Islam. Theoretically, under the concept of church-state separation, schools should be disconnected from religion but the difficulty is that schools are located in communities and community values are clearly considered in designing education.
Religion in Education vs. Education about Religion

Almost everyone agrees that, in American public schools, teachers should not "teach religion" by actively advocating any religious worldview: theistic, atheistic, agnostic, new age,... But should we teach students about religion? And if so, what should be taught in schools serving religious communities and how should their religious commitments be reflected in education?

Charles Haynes, contends that education about religion is compatible with the U.S. Constitution, and when it's done properly, it is legal and constitutional. The constitutions First Amendment sets the legal parameters for religion in the public schools, "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof ....

On one end of the spectrum are those who advocate what might be called the "sacred public school," where one religion (theirs) is preferred in school policies and practices. Characteristic of the early history of public education, this approach still survives in some parts of the United States, particularly the rural South. From the “Bible wars” of the 19th century to current fights over posting the Ten Commandments in classrooms, attempts to impose religion in schools have fueled countless lawsuits and bitter fights in communities throughout the nation. Not only is this model unconstitutional, it is also unjust.

In recent decades, however, some on the other end of the spectrum have pushed for a "naked public school," where religion is excluded in the name of the establishment clause of the First Amendment. The influence of this mistaken view of the First Amendment is apparent in the virtual silence about religion in most of the curriculum and the confusion among many school leaders about the religious-liberty rights of students. But the First Amendment does not mandate that public schools be religion-free zones. This approach is also unjust and, when the rights of students are violated, unconstitutional (Haynes, p. )

There is a third model “civil public school” which includes study about religion, where appropriate, as an important part of a complete education. Warren Nord in his book,
Religion and American Education, believes that religion should be an explicit part of public school curricula, and argues that every child should take at least one introductory course in religion. He suggests that public education provide space for religious education through released time programs where religion can be taught by the religious adherents rather than an attempted neutral sociological analysis.

3 CONVERSION OF RELIGIOUS SCHOOLS TO CHARTER SCHOOLS

The issue of church state separation in education has been accentuated by the fiscal crisis and the rise and expansion of religious affiliated charter schools, which are really private public schools supported with public funds. This issue is being faced and negotiated with by Catholic and Jewish schools which are able to teach a separate secular curricula as secular subjects. However, the problem is being accentuated with Muslim Charters schools, because of the organic nature of Islam does accept separation between secular and religious subjects. Unlike Catholic and Jewish schools, Muslim school curricula activities are directed to religious imperatives of Islamizing the curricula itself and not separating the secular from the religious. Catholic and Jewish schools are more able to separate the religious studies areas from those of secular studies.

3.1 CATHOLIC SCHOOLS TO CHARTERS

The history of private Church run Catholic schools provided important landmarks in religious education in the USA.

In the nineteenth century, there were experiments in which Catholic school buildings were leased to the public school, and religious instruction was offered before or after classes. In communities such as New Haven, Hartford, Poughkeepsie, although the leasing arrangement was rejected in New York City in 1875. “The experiments faded, and by the 1880’s, bishops in Brooklyn, Louisville and Buffalo were ordering that Catholic parents be refused absolution if they failed to send their children to Catholic schools.” (Howard Ralph Weisz)

In the contemporary period conversions of schools are providing an opportunity for Catholic Schools with modifications, to change into charter schools. This has been one way a number of the dioceses have responded to the increased costs of Catholic education. In Washington D.C., seven previously converted Catholic schools were in their second year of conversion in 2009. In fall 2009, eight formerly Catholic schools in the Archdiocese of Miami opened as charters. In winter of 2009, the Diocese of Brooklyn
applied to New York State to convert one of its schools to a charter. The trend is expected to continue reflecting the recommendation of the influential report from the Thomas B. Fordham Institute, “Who will save America’s Urban Catholic Schools?”, that encouraged bishops to consider converting other Catholic schools to charters as alternatives to closing. This option originally turned down, is being re-considered at this time. The Catholic administration has had to consider whether financially ailing Catholic schools can be de-Catholicized of Church symbols and still retain their essence, and whether the schools which converted to charters would seriously draw students from the private Catholic schools. The plan is to have religious instruction continued through the parishes and not through the charter schools. Arnie Duncan, when Chicago’s school chief had proposed Catholic schools in Chicago converting to charters. Msgr. Kieran Harrington, noted that private Catholic schools “…are optimal because they address the formation of the whole person—the mind, the body, the soul” but that value-based charter schools with spiritual values had to be considered as alternatives to the closed private Catholic schools. (Paul Moses, p.)

3.2 JEWISH SCHOOLS

Jewish religious schools have not been directly converting from parochial schools but have been establishing culture charters with religious affiliation - Jewish affiliated charters. This has been posing potential problems and posing alternatives for the Jewish religious schools which may have tuitions of $8,000 plus per year compared to the affiliated culture schools being supported as public schools.

A key concern regarding Christian and Jewish religion affiliated charter schools is their assumptions and loyalties to their religious ideology within the context of the accepted American nation state. That does not mean congruence on all issues, i.e. Catholic and Jewish affiliated schools have clear differences with dominant value systems and can be expected to disagree on the social issues such as abortion. Whether these be Catholic, Jewish or other religious affiliations, the assumption is that in political matters and identifications loyalty to the nation state predominates. Although religious values do provide the cohesion and transcendent loyalty in most cases, they do not
override the values of the nation state. Muslim affiliated school represent a different perspective and in their affiliation,

3.3 MUSLIM SCHOOLS
In the mix of 165 Muslim schools in the U.S. are Sunday schools as well as 95 full-day schools and home schooling. The Muslim schools being established as charters can be classified into two categories. The first category are those clearly and structurally identified with Islam such as the Tarek ibn Zayed Academy (TIZA). That school is so blatantly Islamic in nature that the Minnesota Department of Education has issued two citations against it, and the ACLU has brought a legal suit against them. The second category, in contrast, are the Muslim affiliated charter schools which go under the culture school category. They are more hidden and in many cases deny their affiliation with Muslim agencies. For example, numbers of them are affiliated with the Fetullah Gulen Muslim movement, a world network of Muslim schools. (Fetullah Gulen is a Turkish citizen living in Pennsylvania who is considered as number 13 among 50 of the world’s most influential Muslims (Lumbard and Ali Nayed, 2010)

The Gulen movement operates more than 90 primary and secondary charter schools in the United States, and between 500-700 Islamic schools around the world. According to Guy Rodgers, Gulen oversees a worldwide network of businesses, schools, foundations and media outlets, with an estimated budget of 25 billion dollars. (Schwartz, 2010) The history of Islamic schools in the United States reflects a growing religious awareness and commitment of the Muslim population. There also are a number of Muslims who engage in home schooling for their children.

As noted by Rogers, Gulen’s movement in the U.S, runs over 90 charter public schools in at least 20 states.

What makes Gulen particularly dangerous is his strategic and tactical means to achieving this goal of triumphal Islam. In a sermon in 1999 aired
on Turkish television, Gulen said, (Rogers, p. )

You must move in the arteries of the system without anyone noticing your existence until you reach all the power centers ... until the conditions are ripe, they [the followers] must continue like this. If they do something prematurely, the world will crush our heads, and Muslims will suffer everywhere, like in the tragedies in Algeria, like in 1982 [in] Syria ... like in the yearly disasters and tragedies in Egypt. The time is not yet right. You must wait for the time when you are complete and conditions are ripe, until we can shoulder the entire world and carry it ... You must wait until such time as you have gotten all the state power, until you have brought to your side all the power of the constitutional institutions in Turkey ... Until that time, any step taken would be too early—like breaking an egg without waiting the full forty days for it to hatch. It would be like killing the chick inside. The work to be done is [in] confronting the world. Now, I have expressed my feelings and thoughts to you all—in confidence ... trusting your loyalty and secrecy. I know that when you leave here—[just] as you discard your empty juice boxes, you must discard the thoughts and the feelings that I expressed here.

Gulen is patiently employing taqiyya (stealth conversion of the infidel) on a global scale and in the U.S.

FGC affiliated schools reflect the Gulen’s exhortation to “move in the arteries of the system without anyone noticing your existence until you reach all the power centers...” Indeed, the fact that so little has been written about the FGC schools here in the U.S., as well as the accolades that have been accorded the FGC as a model of “moderation” by some in our government, would appear to confirm that the FGC and its schools are doing an excellent job of heeding Gulen’s exhortation and masking their true intent.

The Gulen schools promote Islam as does the TiZA school in Minnesota. One particular school (and likely numerous others) appears to be in
violation of state law because the school’s affidavit for its charter does not acknowledge that it is connected with a religious institution or group. In other words, those who chartered this school practiced *taqiyya* by hiding this fact.

As another example of the use of *taqiyya*, Jane’s Middle East Quarterly articles gives examples of how FGC’s Turkish language media outlet *Zaman* runs stories with information and headlines that are missing from the English language media outlet *Today’s Zaman*. This practice of two different messages, one to the indigenous Islamic population and one to the West, is common in the Islamic world, and has led many in the West, including political leaders and academics, to be misled as to the true intentions of Islamists.

In building a sophisticated and well-funded worldwide network, including a substantial presence here in the U.S., Fethullah Gulen is following in the footsteps and exhortations of Mohammed, who counseled patience and deception as a means of overcoming the infidel when the power of the infidel was greater than the power of the *umma*, the Muslim community. In a very real sense this is as or more sinister than the frontal assault strategy of Islamist organizations such as al Qaeda and Hamas, because, like the proverbial “frog in the kettle,” we are incrementally “boiled alive” without realizing it.

The activities of the Gulen school are variously known as “cultural jihad,” “creeping jihad,” “stealth jihad,” and “creeping shariah.” Much of Europe and Great Britain has been Islamized through this process, a process that invariably does not lead to peaceful coexistence between Muslims and non-Muslims, but leads to Islamic self-segregation, increased Islamist militancy and aggression, and the eventual forced imposition of Islamic shariah law within the society.
The FGC charter schools in America may outwardly appear innocuous, but they are serving a greater and long-range objective of Fethullah Gulen. The West need to be less gullible and more discerning when it comes to the elements of “stealth jihad” within our midst.

The history of Islamic schools in the U.S. reflects a growing religious awareness and commitment by the Muslim population. Muqtedar Kahn has noted (Kahn, n.p.) that a major objective of Islamic education in America was,

…it to resist cultural assimilation while encouraging political and economic participation in the mainstream.” He noted that Muslims want the power and wealth that America can offer, but they wish to eschew its socially liberal culture, particularly its sexual mores.” Full-time and Sunday schools proved a popular way to try to keep their children from turning “too American.”

Kahn notes,

Muslims began to migrate in large numbers to the United States in 1965, after immigration laws were reformed. .. Their early material success enabled the emergence of a highly ambitious leadership that began to have grand visions for the American Muslim community.

The material success of the Muslim community contributed to their vision for their community including drumming up more support for Muslim causes worldwide. They felt it necessary,”…to preserve the Islamic identity of the next generation and unite different ethnic groups so the American Muslim community would speak with one voice.”

The lack of qualified Islam-studies teachers in the United States resulted in short-term fixes including importing many imams and other religious leaders from Muslim countries to teach their children. Currently, about 5 percent of roughly 2 million American Muslim children attend full-time Islamic schools, but many more attend Sunday schools, and numerous attend charter schools with Muslim religious affiliation.” (Kahn, n.p.)

4. CLASH OF CIVILIZATIONS AND LOYALTIES
The Samuel Huntington historical narrative of 1995, the Clash of Civilizations postulates the existence of a clash of civilizations between Islam and the West. As he noted,

> It is my hypothesis that the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilizations. The clash of civilizations will dominate global politics. The fault lines between civilizations will be the battle lines of the future. (Huntington, p. )

Mohamed Elmasry retired head of the Islamic Congress in Canada with a strong and fervent Islamist/political Islam perspective, notes the faith base of Islam compared to the nation-state and political base of Western societies,

> In discussing a religion, any religion, we must consider also those factors which compete against it and know how to recognize them for what they are, as quasi-religious; I’m speaking chiefly about nationalism, materialism and secularism. Here, we must distinguish between secularization and secularism. The first describes the change from a religious to a non-religious culture, in which all spheres of life are equally affected and included, whereas secularism pertains to an ideology, an attitude toward life that rejects spiritual values and the religious world-view. Islam accepts the former state – secularization – while rejecting secularism. This is because, for a Muslim, that which is spiritual cannot be separated from all other aspects of life.

Elmasry notes that Islam does not accept the concept of nationhood,

> Islam freed itself early from the restrictive bonds of nationhood by envisioning itself as an international community. It was, and in many ways still is, that sense of international fellowship that continues to nourish and sustain our faith. One of Islam’s great contributions to the religious experience of humankind has been to demonstrate the way in which faith can be harnessed to the creation of a complex and successful earthly community – not a Utopian or idealized one, but a matter-of-fact everyday one – a community in which people’s primary needs, hopes and ambitions are not
denied, but channeled into a collective pattern of pious fellowship. Islam has preserved the essence of that ideal community in the Qur’an, where one can read and learn of a people united in sensible and sober fellowship, guided by the justice of Qur’anic teaching.

Elmasry quotes Prof. Ninian Smart from his book, “The Religious Experience of Mankind,” to differentiate between the concept of church as a religious quest and Islam, which already has found the answer.

From the standpoint of religious history, Islam’s importance lies partly in the stress it lays on the social dimension. It is a faith which demands institutions, but not those of a [Christian] Church, centered primarily in the promotion of religious quest by itself: rather, it demands institutions which cover the whole life of the community. There is nothing in Islam (except in a few sects here and there in its history) corresponding to the Church. There is no place for a special institution within society devoted to the ends of the faith. For it is the whole of society which is devoted to the ends of the faith.

Elmasry clearly rejects the corrupting influences of the what he considers the ‘colonialist’ Western Civilization. He notes,

…the impact of Western culture upon Muslims has assailed the very foundations of our society by undermining traditional and extended family dynamics, and by introducing an education system that reflects non-Islamic ideals and aims. Largely as a result of this systemic Western influence the economic and material prosperity of the individual has now become the deciding factor for many of today’s Muslims when dealing with contemporary societal issues. The remedy will not be easy but I believe it is within our power to make the changes that will save who we are, and can be, in this world.

5 WHY ISLAMIC SCHOOLS?

For a Muslim parent, full-day Muslim schools, charter–affiliated schools and home schooling offer a moral choice for the religious education of their children. The underlying political agenda is not necessarily part of their plan. (Badawi, 2005)

Dr Mohamed Elmastry notes the importance of Islamic education in the context of
Western Imperialism and colonialism,

The problem -- indeed, the universal dilemma -- facing Muslims is how to preserve their culture and values within their heritage, while integrating them with the culture and values of the rest of the world. It has now become a matter of survival for the Muslim world to pay attention to decolonizing Islamic culture. This must be done through proactively protecting language, religion and tradition -- in that order. By “tradition” I mean family values and our “Oruf,” or social customs. There is, certainly, no substitute for an objective and critical examination of how the colonizing powers of Europe and the Americas have used language, religion and tradition to oppress Muslims and other indigenous and aboriginal peoples for more than 500 years. But I believe that the remedy for half a millennium of such abuses is within our reach. (Elmastry, n.d.)

Elmasry notes a consequence of western colonization of Islam has resulted in the secularization of Muslim curricula in Muslim countries. He notes, In Muslim countries today, Islam -- instead of being the whole focus of education -- is incorporated into the curriculum as a separate subject, following the Western model of education...the plain fact remains; a school where Islam is taught as one subject among many others is a secular school...Unfortunately, American cultural domination in education and many other areas shows no signs of waning. To preserve Islamic culture through language, religion and tradition, Muslims urgently need to devise a grand collective plan for the next 10 to 20 years. In fact, the decolonializing of Islamic culture should be classed as a matter of national security and governments of Muslim countries must be strongly encouraged to allocate the necessary resources to implement cultural preservation programs without delay. The result of not decolonializing Islamic language, religion and tradition will be the inevitable de-Islamization of Muslims themselves. They will become accustomed to formulating their thoughts within the fabric of foreign cultures. No matter how faithfully they practice their faith, their world view and their values will become foreign to Islam.
Sara Rimer notes that in Minneapolis Minn. immigrants see charter schools as a haven for their values and not necessarily as advocates.

“… conceived, by charter advocates as a way to improve academic performance for immigrant families, they have also become a haven where children are shielded from the American youth culture that pervades large district schools… “amid the wave of immigration that has been reshaping Minnesota for more than three decades, the International schools are among the 30 of the states 138 charter schools that are focused mostly on students from specific immigrant or ethnic groups…to listen to teachers, administrators and parents-Somali immigrants who are relatively new to Minnesota, as well as Hmong and Latinos who have been in the state for decades- is to understand,” the fears of cultural loss are universal. When the immigrant children attend the schools permeated with American culture…”They’re assimilating to a society that parents see as threatening and frightening. It’s anti-authority, anti-studying. It’s materialistic,” and is a reaction to the reality that large numbers of immigrant children become alienated over time and fail to graduate.

Minnesota with its strong charter-school movement, and similar places, “… offers immigrant parents, who have long been conflicted about their children becoming Americanized a strong voice in their children’s education.” (Suarez-Orozco, 2008)

The immigrant status should be considered as a driving force parallel concurrent with the tenets of Islam.

The Muslim American Society Council of Islamic schools (MASCIS) recognizes this negative motivation as posing a problem for developing an integrated and cohesive Muslim curriculum for these schools. They note the problems posed by “… Islamic schools (as) merely a refuge from the (negative) influences of public schools rather than a genuine system in and of themselves,” and suggest the need to develop a systematic curricula for Islamic schools in North America. This unsystematic and lack of integrated curricula also poses an opportunity for Islamists such a
Gulen to provide the glue for developing an Islamist integrated curricula.

.7 THE NATURE OF MUSLIM SCHOOLS
In 2009, Erickson notes a 2006 study which identified about 240 Islamic schools in the USA with an enrollment of over 38,000 students, but that most Muslim students in the U.S. probably 97% or more, attend public schools

WHAT ARE ISLAMIC SCHOOLS TEACHING
Islamic School’s of America refers to their Tarbiya Project. They note, “Curriculum reform efforts in the past have sought to Islamize conventional textbook knowledge. What is now needed is a comprehensive curriculum that has Tauhid (God-centeredness in all its aspects) as its core content and approach.”

Timani, Hassan (Islamic Schools in America) notes,

“…Islamic organizations and Muslim educators have capitalized on the ills of the public schools to put pressure on Muslims to build Islamic schools, where (re) Islamizing Muslim children would be the goal. But, in the process many of these children may end up alienated and isolated from the rest of society, and, in some cases exposed to anti-American, anti-secular, and anti-Western propaganda.”

Daniel Pipes notes in the New York Sun March 29, 2005, that Islamic schools are teaching hatred of Christians and Jews.

Elmasry recommends a number of educational interventions to save the Muslim world including,

English as a second or third language should be introduced only during the last three years of secondary school, and then only as a tool to communicate with others internationally or professionally.
The first three years of a child’s school life should be spent in a reformed
or updated version of the traditional Koottab, in which students not only learn to read and write, but also memorize the Qur’an and are taught how to practice Islamic etiquette. Educational curricula should place higher importance on teaching a comprehensive survey of Islamic history, Islamic civilization, and the varied Islamic arts such as story-telling, etc.

CONCLUSION: CHALLENGES TO AMERICAN EDUCATION AND AMERICAN SOCIETY

The title of this paper is:

RELIGIOUS AFFILIATED MUSLIM CHARTER SCHOOLS: CHALLENGES TO THE ROLE OF EDUCATION IN ASSIMILATION AND INTEGRATION OF YOUTH INTO AMERICAN SOCIETY

At this time this paper is still a work in progress and requires additional extensive research and weighing of evidence before reaching a valid conclusion. However, at this time, it is clear there are special challenges to our pluralistic society posed by public support of religious affiliated charter schools and the undermining of the principle of church-state separation. Publicly supported Muslim charter school education poses a unique problem to the survival of our pluralistic society unlike that of public support for Christian or Jewish affiliated Charters. The problem is both in terms of assimilation and Americanization of Muslim immigrants and the diversity principle in our society. In this time period when radicalization of some Muslim youth to political Islam is posing significant challenges and threats to the US society, questions should be raised as to the validity of using public funds for encouraging an increasing potential threat to American society.

BIBLIOGRAPHY- WORK IN PROGRESS 11/5/10

ACLU takes a Muslim school to court. (Fall 2009). Middle East Quarterly, pp. 76-79

American Civil Liberties Union of Minnesota vs. Tarek Ibn Ziyad Academy (Jan. 2009)


Casas, Martha. (2003). *Teachers as owners: A key to revitalizing public education,* Lanham, MD.: Scarecrow Press

Campus Watch. (2010, July 29) *Surveys: Islam in the classroom*


Conference—Islamic Education in North America (April 6, 2006)

Deal, TE, & Hentschke, GC, & Kecker, K. (2004). Adventures of charter school creators: leading from the ground up. Lanham, Maryland: Scarecrow Education

Elmasry, Mohamed (2007, March 27 – 30) A paper presented at the Islamic Conference, Cairo, Egypt,

Erikson, Doug (2009, Oct. 23)


Haynes, Charles. (2008, October 26) Religious Liberty in Public Schools

Helfand, Duke. L.A. district officials are concerned that organizer's ties to Scientology could raise 1st Amendment questions. The Los Angeles Times (1997, July 4)


Islamic Schools League of America (various publications)


Huntington, Samuel (1995) Clash of Civilizations

Kersten, Katherine (2008, October 26) “New Minnesota charter schools heading into a legal minefield” Star Tribune

Khan, Muqtedar (2025, July 3) Struggling for the Souls of Islamic Schools in America Itihad, a Return to Enlightenment


Leaming, Jeremy. (2003, June 1). Charter for controversy: often touted as a breakthrough in 'educational choice' charter schools instead are raising church-state problems around the country. Church and State. (Americans United for Separation of Church and State)


Lockwood, Anne Turnbaugh, Charter districts: When an entire district goes charter, do benefits follow? A study casts doubts, School Administrator. (2002, June 1)


Moses, Paul (200?). The Public Option- Wil Catholic schools become charter schools? Commonweal


Pipes, Daniel. (2005, March 29) Promoting the Islamit Agenda, New York Sun


Rimer, Sara (2009, Jan. 9) New York Times


Sharon-Kreskin, Rachel. (2010). “Fethullah Gulen’s Grand Ambition” *Middle East Quarterly*


Weisz, Howard Ralph(


**SELECTED CHARTER SCHOOL CLEARINGHOUSES:**
Alliance for School Choice; Americans United for Separation of Church and State; Center for Educational Reform; Islamic School League of America; National Alliance for Public Charter Schools ; Thomas B. Fordham Foundation
The Effectiveness of Using Moodle and Jusur Programs to Manage E-courses on Developing Academic Achievement of Teachers College Students in “Instructional Software” course and Their Attitudes Towards them

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Abstract: this study aimed to discover how different Learning Management Systems (LMS) affected some important educational variables, by comparing the effect of using two LMS “Moodle and Jusur” on the development of students’ academic achievement of teachers college at Riyadh (King Saud University) in the “instructional software” course and their attitudes towards LMS. The results of this study indicated that Moodle and Jusur have a positive effect in the development of students’ academic achievement. Also, The results showed that both Moodle and Jusur have positive effect in improving students’ attitudes towards LMS, although Moodle is more affective than Jusur.

Introduction:
Learning Management System (LMS), also known as Virtual Learning Environment (VLE) (Yasara & Adiguzela, 2010; Gladun et al, 2009; Chang, 2008), sometimes also known as Course Management System (CMS), provides the platform for the web-based learning environments (Cavus et al, 2006); it offers a great variety of channels and workspaces to facilitate information sharing and communication among participants in a course; it is an e-learning infrastructure with the functions of delivering the courses, supporting collaboration, assessing the learner performance, recording learner data, and generating reports to maximize the effectiveness of the entire learning organization (Yasara & Adiguzela, 2010; Romero, 2008). The main components of Learning Management System are (Kok, 2008):
- mapping of the curriculum into course topics that can be assessed and recorded.
- tracking of student activity and achievement within the curriculum presented online.
- support of online learning, including access to learning resources, assessment and guidance.
- online tutor support.
- peer group support.
- general communications, including email, group discussion and web access.
- links to other systems, both in-house and externally.

Many organizations, both academic institutions and commercial corporations, are purchasing LMS as a product to be used in their organization for learning, training and development purposes. The number of LMS available today is in the increase. There are many open source LMS available, as well as commercial packages (Chang, 2008). Some examples of open source LMS are Moodle (developed by Martin Dougiamas, Australia), Claroline (developed by Université Catholique de Louvain), A-tutor (developed by University of Toronto), ClassWeb (developed by University of California, Los Angeles), Coursework (developed by Stanford University), and LON-CAPA (developed by Michigan State University). Some examples of commercial LMS, in which a license must be purchased to use the product, include Blackboard Inc., ANGEL Learning, and Apex...
Learning. Moreover, an example of Arabic system is Jusur (developed by National Center of E-learning and Distance Learning in the Kingdom of Saudi Arabia).

According to a review of the literature, many studies have emphasized the important role of LMS in the learning and teaching process (e.g. Al-salom, 2010; Hussein, 2010; Yasara, & Adiguzela, 2010; Gladun et al, 2009; Al-mutairy, 2008; Kakasevski, 2008; Romero, 2008; Machado & Tao, 2007; Cavus et al, 2006; Naqvi, & Ajiz, 2006; Al-Jarf, 2005; Godat, 2005; Tsinakos, 2004; Larkin et al, 2003). There were also many studied which compared different LMS. For example, Machado & Tao (2007) compared Moodle and Blackboard, they argued that Moodle learning management system is the more efficacious and effective learning management system than the Blackboard learning management system, also, Al-Jarf (2005) compared Nicenet, WebCT and Moodle in EFL instruction, they (Nicenet, WebCT and Moodle) were used to teach grammar to freshman students at the College of Languages and Translation, King Saud University in Saudi Arabia. Al-Jarf’s study showed that Nicenet was more popular than WebCT and Moodle among Saudi EFL freshman students enrolled in their first grammar course at COLT, using Nicenet had a positive effect on students’ achievement. Moreover, the Nicenet group revealed positive effects of online instruction on students’ attitudes towards online instruction and the grammar course.

Al-Jarf (2005) recommended that online courses be selected carefully and online instruction be introduced gradually when used in a no-tech environment and with freshman students with a low proficiency level in English and computer terms and with no prior experience in online instruction such as Saudi EFL freshman students at COLT, also recommended that online instruction from home may start with Nicenet. When students become more sophisticated linguistically and technologically, they might proceed to Moodle and WebCT. Since Moodle and WebCT are open source courses, the instructor may start with two tools (discussion forums and resources) and add tools gradually.

**Jusur** (www.elc.edu.sa/jusur)

is an LMS designed by the National Center of E-learning and Distance Learning in order to manage the E-Learning process in the kingdom of Saudi Arabia. Using Jusur system, users can log on and access the training courses. As the student completes the course, scores are tabulated and reports generated. Likewise, managers and administrators can access reports on the LMS and track the students’ progress. The key features of Jusur System are;

- **log in**: registering students in the portal.
- **schedule**: planning the course and the way of teaching it.
- **delivery**: making the course available for users.
- **tracking**: following up the students’ progress as well as issuing reports of students performance.
- **communication**: students contact with each other through forums, emails and file sharing.
- **evaluation**: testing students through quizzes and examinations and grading them.

Jusur also has a learning content management system (LCMS), which is a system that can access learning object repository which enables subject matter experts, with little technology expertise, to design, create, deliver, and measure the results of e-learning
courses rapidly. LCMS applications fundamentally change the value of e-learning content delivery by offering a scalable platform to deliver proprietary knowledge to individual learners and researchers.

The most of the universities staff in the Kingdom of Saudi Arabia are using Jusur as a learning management system, and some of them use other open or commercial programs, such as Moodle. Thus, this study aimed to identify which one is better to be used, by comparing the effect of using Moodle and Jusur on the development of students’ academic achievement of teachers college at Riyadh (King Saud University) in the “instructional software” course and their attitudes towards LMS. As an example of studies about Jusur, Hussein (2010) aimed to identify the attitudes of faculty members at King Saud University towards the use of Jusur as an e-learning management system, the results showed that there are a positive attitudes of the members of the faculty at King Saud University towards e- learning management system Jusur, although not activate enough.

**Moodle** ([www.moodle.org](http://www.moodle.org)):

Moodle (modular object oriented developmental learning environment) is an open source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It has become very popular among educators around the world as a tool for creating online dynamic web sites for their students. It has been developed by Martin Dougiamas as part of his Ph.D. in education thesis (Kok, 2008). Romero (2008) assumed that Moodle is one of the most commonly used, a free learning management system enabling the creation of powerful, flexible and engaging online courses and experiences.

Open source software, which means that it is free to download it, to use it, and to modify it. Pan (2007) claimed that there are many criteria for open source software such as; free redistribution (copies of the software can be made at no cost), source code (the source code must be distributed with the original work, as well as all derived works, derived works (modifications are allowed), integrity of the author’s source code, no discrimination against persons or groups, no discrimination against fields of endeavor, distribution of license, license must not be specific to a product, and license must not contaminate other Software. Due to being an open source software, Moodle is free to download, use, modify, and even distribute and sell (under GNU General Public License), all with no license fee (Kok, 2008). Michael & Tao (2007) asserted that the main advantages to an open source learning management system are the ability to modify these products and redistribute them back into the community. In the more popular open source projects, as new features become available they can be integrated into the users’ existing system as needed at minimal cost. The disadvantages to open source software are a lack of dedicated support unlike proprietary systems from software manufacturers and if an organization modifies the common code base too dramatically the ability to upgrade to future releases of the software is impaired. Open source software also requires personnel with the requisite knowledge base to implement the software which may require the addition of new personnel or additional training for current personnel.

The underlying philosophy of Moodle is maximum instructor control and minimal administrator control. Once the course area is created in Moodle, the instructor manages its materials with minimal (if any) assistance by the administrator. The
instructor has also control over which course pages and files to publish. An administrative documentation, a teacher’s manual, and documentation created by other users are available on Moodle’s web site. For those users and institutions without any server and support infrastructure to host their own online materials, a Moodle hosting service is available at a reasonable price. Moodle can also be utilized as a collaboration tool for remote project partners (Kok, 2008).

The study:
The study hypotheses were:
- There are statistically significant differences at the level of (0.05) between average scores of the subjects in pre- and post-test application of the academic achievement test of the "instructional software" course, in favour of post-application.
- There are statistically significant differences at the level of (0.05) between means of scores of the subjects in pre- and post-measurement of the attitudes towards Moodle as LMS, in favour of post-measurement.
- There are statistically significant differences at the level of (0.05) between means of scores of the subjects in pre- and post-measurement of the attitudes towards Jusur as LMS, in favour of post-measurement.
- There are no statistically significant differences at the level of (0.05) between means of scores of the subjects in the post measurement of the attitudes towards Moodle and Jusur as LMSs.

The study tools were: achievement test on “instructional software” course, and attitudes towards LMS scale. Validity and reliability of the academic achievement test and the attitudes towards LMS scale were ensured. The sample of the study consisted of (41) students, they were enrolled in an e-course called “instructional software”. One of the e-course units consists of 6 lessons, they were divided into two parts, every part consists of 3 lessons. The sample of the study studied the first 3 units using moodle as LMS, then the same sample studied the next 3 units using Jusur as LMS. The researcher applied academic achievement test and attitudes towards LMS scale (Moodle and Jusur) as a pre-test. The sample studied the first 3 units using moodle as LMS, then the researcher applied attitudes towards LMS scale (Moodle), as a post-test. The same sample studied the next 3 units using Jusur as LMS, then the researcher applied academic achievement test and attitudes towards LMS scale (Jusur), as a post test.

The findings:
The results of this study indicated that there were statistically significant differences at the level of (0.05) between average score of the subjects in pre- and post-test applications of the academic achievement test of the “instructional software” course, in favour of post-application. Therefore, both Moodle and Jusur have a positive effect in the development of students’ academic achievement.

There were also statistically significant differences at the level of (0.05) between the means of scores of the subjects in pre- and post-measurement of the attitudes towards Moodle as LMS, and also the attitudes towards Jusur as LMS, in favour of post-measurements in both treatments. However, there were statistically significant
differences at the level of (0.05) between the means of scores of the subjects in the post measurement of the attitudes towards Moodle as LMS, and the post measurement of the attitudes towards Jusur as LMS, in favour of post-measurement of the attitudes towards Moodle as LMS. Therefore, both Moodle and Jusur have a positive effect in improving students' attitudes towards LMS, however Moodle is more effective than Jusur.

References:


Hussein, H. (2010). Attitudes of Saudi university faculty member toward using learning management system (Jusur). 1th Conference of Applications of Information and Communication Technology in Education and Training, Faculty of Education, King Saud University of Saudia Arabia Kingdom.


1. Title of Submission: Identifying Competencies for Special Education Practitioners Through the Delphi Method

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6. Abstract:

   Any profession defines and distinguishes itself from the rest through its core tasks and competencies. For special education, competencies need to be articulated, when upgrading the level of competence of its practitioners and responding to the needs of special learners at the grassroots level. Given the Philippine geographical situation, the Delphi was deemed appropriate for establishing these competencies. The Delphi is a qualitative method, which creates shared judgment and understanding among a panel of experts from geographically dispersed locations who examine a particular issue. Fifty-six Delphi panelists identified the special education forecasts within the next five years, the tasks required within those forecasts and the competencies necessary to perform the special education tasks.

   A total of three surveys were conducted. The initial survey using two – open ended questions yielded 107 special education forecasts, 272 special education tasks, 474 knowledge competencies, 528 skill competencies and 569 professional dispositions. Through a group of inter-raters, these were trimmed down to 35 forecasts, 10 categories of special education tasks, and 39 subtasks.

   Special education forecasts, tasks and perceived capabilities of special education practitioners to perform the tasks were rated using a Stapel scale. Standard deviation was computed to describe the consensus level of the panel for all items. Significant differences between the desirability and feasibility of special education forecasts and the accuracy and importance of special education challenges were analyzed using the T-test. Analysis of variance and post hoc analysis using Tukey HSD determined the differences of the ratings given by the
different types of Delphi panelists for special education forecasts, special education tasks and perceived capability of special education practitioners to perform these tasks. To compare the similarities in the perceived capabilities of various practitioners, proximities were computed using Euclidean Dissimilarity Coefficient Measure.

The final progressive special education competency framework has 81 knowledge and skill competencies under seven strands namely: Foundations, Instructional Planning, Instructional Methods and Strategies, Learning Environment, Assessment and Evaluation, Collaboration, and Personal Growth and 16 professional dispositions.

The results of the study strengthen the knowledge base of special education teacher training programs and improve practice.
Increasingly, students with disabilities such as autism or seizure disorders, are requesting that animals accompany them to school. In some circumstances, these requests have been denied, resulting in media attention and litigation. In those cases, school administrators have been concerned that the presence of the animal would negatively impact other persons in the school who have allergies, or that the animal was not needed, given that the school district could offer aides or other services to assist the student. Now and with few exceptions, the 2010 publication of federal regulations implementing the Americans with Disabilities Amendments Act of 2008 (“ADA”), 42 U.S.C. § 12101 et seq. (2008), 28 C.F.R. Pt. 35 (2010), require public schools to modify their policies, practices, and procedures to permit the use of service animals by students with disabilities. The law also restricts public school officials from asking certain questions about the animal for which school attendance is requested.

The ADA regulations state that certain species of animals may be considered to be service animals, such as miniature ponies, but that other species are not service animals, such as wild animals. The determination of whether a requested animal is a service animal is up to the discretion of school officials and requires careful consideration of the need for a service animal and the functions the animal would perform for the student. Whether an animal is considered a “service animal” under federal law or whether these animals are merely companion animals that help students stay calm or feel safe, it is up to school administrators to make decisions to permit such animals to attend classes with the student, or to deny the request.

This paper provides a framework to consider requests for use of service animals in public
schools. School officials should consider these requests in light of school district policy, the access and nondiscrimination provisions of the ADA, and if applicable, an inquiry under the Individuals with Disabilities Improvement Act (“IDEA”) to determine whether an animal, even if not statutorily defined as service animal, is an appropriate related service or needed methodology to provide educational benefit to a student with a disability.

Access to Public Schools

Federal Law

The definition of “service animal” in the 2010 ADA regulations is found in Title II, Part 35, Nondiscrimination on the Basis of Disability in State and Local Government Services, 28 C.F.R. Pt. 35.104 (July 23, 2010, Effective March 15, 2011). Title II prohibits state and local governmental entities from discriminating on the basis of disability. Title II regulations provide that public entities must make reasonable modifications in their policies, practices, or procedures when the modifications are necessary to avoid discrimination on the basis of disability, unless the public entity can demonstrate that making the modifications would fundamentally alter the nature of the service, program, or activity. 28 C.F.R. Pt. 35.136(a). The Office for Civil Rights (“OCR”) enforces Title II. Notably, an animal that poses a “direct threat” to others is an animal that poses a significant risk to the health and safety of others that cannot be eliminated by a modification of policies, practices or procedures. 42 U.S.C. §12111(3); 28 C.F.R. Pt. 36.208.

Under Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. § 794 (2008); 34 C.F.R. Pt. 104 (2008), and enforced by the OCR, federal recipient schools are required to provide students with nondiscriminatory access to facilities, programs, and services so that they may be provided an equal educational opportunity. Section 504 prohibits recipients of federal U.S. Department of Education funds from discriminating on the basis of disability.

The ADA regulations define a service animal as any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. Other species of animals, whether wild or domestic, trained or untrained, are not service animals for the purposes of this definition. Miniature horses may be service animals for the purposes of the ADA if the miniature horse has been individually trained to do work or perform tasks for the benefit of the individual with a disability. 28 C.F.R. Pt. 35.136(i)(1).

A public school district is not responsible for the care or supervision of a service animal. A service animal shall have a harness, leash, or other tether, unless either the handler is unable because of a disability to use one, or if such use would interfere with the service animal’s safe, effective performance of work or tasks, in which case the service animal must be otherwise under the handler’s control (e.g., voice control, signals, or other effective means). 28 C.F.R. §35.136(d).

However, a public school official may ask an individual with a disability to remove a service animal from the premises if the animal is out of control and the animal’s handler does not take
effective action to control it or if the animal is not housebroken. With regard to a trainer of a
service animal, know the school board’s visitor policy. The focus of the inquiry should include
the permissibility of the trainer’s entry into the building during the school day, with or without a
service animal.

State Law

State law may require public schools to permit the use of a service animal by a student. If that is
the case, it is important to comply with the law and grant the parent’s request. In Kalbfleisch ex
rel. Kalbfleisch v. Columbia Community Unit Sch. Dist. Unit No. 4, 2009 WL 4829008 (Ill.
App. Ct. Dec. 16, 2009), a three-judge appellate panel in Illinois state court found “ample
evidence” to uphold the lower court’s issue of an injunction finding that a five-year old student
with autism would be irreparably harmed under state law if he did not bring his dog with him to
school. In considering the parents’ request that the child be accompanied to school by a service
dog, the school district determined that the dog would have served no educational purpose as it
was a companion animal that did not meet the definition of a service animal, and would have
impacted at least one student with allergies to animal fur. District officials argued that the
student could attend school without the animal if he chose to and that his behaviors were
volitional. The parents, however, contended that the dog provided a calming influence on the
child, reduced his tantrums, and provided the child with consistency throughout the various
environments he encountered during his day. Because the plain language of state law permitted
the use of service animals, the court held that it was not necessary for the parents to prove the
dog was a service animal in order for it to issue a preliminary injunction. See also, K.D. v. Villa
Grove Comm’ty Unit Sch. Dist. No. 302 Bd. of Educ., 110 LRP 50317 (Ill. App. Ct. 2010) in
which the court affirmed that a 6-year old boy with autism could bring a dog to school even
though the dog did not respond to commands given by the one-on-one aide rather than the child,
or provide him with educational benefit.

Management Issues

Under the ADA regulations, individuals with disabilities shall be permitted to be accompanied
by their service animals in all areas of a public entity’s facilities where members of the public,
participants in services, programs or activities, or invitees, as relevant, are allowed to go. 28
C.F.R. §35.136(g). When a request for use of a service animal is made, school officials may not
require documentation, such as proof that the animal has been certified, trained, or licensed as a
service animal. Furthermore, school officials shall not ask about the nature or extent of a
person's disability, but may make two inquiries to determine whether an animal qualifies as a
service animal:

a. Is the animal required because of a disability? (No need to ask if the disability is
obvious.)

b. What work or task has the animal been trained to perform?

Examples of work or tasks include, but are not limited to, assisting individuals who are blind or
have low vision with navigation and other tasks, alerting individuals who are deaf or hard of hearing to the presence of people or sounds, providing non-violent protection or rescue work, pulling a wheelchair, assisting an individual during a seizure, alerting individuals to the presence of allergens, retrieving items such as medicine or the telephone, providing physical support and assistance with balance and stability to individuals with mobility disabilities, and helping persons with psychiatric and neurological disabilities by preventing or interrupting impulsive or destructive behaviors. The crime deterrent effects of an animal's presence and the provision of emotional support, well-being, comfort, or companionship do not constitute work or tasks for the purposes of this definition. 28 C.F.R. Pt. 35.104.

These inquiries and rules which apply to service animals, also apply to miniature horses. 28 C.F.R. §35.136(i)(C). In determining whether reasonable modifications in policies, practices, or procedures can be made to allow a miniature horse into a specific facility, school officials must consider:

a. The type, size, and weight of the miniature horse and whether the facility can accommodate these features;

b. Whether the handler has sufficient control of the miniature horse;

c. Whether the miniature horse is housebroken; and

d. Whether the miniature horse's presence in a specific facility compromises legitimate safety requirements that are necessary for safe operation. 28 C.F.R. §35.136(i)(2).

**Free Appropriate Public Education (FAPE)**

In addition to nondiscriminatory access to educational programs, services, and facilities, Section 504 has an additional relevant component to consider in that recipient elementary and secondary schools also must provide a FAPE to qualified students with disabilities. A FAPE is the provision of a regular or special education comparable to the education provided to students without disabilities and is based on a student’s individualized educational needs. 34 C.F.R. Pt. 104.33(b) (2000). The provision of a FAPE may include related aids and services, including the possibility that a student may need a service animal for assistance in order to have access to participation in, and gain the benefits of, the programs and services offered by the school. 34 C.F.R. Pt. 104.4(a) (2000).

Under the IDEA FAPE provisions, the relevant question is whether the use of a service animal is a related service to assist a child with a disability to benefit from special education or is the appropriate methodology to provide the student with educational benefit. The process in which a school must engage under the IDEA to make decisions regarding the use of service animals for a student with a disability is a highly fact specific, case-by-case inquiry into the details of the student's needs, the nature and severity of the disability and its impact on the student, and the
appropriate methodology to be used to meet those needs.

Even if the animal requested does not meet the definition of service animal, school officials would be wise to consider whether the student requires use of an animal in order to receive educational benefit. In Gallia County Local Sch. Dist., 36 IDELR 205 (SEA OH 2002) a state hearing review officer (“SRO”) affirmed the impartial hearing officer’s order (“IHO”) and concluded that, under the IDEA, the student, diagnosed with separation anxiety disorder and social phobia, needed a dog for companionship in order to attend school. In arriving at the decision, the SRO applied a preponderance of evidence standard to determine whether the full time use of a companion dog in school was necessary for the provision of a FAPE under the IDEA. The dog was determined to provide the student with some meaningful educational benefit in the least restrictive environment to meet her “current” needs. The school district was ordered to permit the student the use of the dog at all times in school, while on school property, and on the school bus; and elementary school staff and students were to be trained on the use of a service dog. Thus, use of the dog was a necessary component of a FAPE under the IDEA, not as a service animal trained to perform tasks or do work, but as an emotional companion providing comfort to the student.

Related Service

The use of a service animal may be required under the IDEA as a related service. “Related services” are transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education, and includes speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, orientation and mobility services, and medical services for diagnostic or evaluation purposes. Related services also include school health services and school nurse services, social work services in schools, and parent counseling and training.

“Orientation and mobility services” are those services provided to blind or visually impaired children by qualified personnel to enable those students to attain systematic orientation to and safe movement within their environments in school, home, and community; and may include teaching children to use a cane or a service animal to supplement visual travel skills or as a tool for safely negotiating the environment for children with no available travel vision. Because the list of related services is nonexhaustive, a service animal may be necessary as an other supportive service as are required to assist a child with a disability to benefit from special education.

In Cave ex rel. Cave v. East Meadow Union Free Sch. Dist., 480 F. Supp.2d 610 (E.D.N.Y. 2007), the federal court denied a parent’s request under Section 504 for a preliminary injunction to require the school district to permit the presence of the service dog as a reasonable accommodation for a student with a hearing impairment. The court found extensive testimony on the effects of animal dander on people with such allergies to be persuasive and found that the presence of a dog in school would severely impact persons with allergies. Importantly, the court
found it persuasive that the parents did not exhaust their administrative remedies under the IDEA first. On appeal, the Second Circuit Court affirmed, reiterating that the parents should file a request for a due process hearing under the IDEA to seek to incorporate the use of the dog into the IEP as a related service. “A request for a service dog to be permitted to escort a disabled student at school as an ‘independent life tool’ is hence not entirely beyond the bounds of the IDEA’s educational scheme.” Cave ex rel. Cave v. East Meadow Union Free Sch. Dist., 514 F.3d 240 (2d Cir. 2008).

The parents bear the burden of proof at a due process hearing and must show that empirical evidence supports the need for a service animal in lieu of human supports, and that their student needs the animal in order to receive a FAPE. In Bakersfield City Sch. Dist., 51 IDELR 142 (SEA CA 2008), an administrative law judge (ALJ) who heard the due process complaint found no violation of the IDEA. Although the dog did not qualify as a service animal, school officials did not follow procedures in their decision making. They were required to consider whether the student needed the animal as a related service in order to receive a FAPE. The ALJ found that the parents’ proffered evidence that the dog was essential to the provision of a FAPE was not based on peer-reviewed experimentally and empirically based research, but was based on anecdotal reporting. The ALJ also determined that the district’s recommendation of a one-on-one aide was the least restrictive means to provide supports to the student as the aide could make human judgments as to when to wean away from the student when appropriate in order to facilitate communication with his peers, where the dog would be nothing but a constant companion. The presence of the dog was not required for the student to receive a FAPE.

If an animal will be necessary in order for a student to have access to the educational programs or benefits, or the provision of a FAPE, consider the procedures for removing animals from the premises at any time given that they may be ill, may pose a direct threat to others, or may interfere with educational and operational functions.

Under the ADA/Section 504 and the IDEA, school officials may offer alternative means to accomplish the requested service or need, but the alternative must actually be appropriate to achieve all of the work or purposes the service animal provides with respect to the student’s disability. In New Mexico Dept. of Educ., 103 LRP 57802 (SEA NM 2002), the IHO concluded that the determination of whether or not to use a dog as part of the special education program of a student with a hearing impairment was a choice of methodology, and therefore up to the school district. Testimony at the due process hearing established that student’s dog was not used to perform tasks or other disability-related services through work, but was instead used as a means of therapy. The IHO concluded that the purpose of the dog was to confer educational benefit, not to compensate for any lack of mobility or other disability as would a service dog. However, the IHO found that other means of accomplishing the same educational benefit sought by the proposed use of the dog were evident in the IEP, considered by the team, and made part of the child’s educational program. Because the decision of whether to permit use of the child’s dog was a choice of educational methodology, and because the district’s chosen methods conferred educational benefit, the decision not to use the student’s therapy dog and the subsequent non-use of the dog did not constitute a denial of a FAPE.
Conclusion

In summary, a service animal may be necessary under Section 504/ADA for a student with disability to access the facilities, services, and benefits of the educational program, and whether reasonable modifications would facilitate that access. A service animal also may be a necessary related service to enable a student with a disability to receive a FAPE under the IDEA. Therefore, a school official must know the definition of service animal, the needs of the student, and identify the nature of the tasks the animal is trained to perform through a case-by-case, interactive process with the parent/guardian and the child, if appropriate. Document the specific ways in which an animal or other related service will assist the student and the effects of the disability.

The school administrator should be sure that student’s educational planning team considers and documents all the student’s educational needs and discusses all the methods proposed to meet those needs before proposing a FAPE such as the diagnosis of the specific disability; the needs that stem from it; consider the parent’s request for the service or comfort/therapy animal; identify and verify the need for such a service or comfort animal; and directly address the function(s) that the service or comfort/therapy animal is expected to perform in relation to the student’s disability as this may impact the school district’s methodology choices.

The school administrator should also know policy and procedure regarding the animal’s access to water; the walking, caring, feeding, clean up of the animal’s waste; and any restrictions such as requiring that the animal be restrained at all times by being leashed or that the animal be restricted to certain spaces on school property. Other considerations should be made regarding the animal’s vaccinations and other veterinary records but do not condition a service animal request on the parents’ submission of such information.
Cultural Perspectives on Attention Deficit Hyperactivity Disorder: A Comparison between Korea and the US

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Abstract

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most commonly diagnosed behavioral disabilities in US classrooms. Even though the exact cause of ADHD is not known, several factors are accepted as possible causes, including heredity, genetic or organizational factors, head injury, poor nutrition, infections, parental substance abuse, and exposure to toxins in early childhood. Among many possible causes of ADHD, this author focused on cultural perspectives on ADHD based on Ross’s (1987) statement that each culture has different rates, behaviors, and perceptions of ADHD. By comparing Korean and US parents’/teachers’ perspectives on ADHD through a review of research, this researcher found that cultural influence was one of the important factors affecting ADHD diagnosis and treatment.

*Keywords*: ADHD, Confucianism, culture, East Asia, Korea, parents, teachers, USA
Cultural Perspectives on Attention Deficit Hyperactivity Disorder: A Comparison between Korea and the US

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most commonly diagnosed behavioral disabilities in the US classroom setting. According to the National Institutes of Health (NIH), ADHD is estimated to affect three to five percent of school-age children in the US (1998). Researchers with the Centers for Disease Control and Prevention (CDC) analyzed data from the 2003 National Survey of Children’s Health that revealed approximately 4.4 million children aged 4 to 17 years old were reported to have a history of ADHD diagnosis; of these, 2.5 million (56%) were reported to be taking medication for the disorder (CDC, 2005, p. 842). Regardless of the high percentage of occurrence, however, children’s ADHD is diagnosed only by teachers’ or parents’ observation in most cases. As Rowland, Lesesne, and Abramowits (2002) point out, a lack of reliable diagnoses, such as laboratory tests, has made reported estimates of prevalence difficult to interpret.

For most of the children diagnosed with ADHD, stimulant medications such as methylphenidate and amphetamine are recommended. As Advokat (2009) observed, the legal and illegal usages of stimulant medications for students diagnosed with ADHD have increased in the US (2009). Stimulant medications have been regarded as effective in helping students with ADHD to achieve better concentration, organization, and task completion while they are doing classroom activities. However, many researchers have questioned the effectiveness of stimulant treatment in their recent studies, because using stimulant medications may promote drug abuse, researchers find no clear evidence of improved academic achievement, and the drugs have side effects. For example, according to Giedd, Castellauos, Casey, Kozuch, King, Hamburger, and Rappart (1996), children with ADHD who received stimulant medication generated more hostile
responses to provocation than children with ADHD who did not receive stimulant medications. The researchers reasoned that the first group’s more aggressive responses to provocation may be exacerbated by administration of Methylphenidate (2009).

Every culture has children with ADHD (Barkley, 1996). Even in the US, where children with ADHD are found across diverse ethnic groups, different types of behaviors among different cultural groups are observed, which indicates each culture has different rates, behaviors, and perceptions of ADHD (Ross, 1982). Ross found that classrooms in Thailand have comparatively fewer students with ADHD because children are expected and trained to behave and talk quietly in public in Thailand. Likewise, East Asian countries have lower rates of ADHD diagnosis, mainly due to their cultural background, Confucianism. East Asian societies highly value education, harmony with others, and loyalty to the country, parents, and elders. The cultural environment of East Asian countries contributes to having fewer students with ADHD and different concerns in the classroom setting when compared to US classrooms.

According to Lee (2008), students’ socioeconomic (SES) background also contributes to ADHD. Based on the findings of the study, students from low income single parent families, or families where both parents work, show a higher rate of ADHD than students from high income, two-parent families. Szanmari, Offord, and Boyle (1989) argue that the reason could be family problems related to low economic status. DuPaul and White (2006) argue that the major contributive factors of ADHD are genetic and organizational factors: The brains of those with ADHD may differ with respect to the balance of certain chemicals, referred to as neurotransmitters, as well as the size and operation of specific brain components, such as the prefrontal cortex. Also, the nature of classroom tasks and behavior management styles at home and school could affect the expression of ADHD.
In this review of research, I answer the following question: “Do cultural influences impact ADHD diagnosis and treatment?” I compare different cultural views and treatments of ADHD among Korean teachers and parents and US teachers and parents. I also compare perspectives regarding ADHD in the two countries, especially focusing on medication, by looking at the history of ADHD.

Theoretical Framework

Causes of ADHD

The exact cause of ADHD is not known. However, several factors are accepted as possible causes, including genetic factors: the brains of those with ADHD may differ with respect to the balance of certain chemicals, referred to as neurotransmitters, as well as the size and operation of specific brain components, such as the prefrontal cortex (Batchelder, 2003). McLoughlin, Ronald, Kuntsi, Asherson, and Plomin (2007) examined genetic and environmental influences on ADHD in a large-scale twin study. Substantial genetic influences were found for inattention and hyperactivity, as well as moderate to high genetic correlations between the two symptom domains. Even so, the genetic correlations between inattention and hyperactivity also show some etiological independence of the two symptom domains. Heredity is another factor. ADHD tends to run in families, which suggests that children may inherit a tendency to develop ADHD from their parents. Organizational factors, such as the nature of classroom tasks and behavior management styles at home and school, also are known to affect the expression of a child’s ADHD. Other possible factors are head injury, poor nutrition, infections, substance abuse, and exposure to toxins such as lead in early childhood. Psycholgiou, Daley, and Sonuga-Barke (2008) found that physical or sexual maltreatment and post-traumatic stress disorder (PTSD) symptoms overlapped with those of ADHD.
ADHD Diagnosis and Treatment

According to Singh (2008), reliable diagnosis rates for ADHD are difficult to find in most countries because medical or scientific diagnoses are not used for ADHD diagnosis. Instead, teachers or parents observe symptoms of ADHD from a child and refer the child to doctors. Then doctors check whether symptoms have persisted for at least six months and whether symptoms and impairment have been present in at least two settings, such as at school and at home. Most of the time, if the child meets the criteria, doctors recommend that the child be medicated. Breggin (1997) and Diller (1998) negatively described this process because under-resourced teachers may advise a parent of a misbehaving child to get immediate medication rather than utilize pedagogical techniques and resources. Generally, treatment with stimulant medication is known to improve the core symptoms of ADHD and has resulted in positive responses in more than 75% of the children (APA, 2000). However, as many as 20% of children showing ADHD symptoms derive no real benefit from medication. Rabiner (2009) stated that some children experience side effects such as decreased appetite, weight loss, sleep problems, headaches, jitteriness, social withdrawal, and stomachaches that prevent the child from receiving medication. Moreover, many children who benefit from medication still have difficulties with primary ADHD symptoms or associated problems that must be targeted via other means. Also, parents, teachers, and doctors disengaging from the social responsibility to raise well-behaved children have been pointed out as another negative aspect of ADHD medication. Timimi (2002) argues that millions of children and their families are being treated unfairly by placing the children on highly addictive drugs with no evidence of long term benefits. As stimulants are known to be potentially addictive drugs with cardiovascular, nervous, digestive, endocrine and psychiatric side effects (Breggin, 2001, 2002), authors of a U.S. federal government report on ADHD
concluded that no compelling evidence was available to support the claim that ADHD is a biochemical brain disorder (National Institutes of Health, 1998).

**ADHD in the USA**

ADHD is one of the most commonly diagnosed behavioral disabilities in the U.S. classroom setting. According to the record of the National Institutes of Health (NIH) Consensus, ADHD is estimated to affect 3 to 5 percent of school-age children in the US (1998). Researchers with the Centers for Disease Control and Prevention (CDC) analyzed data from the 2003 National Survey of Children’s Health that revealed approximately 4.4 million children aged 4–17 years were reported to have a history of ADHD diagnosis; of these, 2.5 million (56%) were reported to be taking medication for the disorder (CDC, 2005, p. 842).

**ADHD in Korea**

The term ADHD was introduced in Korea in 1987 with a study entitled “Effect on behavioral modification for children with attention deficit hyperactivity disorder through attention training” (Choi, 1987). After 10 years, about 7.6% to 9.5% of Korean children were reported to have ADHD (Cho & Shin, 1994; Kim & Chae, 1998). In Korea, information about ADHD was introduced through a public education campaign: “An ADHD awareness day” was held in 2004 and 2005 by the Korean Academy for Child and Adolescent Psychiatry. In a 2005 campaign, 103 psychiatrists and 8000 audience members participated in the education program nationwide. A media campaign was carried out simultaneously. After the campaign, public awareness about ADHD in Korea increased and many people sought psychiatric help for their children (Cho, 2006).

Approximately half of children with ADHD show overt symptoms by the time they are five years old, and most begin to display behavioral problems during the early school years when
they have to follow instructions from teachers and obey school rules. In Korea, children with ADHD are reported to have difficulty with self-control both at home and in school, to have a tendency to show aggressive behaviors, to suffer from low self-esteem, to have frequent fights with peers, to experience isolation in social situations, to display problems with underachievement, and to have learning disabilities (Silver, 1992). Students who are diagnosed as having ADHD also show developmental disorders (11.6%), conduct disorders (9.3%), oppositional defiant disorders (7%), anxiety (7%), enuresis (4.7%), and mental retardation (4.7%) (Hong, Kim, Shin, & An, 1996). Currently, the Korean Ministry of Health and Welfare does not recognize either developmental disorders or learning disorders as disabilities. ADHD is not recognized as a disability either (Lee, 2008). Therefore, finding an accurate prevalence rate of children with ADHD in Korea is difficult.

Social and Cultural Perspectives on ADHD

According to Batchelder (2003), social and cultural factors are keys to understanding trends in ADHD diagnosis and methylphenidate treatment. Batchelder (2003) pointed out that consumption rates of methylphenidate have increased dramatically across the world; in many countries, five-to seven-fold increases in consumption rates have occurred over the past decades. However, different diagnoses and treatments among different countries also have been observed. For example, Jacobson (2006) studied a group of 53 English 10 and 11-year-olds to investigate why the English diagnose ADHD much less frequently than Americans, and found that English children who were defined as normal in England exhibited the symptoms of ADHD as it is defined in America. According to the results of the study, less than one percent of English children are diagnosed as having ADHD while approximately five percent of American children are labeled as having ADHD.
According to Isanski (2009), people in western cultures value autonomy and independence while people in East Asia attach a very strong moral aspect to learning and education. In addition, East Asian children are more accepting of what Americans might call excessive parental involvement. Interpretation of behavior also varies among parents, health care providers, and school personnel. According to Bussing, Koro-Ljungberg, Gary, Mason, & Garvan (2005), parents interpret their observations of children’s behavior based on their own sociocultural and ethnic experience, in combination with what they have been taught about ADHD.

**School as a Culture**

Schools are institutions in which prominent cultural values and expectations are infused in the developmental and learning processes of young people. According to Singh (2004), school can be viewed as a culture in which children’s development intersects with prevailing expectations and values in relation to their behavior, performance, and achievement. One of the functions of schools is to generate cultural knowledge about children’s behavior. Also, educators in schools must have ways of interpreting and handling children who do not meet the normative expectations. Prout and James (1997) stated that although the immaturity of children is a biological fact, the ways in which this immaturity is understood and made meaningful is a fact of culture.

In most cultural contexts, educators are mandated to provide children with care not just for their minds, but also for their bodies and their spirits, through exercise, health education, meals, basic healthcare screening and moral education. Schools operate on two broad levels of relationships: a micro level and a macro level. At the micro-level, the relationship is between a teacher and a child. Concerns such as how the teacher understands the child, what kind of relationship they have, how long they have been working together, and how experienced the
The teacher is important. The relationship between the teacher and the school is also considered to be at the micro level. To what extent the school administrators and the teacher support each other’s educational vision and practices, and what degree of independence a teacher has in implementing educational strategies to deal with problem behaviors in the classroom, are important concerns. At the macro-level, the relationship is between the school and broader state and national policies that govern children’s intellectual and emotional development within the school setting. Is this a public or a private school? Is this a school with an integrative approach to children with special needs? Does the school have the resources to support children with special needs and behavior problems? How do the children at the school perform at the state or national level in educational achievement? All these are important macro level concerns.

**Confucianism**

Confucianism is a Chinese ethical and philosophical system developed from the teachings of the Chinese philosopher Confucius (551–479 BC), who emphasized human morality and right action. At the basis of the teachings of Confucianism is the importance of education for the moral development of the individual so that the state can be governed by moral virtue rather than by the use of coercive laws. East Asian cultures and countries strongly influenced by Confucianism include China, Japan, Korea, and Vietnam, as well as various territories settled predominantly by Chinese people, including Singapore and Taiwan. Just like other Confucian cultures, Koreans value “Harmony by morality” acknowledge, the best philosophy, according to Confucian doctrine. To maintain harmony, people should know the order according to hierarchies of age, social status, gender, and family. Lower hierarchs are expected to respect higher hierarchs by obeying, and higher hierarchs are expected to care for lower hierarchs. Since high social status can be achieved by education, education is one of the great values in Confucian
cultures. Any delinquent behavior is regarded as “non-moral” and the individual and the group to which the individual belongs should feel shame. The “shame” then becomes a stigma among members of the society (Feng & Hua, 2004).

Method

Selection of Empirical research

Basic information about ADHD and general concerns about ADHD in different cultures were gathered through reviewing articles and related books. Then I analyzed selected articles to review the different cultural perspectives on ADHD between Korea and the US. Searches of Education Abstracts Full text, ERIC, and PsycInfo using the descriptors “ADHD” yielded about 12,000 articles. Then I added three more keywords, “culture,” “Korea,” and “USA,” and limited the date published to between 1999 and 2009. Among the 38 articles found, I chose 21 studies that were peer reviewed, data-based, and empirical for this review.

All of the researchers of my chosen articles used qualitative research designs, especially interview, to evaluate cultural perceptions on ADHD and disabilities. Four researchers among the 21 studies reviewed directly compared Korean (or East Asian) and US parents’ and teachers’ perspectives on ADHD; 14 researchers studied cultural influence on ADHD, specifically looking at different cultures; and the remaining four researchers studied cultural perspectives on other disabilities.

Because the main method of all studies in this review was interview, each individual’s experiences and voice were well heard. However, due to the small numbers of participants in the studies, and the nature of qualitative study, I need to include more studies with larger populations to achieve objectivity and generalism.
Results

Teachers’ Perspectives on ADHD in the U.S. and Korea

Lee (2008) conducted in-depth interviews with 10 U.S. teachers who had 4 to 30 years experience in pre-kindergarten through third grade. Teachers were concerned mostly about ADHD behaviors that disrupted the regular flow of class, such as not paying attention, being constantly off task, excessive movement and talking, and being physically and verbally aggressive to other children. Teachers worried about losing instruction time by having to constantly stop such distractions and redirect students. Teachers’ reactions to the interruptive behavior were to refer the child to third party school personnel, such as a counselor, principal, or special education teacher.

In Hong’s study (2008), however, Korean teachers answered that inability of children to control themselves was the most challenging problem in the classroom. Korean teachers worried most about students with ADHD stubbornly refusing teacher direction and ignoring classroom rules. Korean teachers’ reaction to children with ADHD was shame about their concerns over their inability to fulfill their duties as a teacher. Another challenge teachers faced was maintaining the trust they earned from the other children in their classrooms. Teachers worried that other students would think that their teacher was no longer capable of stopping the problematic behaviors demonstrated by their peers with ADHD.

Parents’ Perspectives on ADHD in the US and Korea

Collett, Gimpel, Greenson, and Gunderson (2001) found significant relationships between parental discipline styles and children’s ADHD behaviors. Parents of children with ADHD had more parent-child interaction problems than parents of children without ADHD (Seipp and Johnston, 2005). According to Barkely (2006), parenting contributed to symptom exhibition and
development of comorbid disorders. According to Lee (2008) and Hong (2008), Korean and US parents’ perspectives on ADHD also were different. The U.S. parents were concerned more about their children’s behavior while Korean parents were concerned more about their children’s academic achievement.

An interesting difference related to parental concerns is that U.S. parents responded positively or neutrally to the use of medication because medication helps to reduce behavioral problems, while Korean parents responded negatively because medication does not help to increase children’s academic achievement. In Korea, in most cases, the mother is the primary and critical caregiver of children with ADHD (Kendall, Leo, Perrin, & Hatton, 2005). Also, the traditional culture of Confucianism has a strong influence on parenting practices, and obedience is seen as an essential value in achieving and maintaining family harmony and functioning, upholding the family’s right to raise their children as they see fit (Yang, 2008). Although over the last several decades, Korean traditional values of parenting and family life have been influenced by western culture, the vast majority of parenting beliefs and practices in Korea still conform to many of the traditional values grounded in Confucianism (Kim & Park, 1997; Park & Chesla, 2007). Korean traditional values of parenting are based on the concept of filial piety, or Hyo. In Hyo, parents have absolute authority over their children and teach their children the laws of family honor (Choi, 1997). Children have to obey their parents. Korean traditional culture is family-based, with more value placed on family than on personal or individual needs or desire, whereas in the US, individualists tend to stress independence, autonomy in choice and actions, self-reliance, uniqueness, and achievement.

**Alternative Treatments of ADHD**
In both the US and Korea, social skills training was regarded as a very important alternative treatment to teach children how to read others’ reactions and how to behave more acceptably (Sawyer, 2004). The limitations were long waiting lists for public services and the expensive of private services. In the U.S. setting, Singh (2008) suggested the need for more resources such as better classroom environments, more special educational services, and smaller class sizes to reduce the need for more ADHD diagnoses and stimulant drug use in the classroom. Armstrong (2000) advocates for Gardner’s theory of multiple intelligences, a concept that takes a more multi-cultural approach to human learning and cognition. Gardner says that our educators and culture focus most of their attention on linguistic and logical-mathematical intelligence. Unfortunately, children without skills in these areas end up being labeled learning disabled, ADHD, or simply underachievers. Gardner stated that instead of overly focusing on traditional views of intelligence as uni-dimensional, the various types of intelligence, including linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intra-personal, and naturalist intelligences should be considered.

Within national contexts, cultural attitudes and practices in relation to child behavior have made a big difference in mediating the ways in which a child is perceived at home and at school. In Korea, public understanding of ADHD is still quite poor and the stigma of child psychiatric diagnosis and stimulant treatment was high. Often parents are the ones who view their child’s behavior as being symptomatic of ADHD, having consulted websites and /or friends in their efforts to deal with their child’s behavior (Singh, 2000). Schools are still under-resourced to deal with children with ADHD-type behaviors and teachers tend not to know very much about the diagnosis and behavioral/educational methods of treatment. According to Hong (2008), Korean
teachers have difficulties in distinguishing ADHD from other disorders, including emotional
disturbances.

In general, Korean teachers try to give a child with ADHD an opportunity to develop
responsibility and suggest support for the child through individual tutorials for schoolwork as
much as possible. For example, a teacher could have a student stay after class, because if the
teacher pays too much attention to a child with ADHD during a class period, it might cause
inconvenience to other children, and this way, the teacher can check whether the student is
following along with his/her studies. The teacher cannot cure a child with attention deficit in an
hour or in a year. Therefore, as a fundamental responsibility, the teacher tries to help the child
accomplish the goal of a day’s study by keeping him after school (Hong, 2008). Korean teachers
believe when a problem occurs in class, teachers should be able to guide and cope with children
based on their knowledge of developmental characteristics and should provide the children with
appropriate methods for learning. They tend to blame themselves for being unable to control the
situation and provide appropriate guidance and care for the child with ADHD. While teachers in
the US would seek help from a third party, Shwerder (1998) argues that Korean teachers focus
more on emotional difficulties than behavioral problems, compared to U.S. teachers. According
to Shrewder (1998), being able to sensitively consider other people’s emotions, desires, and
needs, and to control one’s own to fit in is regarded as an important social skill in Confucian
cultures where the interdependent self is valued.

In the United States, on the contrary, public education provides expert alternatives such as
psychosocial therapies to focus on the behavioral, psychological, social, and school problems
associated with the illness; behavior modification (parent training, classroom behavior
modification), and applying a section 504 plan (providing preferential seating in the classroom,
reduction in length of assignments, extra time during testing, or testing in a quiet space to compensate for distractibility) to benefit students with ADHD (DuPaul & White, 2006).

Discussion

The different responses of Korean and US teachers to the most challenging behavior of students with ADHD in the classroom appear to be based on the cultural influences on the teachers. According to the studies and reviewed, in the US culture, each individual regards him/herself as an independent being, so teachers did not want other individuals (i.e., students with ADHD) to interrupt their class time. Also, in the process of treating students with ADHD, U.S. teachers brought in third parties, such as school personnel for diagnosis, planning interventions, and the student’s replacement into special education. Inviting third parties to the classroom can be interpreted as meaning that US teachers do not consider students’ interruptive behaviors during class to reflect negatively on the teacher him/herself. On the other hand, Korean teachers emphasized on their responsibility for disciplining students, so that when the Korean teachers were interrupted by students with ADHD, the teachers took it as an offense to their authority. In other words, under the Confucian influence, Korean teachers are afraid of losing face and authority over the students. Also, according to Hong (2008), another concern that Korean teachers had about children with ADHD which is distinct from U.S. teachers’ concerns, was that the students did not have any friends: the students were psychologically or physically isolated from other children in their daily group lives. The teachers were afraid that a child with ADHD might not be able to form friendships even after he/she grew up, and this would cause the student to have difficulty living a normal life as an adult. The concern for “normal life” in harmony with others also is an influence of Confucianism. U.S. teachers, on the other hand, focused more on students’ current and individual behaviors in the classroom.
Conclusion

While investigating whether teachers’ and parents’ perspectives on ADHD are influenced by culture, I found that cultural influence plays an important role: In Korea, according to Confucianism, parents and teachers tend to focus more on children’s academic achievement and take children’s distracting behaviors as a negative reflection on themselves and their authority. Korean teachers and parents try to take personal responsibility for children’s distracting behaviors, and have negative attitudes toward medication because the medication does not help to increase academic improvement. U.S. parents and teachers, influenced by western culture’s focus on independence, tend not to take personal responsibility for the children’s behaviors but to focus more on children’s current problems and treatment. U.S. parents and teachers did not mind a third party’s engagement in dealing with children with ADHD and their behaviors. U.S. parents were more positive about medical treatments because medication helps to reduce children’s distracting behaviors. As I learned in this literature review, different perspectives on ADHD exist due to different cultures, different histories, and different personnel who are in charge of the setting. However, I could find only a limited number of empirical studies that focused on cultural perspectives on diagnosing and treating ADHD. Further researcher could test parental and school environment variables in longitudinal studies and revisit the way we approach ADHD. Hartmann noted that in light of the findings (evolutionary ADHD), we must consider the way we access ADHD treatment in adults, moving from a broken/pathology/therapy model to a skill-set/opportunity/coaching model.
References


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Abstract: This United States Department of Education funded grant is in its second year of enhancement for State University of New York at Fredonia’s merged special education and general education inclusive teacher education program. The focus of the project has been to apply Dr. Daniel Reschly’s research on Innovation Configuration to faculty syllabi for a review of inclusive practices.
Interpreting Logical Gaps in Conversation with a Mother who has a son with Autism Spectrum Disorder

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INTERPRETING LOGICAL GAPS

Abstract

Narrative is one analytic method in qualitative research that allows character to reveal themselves through their speech. In the Sociologist’s view of narrative, people communicate meaning through a range of linguistic practices in which they make sense of personal experience in relation to their own culturally and historically specific discourses, and how they draw on, resist, and transform those discourses as they narrate their selves, experiences, and realities. In this study, I conducted online interviews with the mother of a son with Autism Spectrum Disorder. Our online conversations were coded using narrative analysis procedures of logical gap and flash. Analysis of the data generated four main themes regarding use of logical gaps and flash forward, including awakening from recalling the past, avoiding difficult topics, showing cultural influences, and exhibiting current issues.

Keywords: Qualitative research, Narrative analysis, Flash, Logical gap, Autism Spectrum Disorder, East Asian Culture
Interpreting Logical Gaps in Conversation with the Mother of a Son with Autism Spectrum Disorder

Narrative is one analytic method in qualitative research that allows characters to reveal themselves through their speech. Narrative analysis is analysis of a chronologically told story, with a focus on how elements are sequenced, why some elements are evaluated differently from others, how the past shapes perceptions of the present, how the present shapes perceptions of the past, and how both shape perceptions of the future. Some advocates see it as an "empowering" social science methodology insofar as it gives respondents the venue to articulate their own viewpoints and evaluative standards. According to Labov and Waletsky (1967), narrative analysis implies that ordinary people’s oral narratives of everyday experience are worthy of study in themselves. Labov and Waletsky (1967) also pointed that narrative recapitulates past experience by matching a verbal sequence of clauses to the sequence of events which actually occurred.

Narratives are gathered through interviewing, which is understood as a discursive act (Mishler, 1986) in which the interviewer and the respondent "are engaged in creating the meaning of the questions and answers that constitute the narrative as they negotiate understanding through language" (Alvarez & Uría, 2002, p 40). The interviewer and respondent jointly create the narrative framework. The major approaches in contemporary narrative inquiries include the psychologist’s view, the sociologist’s view, the anthropologist’s view, and the autoethnographic view. In this study, I will focus on the sociologist’s view.

In the sociologist’s view of narrative, researchers are interested in how people communicate meaning through a range of linguistic practices, how their stories are embedded in the interaction between researcher and narrator, how they make sense of personal experience in
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relation to culturally and historically specific discourses, and how they draw on, resist, and transform those discourses as they narrate their selves, experiences, and realities. The sequence of narrative is called the main line. A main line usually contains an event that represents a completed moment of action in a timely order. Most narratives should follow main line. However, there are some narrative factors that do not follow the mainline: Flash and Logical gap.

Flash is a literary narrative or vernacular oral narrative which consists of a flash back (to a time prior to that of the immediately preceding narrative clause), or flash forward (to a time that is after the time of narrative clauses that follow the flash). Flashed clauses will always be specially marked in some way: by a change in voice quality, pitch, a discourse particle (such as meanwhile or but), a change in tense or aspect marking on the verb. Logical Gaps during the narrative include an interesting case of an apparent “gap” in the logic or coherence due to psychological, social, cultural, or individual influences on the narration, about the topic of the narration that the narrator does not recognize in the moment.

For this research, I interviewed a mother who has a son with Autism Spectrum Disorder. I chose the narrative method to analyze my interview with her, focusing especially on flash forward and logical gaps in her narration. By using this method, I learned that how individuals narrate their own experience is as important to the meanings they communicate as is what they say. Also, I believe this method is one of the interlocutional methods that narrators use to support their points in the conversation, broaden their explanations, or show their psychological status (to avoid the topic, for example) while the conversation is going on. Therefore, analyzing logical gaps could help researchers, as interpreters of conversations, to deepen their understanding about the narrator and the conversation. According to Bruner (1986), Gubrium & Holstein (1997), Hinchman & Hichman (2001), Laslett (1999), and Polkinghorne (1995), flash and logical gap
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are retrospective, meaning that they are ways of understanding one’s own and others’ actions, of organizing events and objects into a meaningful whole, and of connecting and seeing the consequences of actions and events over time, including the narrator’s community, local setting, organizational and social memberships, and cultural and historical location.

My goals in this research are 1) to understand cultural influences on Asian parents’ perspectives on autism, and 2) to observe the role of the logical gap and flash in analyzing narrative data. Therefore my research questions are 1) Are there cultural influences on parents’ perspectives on autism? and 2) Under what situations do flash and logical gap appear, and how can interlocutor interpret them?

Theoretical Framework

Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) is the fastest growing pediatric developmental disorder, affecting as many as 1 in 150 children (Centers for Disease Control and Prevention, 2007), and of unknown etiology. According to Bodfish (2004), ASD is characterized by deficits in behavior, language, and social communication. Deficits manifest prior to the age of 36 months, and the diagnostic procedure generally involves a multidisciplinary team including psychologists, pediatricians, psychiatrists, and other health professionals. Symptoms are classified on a spectrum, with varying degrees of functioning among individuals with ASD. Some individuals with the autism have significant cognitive impairments, whereas others perform in the average or gifted range of intellectual functioning (Wing & Potter, 2002).

Researchers have studied parents or caregivers of children with ASD and point out that children’s challenging behaviors ha3 been documented as predicting variables of parental stress (Quine & Pahl, 1985; Singer & Irvin, 1991). Also, caregivers of children with ASD have higher
rates of depression and stress when compared to caregivers of both typically developing children and children with intellectual disabilities (Blacher & Mcintyre, 2006; Fishman & Wolf, 1993; Hastings, 2003; Ross & Cuskelly, 2006).

**ASD and East Asian Culture**

In response to major demographic changes, researchers and service providers have begun to direct their attention to the impact of culture on parental beliefs and practices surrounding childhood disability (Kalyanpur & Harry, 1999; Lynch & Hanson, 1998). Researchers of ethnicity and ASD have indicated that parents from different cultures have varying point of views regarding ASD symptomology (Morrier, Michael, Hess, & Heflin, 2008). According to Chan (1992), Fatimilehin & Nadirshaw (1994), Green (1982), and Ryan & Smith (1989), the ways Asian families respond to the challenges associated with raising children with ASD is different from their Western counterparts. These researchers point out that some groups of Asian parents experience higher levels of emotional stress and difficulty accessing social services.

In East Asia, Confucianism places a very strong moral emphasis filial duty and obedience, education, harmony in the group, and distinctions between right and wrong. If any individual violates or fails to follow the Confucian rules, not only the individual but the entire group with which the individual is involved feel shame or loses face. According to the East Asians, physical or mental impairment is also regarded as a “failure” or “wrong” physical/mental condition. Due to this cultural influence, East Asian parents suffer more from negative public responses, high levels of shame and embarrassment, much less acceptance of and less knowledge about individuals with ASD. Cho, Singer, & Brenner (2003) point out in their study that Korean mothers of children with ASD in Korea experience more difficulties than their immigrant counterparts in the U.S., where the Confucian culture norms are not dominant. Approximately
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one half of the mothers in Korea described having suicidal ideas and feelings when they first learned that their child had a disability, and the mothers felt powerful emotions of shame and humiliation when their children exhibited problem behavior in public. Chinese families also face many difficulties because of social and cultural beliefs about disability (McCabe, 2007). A Chinese mother reported many openly discriminatory beliefs and practices against individuals with disabilities and their families. Public schools in China often reject students with autism, limiting opportunities for intervention. Moreover, because of the lack of knowledge and social systems for disabilities, including ASD, parents are believed to be the ones who should provide care to their children all the time. In the East Asian culture, parents’ sacrifices and decisions that demonstrate love for their children is regarded as highly moral and right.

In the United States, where autonomy and independence are emphasized, parents of children with disabilities are full members of their child’s educational team as mandated by the individuals with disabilities education act. Intervention programs that involve parents have been found to increase parents’ sense of competence and confidence about their child’s learning and development (Bruder, 2000; Dawson & Osterling) as well as to provide support for the emotional and logistical stresses that result from having a child with ASD.

Method

Participant and setting

The participant is the mother of a child with ASD who came from Vietnam in 1999. She had her son in 2000 and found out that he has ASD 14 months later. She confessed that she devoted herself to taking care of her son without having any other private activities, hobbies, or time of her own. Our three interviews or conversations were conducted online because of long geographic distance between us; she is in Minnesota and I am in Arizona. The interview was
 semi-structured. I sent her general questions via email first for her to preview and she answered me briefly, then we had free discussions about each question during our online conversations. The general questions and her responses were;

How did you feel when your son was diagnosed as having autism?
→ Shocked, lost targets to live, did not know what autism is and how to help my son.

What did your husband say about it?
→ Mournful, could not say a word.

Did you let your family know about it?
→ Yes…right away, hoping to find any information or help.

What was the first thing that you did for your son?
→ Followed all tests from Doctors’ recommendations and tried to make an appointment with the Neurologist.

Is there anything special that you are doing for your son, now?
→ Special Ed, DAN now, Respect. Love and Hope

Do you think medication or hospital helped your son’s autism? (If yes, why? If no, why?)
→ Yes, in some of fields but not totally yes.

Do you trust medication or medical doctors?
→ Not completely. Some medication might good for this patient but not for the other patient. Medical Doctors…they have different experiences…different ideas….trust them or not depends on many other circumstances….example when you read the book What Your Doctor May Not Tell You About Children’s Vaccinations-Stephanie Cave, M.D., F.A.A.F.P. with Deborah Mitchell.

How would you describe your daily life?
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→ Accept, strive, and hope

How would you describe your son P’s daily life?

→ Free-minded, carefree, and regardless

How would you describe your husband’s daily life?

→ He tries his best to take care of his son so when he cannot take care of him anymore, he doesn’t have the feeling of regret.

Would it be different if you were in Vietnam, now? If yes, How would it be different?

→ Sorry I do not know that it would be different or not if I were in VN.

What do you wish right now in concerning with P?

→ I wish P can talk to easy communication with others and help himself for what he wants and needs and learn to be a useful person.

What do you wish right now concerning yourself?

→ I wish I can be more calm and patience.

Then in our online conversation, we had more and deeper narrative conversations about each questions.

Data analysis

The narrator’s stories in our online conversations were coded using narrative analysis procedures of the logical gap and flashes (Hill, 2005). In analyzing narrative story, analyzing grammar, especially tense, is important, because mixing the usage of tense (e.g., using present tense when complete tense should be used) is characteristic of flash. Analyzing the logical gap in a conversation is an interesting task because it is obvious that where a logical gaps occur, there are changing tenses (from past to present, or present to past). People tend to ignore logical gaps in their interpretation of conversation, treating it as unnecessary, distracting information.
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However, I believe the logical gap is one of the ways that narrators use as an interlocutional method to support their points in the conversation, broaden their explanation, or show their psychological status (e.g., to avoid certain topics) when the conversation is going on. Therefore, analyzing occurrences of logical gap could help researchers, as interpreters of the conversation, to have deeper understanding about the narrator and the conversation.

Result

I found four common categories in which the narrator used logical gaps and flash forwards: awakening from recalling the past, avoiding difficult topics, showing cultural influences, and exhibiting current issues. I have bolded sentences that exhibit logical gaps and to protect my interviewee’s privacy, I use the acronym A to indicate the participant, S to indicate myself, and P to indicate the participant’s son, who has ASD.

Awakening from past recalling

In <conversation 1>, the mainline of the narration recalls the narrator’s past, focusing on her experience with her grandfather when she was young. Then suddenly she asked me if I knew how old she was, changing the tense from past to present. Here, a logical gap by flash-forward occurred. While she was recalling the past, she might have thought of how long ago it was, and suddenly come back to the present, recognizing how old she is now. In other words, she woke up from recalling the past.

<Conversation 1>

A (11:23 AM): My grandpa hated that...
S (11:23 AM): you would be her worst friend if you borrow her books...hahahaha
A (11:25 AM): He taught how to hold the book...get my notebook to write ....but it is hard for me....One time he said "you are the King of lazy people."
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A (11:25 AM): that is why I miss him forever.

S (11:25 AM): hahahahahaha hahaha

S (11:27 AM): see? ? ? your nick name "turtle" started from when you were young....right?

A (11:27 AM): S, do you know how old I am?

A (11:28 AM): maybe I am older than you almost 20 years? ? ?

S (11:28 AM): really?

S (11:28 AM): how old are you?

A (11:29 AM): 41 in US but 42 in VN


S (11:29 AM): I remember your face at the airplane......you looked so young!!!!!!

A (11:30 AM): so small but old....in VN the year follows Moon Calendar.

Avoiding Difficult Topics

The narrator seemed to unintentionally avoid answering hard questions by using logical gaps; she had a hard time expressing her feelings by remembering the time when her son was diagnosed as having ASD. In <conversation 2>, the mainline focused on how she felt when she first learned that her son has ASD. She used logical gaps twice in a short conversation to avoid the topic. In <conversations 2 and 3>, she also used flash-forward, exhibiting logical gaps from the mainline of telling her feelings about her son’s ASD. Throughout our conversations, I learned how she and her family struggled and were frustrated when they first heard about her son’s ASD (Her East Asian culture would increase her negative feelings about the son’s diagnosis). I could understand why she did not want to recall those hard times. When I asked her how she felt when she first learned about her son’s ASD, she immediately asked me whether I could email her all the questionnaires in advance. She continuously had difficultly staying engaged with the
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mainline of the conversations. She joked (“you need more laugh for your baby”. [I was pregnant at the time]) and mentioned how P is good at typing, while she was telling me about her feelings of anger and frustration in the past in <conversation 3>.

Her joke, “you need more laugh for your baby”, in <conversation 2> also could be analyzed as showing a cultural influence. In East Asian cultures, traditionally, pregnant women are strongly recommend to see, listen to, and talk about only good or positive things in order to benefit the unborn child’s benefit. The narrator would be concerned about my pregnancy since she regarded her story as negative. She exhibited this cultural attitude once more at the end of the conversation, saying “I hope we will talk about funny things with you so your daughter must be a happy girl....healthy and intelligence.”

<Conversation 2>

S (10:15 AM): How did you feel at the first time when you heard from the doctor about P’s autism?

A (10:17 AM): yesterday I forgot to talk with you that...to save time and easier for me that you could give me all your questions and I answer ...after that we just talk more about what we need.

S (10:17 AM): that's very good idea!!!!!

A (10:22 AM): at that time the word autism is what I was totally do not know it? I did not know what it is...what is that disease....what happens if what got that? What will come with P....after that I came home....went to public libraries...got on computer....google....search.... ..the more I read the more I confused...hopeless......was weary...

S (10:22 AM): right....

S (10:22 AM): I could imagine how you would be desperate...
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A (10:24 AM): but the end or today...or you could send the last part of your interview's questions to my e-mail...

S (10:24 AM): yes, I will. Thank you for your great suggestion.

S (10:25 AM): did you start to go to hospitals right away? or did you try some traditional way?

A (10:25 AM): am I silly? just for fun...you need more laugh for your baby....than my story.

S (10:25 AM): hahahahaha

S (10:26 AM): you are right!!!!!!!!!

S (10:26 AM): but your story is also great, too = )

S (10:27 AM): I am happy to know you more~~~~

A (10:29 AM): I knew nothing about traditional way to do? ? ? Nothing to do at hospitals in USA too. Doctors just said that autism is new...nobody know the reason...the cuase...so it has no treatment...

<Conversation 3>

A (10:40 AM): each time I complained about P’s behavior...the doctor just said ...repeat....the people with autism act that way...

S (10:40 AM): oh......

S (10:40 AM): how did you feel when you hear the doctors are repeating same things all the time?

A (10:42 AM): at that time the time Paul has diagnosis...many other doctors , nurses, and teachers in US....also like me....when i first concerned or said autism I had to explain or show them the evaluation of P

S (10:43 AM): yes~
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A (10:48 AM): I was angry with myself...I could not believe what the doctor worked for....I tried to talk with one of P's teacher in building blocks....kind of early intervention.... i talked i showed her all things I worried for P ...and she went to see the doctor with me for the next appointment after that....but nothing changed...she consoled me...i have the same displeased like me...when we were hearing what the doctors explained....very simple....autism signs....like that...like this....no medicines...no treatment...

A (10:49 AM): P……..

S (10:50 AM): Oh......what a disappointment..

A (10:52 AM): P's teacher was consoled like me, and she had the same displeased thinking like me.....( clearly than above...sorry... when I type...I did not read it...)

S (10:53 AM): hiihi...Thank you....

S (10:53 AM): The teacher was P's teacher?

A (10:54 AM): Do you know ...P's typing is much more faster and accuater than me...even he doesn't look at his hands or keyboard.

S (10:54 AM): wow...really?

S (10:54 AM): only 10 year old boy?

A (10:55 AM): yes...he is good at computer and typing about 150-230/ characters each minute for 95% accurateness

SEOK (10:55 AM): wow.......amazing!!!

Cultural Influence

In< conversation 4>, the narrator talked about early interventions with her son, which kept her busy. Then she exhibited logical gap (using flash forward), saying that I am lucky because my mother could come and help me to take care of my baby. I could see the cultural
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bridge, of how the narrator connected her busy/hard time during those days and my mother’s coming to help me. In the East Asian culture, traditionally many grandparents serve as caregivers of their grandchildren when the babies are very young, and their help is taken for granted (Brinton, 2001). Recalling her own hard time, being busy in the past without extra help from parents, would have brought to mind the idea that I was lucky to have my mother come to the U.S. to help me out. Also, in the later part of conversation 4, the narrator mentioned her constrained relationship with her mother-in-law. I believe the narrator reveals a national culture of constrained “in-law” relationships, in which the birth of an imperfect child would only increase the tension between mother-in-law and the daughter-in-law she might hold responsible for the child’s disability.

<Conversation 4>

A (11:03 AM): after the assessment about 6 months, he went to early intervention

S (11:03 AM): so...that will be when P was 24months?

A (11:04 AM): he was around 24 months or older little bit...wait for School's assessment, speech, occupational..Physical therapists' assessments...

S (11:04 AM): did he have early intervention at his school? or some other institution?

A (11:05 AM): In US, we have early childhood….head start..or preschool for kids under 5 years old....and early intervention for kids not develop normal ...not typical....most of kids in early intervention are special needs.....

A (11:06 AM): I was very busy doing many things at that time…I did all things by myself…If I were in VN, my mother would help me to take care of me and P…… going to market or cook.
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A (11:07 AM): you don't need time to cook or go to market...your mother in law takes care about that.

S (11:07 AM): you are right!!

A (11:08 AM): you are lucky

S (11:08 AM): My mother will come first 3 months....then she goes back to Korea.....then my mother in law will come and stay other 3 months....then will go back to Korea

A (11:09 AM): wow how lucky you are!

S (11:09 AM): thank you!!!!

A (11:10 AM): I just like to be with my mom only....If mother- in- law...I better need my husband is enough...hi hi...ha ha...

S (11:11 AM): kahahahahaha!! ! I agree with you!!

A (11:11 AM): my mother in law is nice...we have no fight....but i do not know why I can not feel comfortable when i live with her....maybe because...with my mom she takes care of me everything....10 0% and my MIL I have to look for her all the times? ?? ? I am crazy!!!

Mother in laws say that they think us like their own daughter....but I think "daughter" and "daughter in law" are different.

A (11:13 AM): what my mom has said is always what it is ....and what my MIL has said I have to think again to see what it means...what she wants me to do? ??

In <conversation 5>, the narrator exhibited another logical gap by using flash forward; the main line was a past event, about how she and her husband met. Suddenly she mentioned that she felt like I was a “police officer,” maybe due to my direct and consecutive questions. In East Asian cultures, people do not ask questions directly. As Hall (2009) pointed out, interviewers should start with some small talk, then ask open-ended questions and go very slowly into the
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details while leading the interviewees indirectly in such a way that they feel they are still in charge. When the narrator in my study was asked many direct questions in a way that she had not experienced in her culture, she have felt offended.

<Conversation 5>

S (10:19 AM): How long did you two date and when did you get married?
A (10:22 AM): We knew each other 1986....then friends ....He left VN in 1991....
S (10:22 AM): ahh, so at that time, you were not married, yet.
A (10:23 AM): no....he had come back and to visit me and date ....and we married in 1997
S (10:24 AM): oh....wow~~~
A (10:24 AM): I feel like you're a police officer.
S (10:24 AM): so you get married in Vietnam. = ) then came to U.S. with your husband.
S (10:24 AM): puhahahahahaha
S (10:24 AM): really? ??
S (10:25 AM): I am sorry if you feel that way.....hahaha
A (10:25 AM): yes....after that almost 2 years ...waiting for papers to go to USA
S (10:26 AM): ahhh~~~ so your husband went back to U.S. and you were waiting for him in Vietnam.....?
S (10:26 AM): I mean paper.
A (10:26 AM): yes

Current Issues

The mainline in <conversation 6> was a description of the narrator’s daily life. Suddenly the narrator exhibited a logical gap by mentioning a library near her house. This logical gap
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could be bridged with the sentence, “I even do not have enough time to enjoy... borrow some books for myself.” Reading books would be one of her favorite hobbies, but due to her son’s ASD, cannot find her own private time for that activity. When the narrator was telling me about her tightly compacted schedule, the word “library” naturally came out to represent her “private time.” Then her narration branched to a book that I gave her when I first met her. That was about 5 years ago and the book was very thin. Even though she likes the book, and she likes to read books, she had only read that book one and half time during past five years. This could be interpreted to mean that she has very little private time.

<Conversation 6>

A (11:00 AM): I try to wake early...5 AM or earlier....but I cannot because

S (11:01 AM): wow...that's pretty early

A (11:01 AM): when I put P in bed at 9PM...follow the schedule...but taking care of the kid like my son...not easy to keep schedule on time...for almost everything.

A (11:02 AM): After P gets in bed....i need to do all work in day if I can....I do not want to wait until tomorrow.

A (11:04 AM): Clean up, write note for P’s Teachers, prepare P's backpack, plan ....what food, snack, drink....ready for P at school and home tomorrow

A (11:05 AM): check my paper work....take care of myself....then pray....until sleep...Do I miss any part?

S (11:06 AM): no no no......I am thinking "wow.....so busy!!!!!"

S (11:06 AM): What time do you go to bed, then?
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A (11:07 AM): In the morning I want to wake up early to do some stuff in bathroom ...then get ready P's clothing...food. ...+....If have time....I read Autism News....check email in Autism group...MY reading...

A (11:09 AM): usually 10- 11PM....some day 12PM....2..3...4 . AM....happen all the time....MY husband told me ...I am a turtle...hi hi...that is ok.

S (11:09 AM): hahahahaaha turtle!!!! why he calls you turtle?

A (11:12 AM): I stay up late to make homework...print paper works for P...make books...picture books...he is visual learner.....or prepare every thing ready...so when i get in the table work with him....he doesn't need to wait for me...

S (11:12 AM): oh,,,

S (11:12 AM): very diligent mother!!!

A (11:13 AM): I am turtle because I am too slow.....slow but steady....hi hi

S (11:13 AM): Aha!!!!!

S (11:14 AM): your nick name...Turtle... .haha...I like it!!!

A (11:15 AM): My town house is next to the library...I hope I can live and work in the library whole day....I even do not have enough time to enjoy...by borrow some books for myself...

S (11:16 AM): oh....you like books..?

A (11:17 AM): that why P is my only son.

A (11:17 AM): yes

S (11:19 AM): I love books, too... and I like the smell the old books have.....

A (11:19 AM): I still keep the book you gave me.

S (11:19 AM): oh....you do?
The mainline in <conversation 7> was the narrator’s suspicion that a vaccine was the cause of her son’s ASD. The narrator exhibited a logical gap by flashing forward from recalling the past: warning me to be careful with my baby’s vaccinations because she knew that I was pregnant and soon would have to vaccinate my child.

<Conversation 7>

S (11:04 AM): When did you first know that P had autism?

A (11:07 AM): when he is 18 months old, he has the diagnosis of autism...but I knew something wrong with him after he got shot at 12 months old and few hours after that he got high fever even he had tylenol...very 4 hours....and went to MR....

S (11:08 AM): oh....

A (11:08 AM): ER...sorry

S (11:08 AM): what kind of shot did he have? do you remember?

A (11:10 AM): MMR, DTP, Varricella drop...

S (11:10 AM): oh......

S (11:11 AM): After you went to the ER, did he get better?

A (11:12 AM): after some tests and medicines.....

A (11:14 AM): he got 2 times for influenza shots....each time after shot he got flu!! high fever again...hives...vomit...1 time had to see Dr...and i time took him 2 weeks...sick.

S (11:15 AM): ohhhhhhh.....

A (11:15 AM): be careful with vaccine and flu shot for your baby
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S (11:16 AM): oh,,,,,, yes.....I should be very careful.....thank you. ....Then what did the doctor said? Did he say that it is normal symptom for every child? or only P react sensitive?

A (11:17 AM): some DR. advices ....take it slow....and if no need shot....don't give to the baby

Discussion

My research questions were answered by analyzing the interview. I could categorize four ways that the narrator exhibits logical gaps, often using flash forward: awakening from past recalling, avoiding difficult topics, showing cultural influences, and exhibiting current issues.

The participant also showed that she was influenced by East Asian culture throughout her narration. Especially in <conversations 4 and 5>, the narrator showed the influence of East Asian culture in that she prefers indirect conversation and wished to have P’s grandparents’ help to take care of her son. In <conversations 2 and 3>, the narrator had a hard time discussing her feelings about her son’s disability, indicating that she went through not only a physically but also mentally hard time due to East Asian perceptions of disabilities as something “shameful” or “physically wrong.” It was interesting to observe that she did not exhibit difficulty in “explaining about ASD.” or “what she did for her son’s ASD” (conversations 6 and 7). However, when she was asked “how she felt” about her son’s ASD, she exhibited logical gaps to avoid the topic. In other words, the narrator had an easier time describing the “fact” than her “feelings”.

The online discussions that made up the interviews were convenient for three reasons: first, because the interviewee was in Minnesota and I was in Arizona; second, because they made possible an ongoing conversation in which the interviewee was able to exhibit logical gaps using flash forward. If I had relied only on email interviews without the ongoing conversation, the participant would have been able to think longer and write/ rewrite answers for the questionnaires logically, which would not have allowed her to exhibit logical gaps. Lastly, since
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neither the interviewer nor the interviewee are Native English speakers, it was easier to communicate in an online conversation (in written language) than orally. However, the online conversation had the limitations in that the interviewer could not see the interviewee’s non-verbal clues, such as body language and facial expressions. The interviewee also had more chances to filter her ideas while typing answers to my questions, which may have resulted in fewer logical gaps than if we had the same conversation face-to-face.

Since this study had only one participant, it is hard to generalize its findings. Further studies could enlarge on these findings by increasing the number of participants, including participants from different cultural groups, and then comparing the categories in which members of each cultural group exhibit logical gaps and how a particular culture influences the family’s perspectives on ASD. Given the importance of the cultural context in which family life is embedded, it is important to bring to light sources of support or stress in that environment, as well as the cognitive styles and beliefs of family members (Bronfenbrenner, 1979; Gallimore, Weisner, Kaufman, & Bernheimer, 1989).
INTERPRETING LOGICAL GAPS

References


Clandinin, D. J., & Connelly, F. M. (1989). *Narrative and story in practice and research*


Miniscalco, C., Hagberg, B., Kadesjo, B., Westerlund, M., & Gillberg, C. (2007). Narrative skills, cognitive profiles and neuropsychiatric disorders in 7-8-year-old children with late...
INTERPRETING LOGICAL GAPS


Perspectives on Principal Leadership Competencies: Two Case Studies In Southern Mexico

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Abstract

The purpose of this study was to examine the perceptions of school principals and teachers about the principal leadership competencies. The study was conducted in two schools located in rural communities from the Southeast Mexico. Data collection involved document analysis and surveys addressed to principals and teachers. Findings of the study indicate that principal perspectives are different from those of teachers. While principals emphasized motivation and leadership competencies, teachers were more concerned about the principal school management competencies. Some differences were found on teacher perceptions about principal effectiveness in relation to teacher level of preparation and years of experience.
PERSPECTIVES ON PRINCIPAL LEADERSHIP COMPETENCIES: TWO CASE STUDIES IN SOUTHERN MEXICO

INTRODUCTION

One of the main challenges for improving Mexican education is to provide education opportunities for all students, increasing the quality of educational process and the transition between educational levels, as well as improving the integration of the whole educational system (Mexican National Plan of Development (2001-2006)). These challenges are particularly important in the case of Mexican high school education.

High school education has a very important role in national development (PNE 2001-2006). According to the National Plan of Development (2001-2006), Mexico needs to improve the quality of this educational level by increasing innovation and providing more access opportunities for all students. Thus, administrators at this educational level need to innovate and provide quality education for all students, particularly those who live in remote rural areas. However, this is a challenge for most principals since most rural schools in Mexico confront serious educational problems, such as low academic achievement, lack of preparation of the administrative staff and limited resources (Blair, 2002). Given the important role of principals in school effectiveness and innovation, more research is needed on principal competencies. Particularly, more studies are needed on the competencies of principals of schools located in remote rural areas in Mexico (Fernández y González, 1997; Fernández, 1988; Cisneros-Cohenour, 2001; Cisneros-Cohenour & Merchant, 2005).

OBJECTIVE

This study focused on examining the leadership competencies of school principals from the perspectives of the principals and teachers from two schools located in rural communities in Southern Mexico.

PERSPECTIVE OR THEORETICAL FRAMEWORK

Deal & Peterson (1994) and Lashway (1996), state that effective principals need to be well organized passionate and creative leaders. Stolp (1994), also
state that school principals have to be both managers and leaders. As leaders, they have to promote a vision expressing the central values of the school. As managers they develop structures and policies that help to institutionalize the vision.

Kyrillidou & Blixt (1992) also examined the competencies of effective principals. They stated that all principals need to develop essential competencies required for effectively accomplishing their roles. Studies on principal leadership in Mexico found that most principals in elementary and junior high schools start their positions without having prior preparation in the required competencies for the position (Cuellar, 1989; Cisneros et al, 2003; Cisneros & Merchant, 2005).

Given the limited number of studies examining the competencies of school administrators in Mexico, Cisneros-Cohernour et al (2005) conducted a study examining the competencies of school principals for elementary and secondary schools, as well as for higher education administrators in Southern Mexico. This study was part of that research, conducted in rural schools in Yucatan, Mexico.

METHODS

This was a descriptive study conducted in two high schools of the Southeast of Mexico. Two questionnaires were used to collect information from the principal and teachers perspective about principal leadership competencies. Participants were two principals and 79 teachers: school A = 37 teachers; school B = 42 teachers.

The survey addressed to principals was a self-assessment questionnaire designed by Cisneros-Cohernour et al. This survey was developed after a review of the literature on principal competencies that was later validated with a Delphi of experts from the US and Mexico who worked for the last ten years on principal preparation in Mexico. Then, the survey was validated with a sample of principals from elementary, junior high and high schools in southern Mexico. The final version of the survey has 110 items measuring the following nine competencies: management, communication and human relations; academic development; education for a globalized society; legislation; leadership; motivation; ethical, social and professional responsibility.
The second survey addressed to teachers was an adaptation of the Principal Evaluation Form Questionnaire developed by Kyrillidou & Blixt (1992). This survey includes 30 items focused on measuring the following competencies of the principal: management, professional development and personal characteristics.

RESULTS

Findings of the study indicate that the principal of School A believed that she demonstrated in her work the competencies related with motivation and leadership. She believed the competencies she used less were ethical, social and professional responsibility and education for a globalized society. She added that she would like to receive preparation in these two sets of competencies. Although this principal indicated that she considered all competencies to be important, she believed motivating school personnel and leading the school were essential for an effective school leadership.

On the other hand, the principal of school B stated that he used more in his job the competencies related to academic development and ethical, social and professional responsibility. He stated interest on receiving professional development about the competency related to education for a globalized society. Although this principal also stated that all competencies were important, but he believed that the essential competencies for an effective principalship were: motivation, ethical, professional and social responsibility.

Results from the teacher survey show that school personnel have a different perspective of the principals' competencies. Teachers gave a high assessment to the principals in the following aspects of the competency of professional development:

- Allowing an harmonious relationship among teachers
• Promoting a high morale of the staff
• Being respected by students
• Promoting harmony among school stakeholders
• Making the staff feel trusted by the administration
• Attends
• Attending the school every day

Both principals obtained high assessment from the teachers in relation to certain personal characteristics:

• Dressing in an appropriate way
• Demonstrating maturity and emotional stability

However, principals obtained lower scores from teachers in the following aspects of the management competency:

• Providing clear and consistent instructions to the staff
• Reducing non-academic work that affect academic responsibilities
• Having resources for schools to support school work available for teachers
• Organizing academic meetings only when they were necessary
• Establishing a working schedule according to the school and staff needs.

Of the two principals, the principal of school A was better evaluated by the staff in relation to her personal characteristics. However, teachers who had low experience in the job (1-10 years of experience) or high experience (21-30 years of experience) rated more positively this principal than did those with medium experience in the job (11-20 years of experience). It was also found that teachers who were less prepared (bachelor degree) provided a higher
assessment of the two principals in the competency related to management
than did those with a higher degree (graduate degree).

CONCLUSIONS

Findings of the study were consistent with the work of Cuéllar (1989),
Cisneros-Coehernour & Merchant (1999) and Cisneros-Coehernour (2001)
regarding the lack of experience and preparation of the principals prior to their
appointment. It was also found that principals do not use all the expected
competencies for their job, nor are prepared in all of them. Although both
considered all the competencies as important, they were not interested in
receiving professional development in all of them.

Teachers evaluated higher the principal of school A than did the teachers of
school B. These findings were consistent with School Department Officials who
indicated that the performance of students in school A was higher than those of
school B. The principal of School A also had a strong positive reputation within
the community surrounding her school.

In spite of these findings, it is desirable for both principals to receive
professional development in all the competencies, primarily in those related to
school management, ethical, social and professional responsibility and
education for a globalized world. Future studies could examine deeper
differences in teacher and administrator perceptions and the challenges faced
by principals in their real work. This research should use multiple methods of
data collection and examine deeply the complexities of the school context and
the reasons for possible explanations of principal behavior.

EDUCATIONAL SIGNIFICANCE

The study is important because it adds to the literature on school leadership
in Mexico, primarily on effective competencies for principals of rural schools in
Latin America. This research is necessary given that most of the studies have
been conducted in other countries and cultures. The inclusion of teachers and
principals perceptions was important because it allowed examining similarities
and differences between these two stakeholders at the school level. The
research also permitted to validate findings of prior studies on school leadership
competencies from abroad (Harris, Day and Hadfield, 2003; Checkley , 2000)
as well as other studies on principal leadership conducted in Yucatan in other educational levels (Cisneros-Cohermour et al, 2003; Que, 2005). Results of the study can be used for designing and implementing professional development for school principals.

BIBLIOGRAPHY


Title of Submission: Secondary Co-Teaching: A New York State Perspective on Special Education Teachers and General Education Teachers Instructing Together

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Abstract: The New York State Education Department is encouraging a special education service referred to as “integrated co-teaching.” Researchers analyzed observational and interview data from high schools throughout the state to determine how special and general educators implemented the service. With appropriate supports, co-teachers were effective in using the model.
Title of Submission: Weaving Information Literacy Skills into Undergraduate and Graduate Curricula

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Abstract: This study demonstrated how collaboration between a university instruction librarian and academic faculty increased student learning in the area of information literacy. By integrating library instruction into Education course assignments, undergraduate and graduate students became more confident in using online databases for research and applying these skills to future research.
6. **Abstract**

This study aims to describe how learner-initiated questions contribute to their understandings in the Japanese-language lesson. Japanese-language classes were monitored in terms of learners’ spontaneous dialogues. Observation records were analyzed with encoded written protocols that included paralanguage and non-verbal communication. As a result, three effective student-initiated questioning cases; Paralanguage and Assimilation, Re-questions and Conjectures, and Endeavors and Illustration, were extracted. Besides, we confirmed prospecting problems to develop learners’ autonomy. Finally, we proposed perspectives to train effective self-directed skills of students, and considerations of a teacher in charge to encourage students to ask questions.
Study on Effective Questions in the Japanese-Language Classroom

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Abstract
This study aims to describe how student-initiated questions contribute to their understandings in the Japanese-language lesson. Japanese-language classes were monitored in terms of students’ spontaneous dialogues. Observation records were analyzed with encoded written protocols that included paralanguage and non-verbal communication. As a result, three effective student-initiated questioning cases; Paralanguage and Assimilation, Re-questions and Conjectures, and Endeavors and Illustration, were extracted. Besides, we confirmed prospecting problems to develop learners’ autonomy. Finally, we proposed perspectives to train effective self-directed skills of students, and considerations of a teacher in charge to encourage students to ask questions.

1. Introduction

Recently, number of learners of Japanese-language is about 3.7 million (Japan Foundation, 2010), and areas and public interests concerning Japanese-language are also expanded. And then, it should be paid more attention especially to communication among related people. For example, Japanese-language is used considerably in the Internet, and number of users is ranked as fourth in all world languages (Miniwatts Marketing Group, 2010). Also, Japanese-learners use Internet as a learning tool in daily life. Knowledge written in Japanese-language in Wikipedia reaches 700 thousands in article number, and ranked as sixth within 250 regional languages in the world (Wikipedia, 2010).

But, communication style of Japanese-learner become more passive, even their chances to express opinions and language skills are increased. So language environment changes, the purpose of Japanese-language classroom is changing simultaneously. The communication between students and teachers has to be reconsidered, especially an interaction from students to a teacher. There were a lot of preceding studies which investigated communication in a language classroom, this study focused on how was the discourse process and how could we describe about the student’s questioning in learning environments.

2. The Communication in the Classroom

2.1 Students’ Utterances

Students’ utterances observed in a lesson were classified into categories by Nohara (1999). Passive Utterance (PU) is compelled by a teacher, and Spontaneous Utterance (SU) is specified as asking something or response spontaneously to solve a learning issue. In addition, this SU is divided into "Aggressive Spontaneous (AS)" and "Selective Spontaneous (SS)." For instance, a question or a request addressed directly to overcome the problem that a student is confronted is called as AS, and an utterance as giving assistance to others and contribution to team work without any relation with a learning problem is called as SS (see Figure 1).

Thus, a student's utterance in a lesson is recognized as a category, and SU is evaluated positively as a factor to promote an interaction (Nohara, 1999). In addition, the question with AS leads the IRE
(initiation-reply-evaluation) structure (Mehan, 1985), and the problem is related to a student’s cognition, then categories were recognized as an important learning strategy (Ikuta & Maruno, 2005).

![Figure 1: Student’s Spontaneous Utterance in the Japanese-language Lesson](image)

2.2 Questioning and Understanding
Most researchers and educators recognize that the question as an important instrument in classroom practice, and they believe that questioning plays important role in learning (Morgan & Schreiber, 1969). Obviously, a student initiated question is the provision of chances to summarize their fragmented knowledge through communication, although these could be obtained privately. However, the empirical study reported that questions asked by the teacher far exceed the number asked by students. The ratio of teacher questions to student questions was as high as 95 to 5 in some classrooms (Floyd, 1960).

If we observed lesson record that involved the questioning pattern T-S-T-S-T-T, where T is used to signify a question asked by a teacher and S is used to signify a question posed by a student, we could suspect that a student was raising a question for the purpose of clarifying what the teacher said. It would also seem that there is little interaction among students and this pattern indicates the discourse is quite teacher directed. On the other side, S-T-S-S-S-S-S-T pattern would appear that students had become actively involved in asking questions.

Also, it could invoke further detailed patterned lesson analysis, but the study in this article, we focused substantial properties around questions in Japanese-language lessons by a native-teacher, and investigated potential factors of questioning by a learner for resolving vague understanding.

This learner initiated questioning is strongly related with self-directed learning skills as follows (Thomson, 1998).
1) Skills to create climate where learning can be maximized.
2) Skills to identify own learning needs.
3) Skills to draw realistic learning objectives from the learning needs.
4) Skills to plan learning activities that effectively uses learning resources.
5) Skills to locate relevant learning resources to achieve the objectives.
6) Skills to carry out the learning plan.
7) Skills to self-monitor the learning process and outcome using appropriate assessment measures and criteria.

These skills entail emotional factors more than rubric. And, intrapersonal communication, non-verbal communication and paralanguage are subordinated with questioning. In addition, questioning entails relational autonomy that is an awareness of both self-direction and collaboration between teacher and students, and between student and student (Ebata, 2010).

However, the research of questioning is just beginning to evolve to confirm the attributes of successful and unsuccessful students and more studies are needed. Since native teacher govern the process of a lesson, what exactly is the role of the foreign student?

2.3 Additional Factors to Influence on Dialogue
When students attend dialogue in a language classroom, they may face some problems. According to Usuki (2000), learner autonomy is based on the learner’s awareness of their responsibility for their own learning. So especially in the case of Japanese-language students in foreign country, they have to control their awareness by themselves because it’s difficult to improve their communicative competences without their initiated actions during a lesson. Wenden (1991) said, ‘autonomous learner are self confident learners who believe in their ability to learn and to self direct or manage their learning.’ Then, the action of questioning is the way to recognize what they can not understand, and it is needed that self-directed action should be arisen in the classroom lesson. However, despite of
recognized importance of student initiated question, the questioning has some accompanying problems below (Table.1).

<table>
<thead>
<tr>
<th>Problems of a Teacher’s Side</th>
<th>Problems of a Learner’s Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>・ When a learner's language ability is not enough, the learner might not understand the teacher's reply. Therefore, the suitability of teacher’s utterance greatly controls the success of the understanding.</td>
<td>・ Personal problem is revealed, and it arises fear of limited knowledge to be appeared by the question in front of peers.</td>
</tr>
<tr>
<td>・ The communicational initiative of the lesson is governed by the learner, and a teacher becomes difficult to manage the lesson.</td>
<td>・ There is uneasiness to comprehend language, and it frequently occurs not to understand what a teacher says.</td>
</tr>
<tr>
<td>・ There is uneasiness to comprehend language, and it frequently occurs not to understand what a teacher says.</td>
<td>・ A self-directed question seems to be an interrupt of lesson process, and then hesitation arises to mind other students.</td>
</tr>
</tbody>
</table>

Thus, the student initiated question doesn't appear easily in the lesson. Because it looks to interrupt the lesson flow, hesitation introduces the insufficient understanding as well.

Saitoh (1989) mentioned that questions in the lesson are appeared as cues of dialogue and style of exercises in the textbooks, and arranged by the formative pattern. And, she clarified the difference of question between the learning situation and the conversational situation. She also indicated that it was difficult to master the everyday language from the ordinal lecture. That is because, in the most of textbooks students’ utterances are often set in a passive situation. So it is important to encourage student’s self-directed actions and to increase spontaneous utterances of students.

3. Investigation

3.1 Target lessons

![Figure 2: Japanese-language Class in France](image)

In this study, we investigated the following lessons to know factors of teacher-student’s communication, and inquired about effects of students’ spontaneous utterance.

<Lessons Investigated>
- Lessons : Teacher training lessons in Japan and regular lessons at the overseas university (see figure 2)
- Learners : 8-30 students, beginner level
- Teacher : Japanese native speaker
- Date : May, 2006 and March, 2010

3.2 Method of Investigation

Observed lessons are a short-term class of teacher training program in Japan and a regular subject of Japanese-language major in France. Using video records, written protocols were described for further study, and documents were included statements of non-verbal communication or paralanguage appropriately. Next, we marked dialogues which students solved their own problem spontaneously during the lesson. Then, we focused on
functions of strokes seen after student’s AS, and described effects of the communication.
For data encoding, we used triangulation method and took possible considerations to reliability for documentation.

4. Results

Most questioning action had been observed when the student made the utterance actively and spontaneously under
without any obligation. "Paralanguages and Assimilation", "Re-questions and Conjectures," and "Endeavor and
Illustration" were shown as questioning where students could try to overcome boundary of the barrier (see figure
3).

Figure 3: The Process of Student’s Understanding Using Questions

4.1 Termination of Understanding (Type I shown in figure 3)
In the classroom, students sometimes did not reach understanding (Type I-1). In this case, student asked the
meaning of the word ‘inu’, but the teacher didn’t explain and forwarded to the next step. If the student wanted to
understanding, he should ask to the teacher again; ‘Benkyou shimasita ga, wasuremashita. Mouichido
oshietekudasai. (I learned but I forgot. Please teach me one more time.)’

<Type I-1>

01S: Sensei, inu wa nandesukara? (Teacher, what is the meaning of ‘inu’?)
02T: Sensyuu kurasu de benkyou shimashitayo. (We learned the word last week.)
   Jya, tsugi ikimasu yo. (Now, let’s move on to the next.)
   - No utterance was coming out -

Students frequently hesitated because they did not know the way how to ask the question, especially novice
students. This hesitation is also explained by intrapersonal communication. It refers to communication within a
student, and includes all of the thoughts, fears and anxieties that a student may have about his/her utterance (Bylis,
Holmes, & Starkey, 2007).

<Type I-2>

01T: Hai, jyaa, Ratena san? (Ok, well, Mr.Ratena ?)
02SI: Yon ? Batsu ? (Number four ? False ?)
03T: Yon desu. Batsu desu. Doushite ? (The answer is four. The answer is false. Why?)
04SI: A...U ... B san wa ... (Ah...U...Mr.B is...)
05T: Un. (Yes.)
06S1: Iki...nai. (Does not go.)

07T: Un, Ikimasuyo... Demo, Gohan wo Tabemasu.Ikimasu. (Yes, he goes, but he has dinner, and he goes.)

(Charlene raised her hand)

Hai, Charlene san. (Yes, Ms. Charlene.)

08S2: A san to B san, Issyo ni Hanabi ni ikimasu. (Mr. A and Mr. B, go to see fireworks together.)

09T: Soudesune, Soudesune. A san ga ryouri wo tsukurimasu. ryouri wo tsukurimasune. Issyo ni tabemasyou to iimashita. Dakara B san wa, Gohan wo tabemasu, Hanabi ni ikimasu. Ne. Dakara Ikimasenne. Gohan wo tabetekara wa ikimasenne. Dakara Batsu desune. Hai, jya, gohan, Cindy san. (That’s right, that’s right. Mr. A cooks dinner. He cooks dinner, right? He said let’s eat together. So Mr. B, he eats dinner, goes to see fireworks. No, no. He goes to see fireworks and then eats dinner. Ok? So, ‘doesn’t go’. He doesn’t go after eating dinner. Then, the answer is ‘false’. Ok, then, Number five, Ms. Cindy?)

This dialogue was an example that student did not to solve his problem. In exercise correction of listening class, Ratena (S1) told collect answer to the teacher (02S1). Nevertheless the teacher asked why he selected this answer, he could not respond. And then, another student Charlene (S2) raised her hand, answered the teacher’s question (08S2). After her answer, the teacher begun to explain the exercise. Finally, Ratena (S1) lost his chance to explain, but he didn’t insist.

4.2 Reach Understanding (Type II shown in figure 3)
In this part, we expound ways how students reach understandings.

<Type II-1 (Paralanguage and Assimilation)>

01T: Watashi wa kinou, ‘Nattou’ wo tabemashita. (I ate Nattou yesterday.)

02S1: ‘Nattou’ wa nandesuka? (What is ‘Nattou’?)

03T: Eh..., ‘Nattou’ wakarimasuka? (Eh...Do you know ‘Nattou’?)

04S: (No one answered, everyone looked at S1.)

05T: ‘Nattou’ wa nihon no ryouri desu. Tabemono desu. (*Nattou is a Japanese dish. It’s food.)

(With the gesture eating ‘Nattou’)

06S1: A.... (Oh.)

07T: Koudesu, Wakarimasuka? (Like this, can you understand? ) (Continued to same gesture.)

08S1: (laughing)

09T: Hai, Kore wa ‘Hashi’ desune. ‘Hashi’. (Ok, this is ‘Hashi’. ‘Hashi’. )

(Draw a picture to eat ‘Nattou’ with gooey threads using ‘Hashi’.)

10S2: Beans, small beans in the pack.

11S1: A.... (Ohhh.)

12T: Hai, ‘Nattou’ wakarimasuka? (Ok, Now do you understand ‘Nattou’ ?)

13S1: A.... (With nodding, everyone laughing)

The meaning of "Natto" that the teacher showed was not able to be understood here, so the student asked it. The teacher confirmed prior knowledge to the class (03T) whether there is another person who did not know Natto or not. The gesture, the teacher pulled the gooey threads of Natto, was shown, and she draw it on a blackboard and explained continuously. However, another student (S2) who saw the picture and recognized first, and then begun an explanation to S1 in English (10S2). After this advice, S1 said "A…", and showed understanding with the nod.
Students’ reply with silence leaded teacher’s additional explanation with drawing, and also a cue from another student enhanced to reach understanding. During dialogue, frequent expressions of non-verbal actions and paralanguage were used to express level of understanding by students, and this communication way was essential to process smooth lesson strokes.

<Type II-2 (Re-questions and Conjectures)>

01S: Sensei, ‘Hana’ to ‘Hana’. (Teacher, ‘Hana(nose)’ and ‘Hana(flower)’)
(With pointing her nose)
‘Flower’ Onaji? Hatsuon wa onaji? (Flower. Same? Same pronunciation?)
02T: ‘Hana’ to ‘Hana’ (Nose and flower.)
(With drawing flower on the board)
03S: U....n, Wakaranaidesu. (Un…, I can not understand.)
04T: (With emphasize the accent and pronunciation)
‘Hana’ to ‘Hana’. (Nose and flower.)
05S: U...n, It’s not same, but I don’t know.
(Shake her head.)
06S: Wakarimasuka? ‘Hana’ to ‘Hana’. (Do you understand? Nose and flower.)
07S: (Consent with reluctance)
Daijyoubu desu. (It’s ok.)

When noun "Nose" was introduced, the student who knew "Flower" questioned about the difference of the accent. First, a teacher wrote on a blackboard, and confirmed the difference meaning between the nose and the flower (02T). Next, a teacher pronounced it to emphasize the difference of accent. However, the student said in English that she was not able to understand, finally she said, "It is OK."(07S).

Summarizing these, a student made repeated re-questions to clarify the correct pronunciation, and finally she did cognitive efforts by conjecturing and reached acceptance.

<Type II-3 (Endeavors and Illustrations)>

01T: Hai, Jya tsugi, Shuka san. (Ok, now next, Ms. Shuka.)
02S1: A..., Rampu ga tsukuto, Kaitai maisuu no botan, A...oshimasu. (Oh…, when the light is on, and then the number how many tickets you want to buy, eh… push.)
03T: N? (Excuse me?)
04S1: E, suimasen. (Oh, just a moment please.)
05T: Osuno wa dare? (Who does push the button?)
06S1: E...a, Dokoni arun darou, A... Osu? (Eh…oh, where is…oh, push?)
08S1: Iya, A.... watashi ‘to’, watashi ‘to’…. wo tsukatta, watashi wa ‘to’.... wo tsukattann desuyone. (No, eh… I ‘and then’, I use ‘and then’, I select to use ‘and then’ in this case.)
09T: Un. (Yes.)
10S1: Ittandesukara, e... (I say that, and…)
11T: Tsukaukotoga dekimasen. (You can not use that.)
12S1: E. (pardon?)
13T: Kokowane, ‘osu’karane. (This is not good, because it’s ‘push’.)
14S1: Chigau, chigau, watashi wa sou itta, a...a... ranpu ga tsukuto, (No, no, I said so … When the light is on, and then …)
15T: Ramp ga tsukuto… (When the light is on, and then …)
16S1: Kaitai maisuu no botan wo oshitekudasai. (Please push the button how many tickets you want
Student’s AS is sometimes interrupted in a larger-scale lesson. During activity to collection of exercises, the teacher assigned Shuka to tell her answer (01T). She presented her intended answer to a teacher, and tried both to know T/F of her proposed example and to know the way of composition (08S1). Finally, although, Shuka continued to ask the reason, teacher expanded the conclusion into the classroom (21T). This reasoning activities required strong endeavors to maintain communication with a teacher.

5. Conclusions

Through our observational study, we confirmed three types of learning activities that overcome the existing barrier. That is,

i) Paralanguage and Assimilation

ii) Re-questions and Conjectures

iii) Endeavors and Illustration

These observed cases required students’ self-directed actions to process their learning to reach the goal, and it was required some cognitive thinking skills to understand as well. These actions are closely related with the findings seen in preceding study of section 2.2.

‘Paralanguage” is derived from fundamental skill 2). On the other hand, ‘re-question” is based on the skill 1) and nature of ‘endeavors” is appeared in 5) and 7) (see section 2.2 above). The self-directed learning skills are able to develop through careful guidance and introduction of awareness to students. Dillon (1988) suggests that teachers need to modify their behaviors if they really want their students to ask questions, and they can do this by asking fewer questions.

Accompanied “thinking” activity was frequently assisted by classmates or group discussion during reasoning exercises. Thus, ‘communicational autonomy’ of each student is crucial to improve environment of Japanese-language lessons. Then, it needs to develop teaching techniques for getting students to listen to and interact with each other. It needs to change communication patterns by using remarks such as “What do you think about …?” addressed either to the group as a whole or a specific student, or “What can you add to that?” or “How do you feel about that?” or “What might be a different interpretation for that?” (Blosser, 1997).

There were many beneficial aspects in students’ self-directed questioning that could contribute understandings, but there have been few cases reported. Because, university education is structured to discourage learner autonomy, or students’ past social experiences do not reinforce their autonomy, then students are not good at being autonomous in language lesson (Thomson, 1998). But solving the problem under cooperating situation in which another student’s positive advice invented made good atmosphere to the class. It can introduce deepen understanding in the entire class and invents good atmosphere to ask questions by leaner.

As a known operational problem, Ohira (2000) proposed the relation between teachers’ question and students’ utterances, "Person stops problem solving, because a limitation of processing effort interrupt” during exchange
between Japanese native speaker and non-native speaker. Therefore, it is important to know the limitation of processing effort of a learner more than improving the teacher's reply to the student's question. As conclusion, the student's questions were extracted from the dialogue in this study, and functional sequence of questions was investigated. In spite of limited data, summarized three effective student-initiated questioning cases illustrated requiring future challenges for skill development of students. We also feel importance to explore our investigation into comparative study between classroom conversation and daily conversation to develop more authentic lesson tasks in the next stage.

6. Acknowledgements

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7. References

Training Elementary Teachers to Teach Active Physical Education:  
A Case Study Using the SPARK Curriculum

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Objective:  
Given the continuous increase of childhood obesity and the concern for rapidly growing health care costs, promotions of health behaviors among this population is especially crucial. Among Hawaii’s Department of Education (DOE), a large portion of the elementary Physical Education (PE) classes are not taught by PE specialists.

One promotional strategy used in recent behavioral interventions is to train teachers using the Sports, Play, and Active Recreation for Kids (SPARK) PE curriculum. SPARK aims to train teachers in proven methods and promote life-long physical activity among all children involved which will subsequently ensure quality PE, create social capital within the schools, and provide children with the recommended levels of activity. This project documents a case study of the teachers from an elementary school implementing SPARK.

Methods:  
All teachers from one Kaua‘i DOE elementary (K-6) school participated (K=14.3%, 1st=21.4%, 2nd=14.3%, 3rd=14.3%, 4th=14.3%, 5th=14.3%, 6th=7.1%). Program expectations include the teachers’ implementation of SPARK for >30 minutes at minimum once per week (recommended 3 times per week) and participation in the evaluation. Trainings were organized and facilitated by a certified SPARK trainer to ensure effective implementation of organized physical activities. Prior to the intervention, participating teachers self-reported their knowledge of national and state physical education standards, teachers’ knowledge of SPARK standards, teachers’ level of confidence in teaching physical education, which they reported again after the training and again during at a nine-month follow-up assessment. A one-month treatment fidelity follow-up assessment had the teachers self-report the level of student engagement in activities, how well the material helped students achieve standards, teachers’ intention of sharing information received, and teachers’ intention of using the material in the future.

Results:  
There were a total of 15 (100%) pre-training, 15 (100%) post-training, and 14 (93%), one and 13 (87%) nine month follow-up surveys received from the participating teachers.

Knowledge of Standards
Before the training, the majority of respondents (n=13, 86.7%) reported knowing the national and state PE standards *Slightly Well*, most (n=11, 73.3%) also reported knowing *None* of the SPARK PE curriculum before the training.

After the training, the majority of respondents reported they knew the national and state PE standards *Well* (n=12, 80.0%), and just over half of the respondents knew the SPARK PE curriculum *Well* (n=8, 53.3%).

The Nine Month Follow-Up Survey indicated that almost half of the respondents know the national/state PE standards *Well* or *Slightly Well* (n=6, 46.2%). The majority (n=9, 69.2%) of the respondents reported knowing the SPARK PE curriculum *Well*, nine months after the training.

### How well do you know your national/state PE standards?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Pre-Training</th>
<th>Post-Training</th>
<th>9 Month Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Slightly Well</td>
<td>4</td>
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<td>2</td>
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<tr>
<td>Well</td>
<td>7</td>
<td>4</td>
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<tr>
<td>Extremely Well</td>
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### Overall, how well do you know the SPARK PE curriculum?

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<th>Responses</th>
<th>Pre-Training</th>
<th>Post-Training</th>
<th>9 Month Follow-Up</th>
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<tr>
<td>None</td>
<td>13</td>
<td>2</td>
<td>10</td>
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<tr>
<td>Slightly Well</td>
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<tr>
<td>Well</td>
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<tr>
<td>Extremely Well</td>
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**Pre-Training Knowledge Comments**

How well do you know your national/state PE standards?

- We’ve had a P.E teacher for at least five years- so while I join the class- I have not recently received standards after.
Overall, how well do you know the SPARK PE curriculum?
- Brief overview end of last school year here at Kilauea.
- Never heard of it before this week.
- Our PE teacher (when we had one) used it last year.

Post-Training Knowledge Comments
How well do you know your national/state PE standards?
- Pat (Mr. Owens-the trainer) made them easy for us to remember.
- Great instruction.

Overall, how well do you know the SPARK PE curriculum?
- Very organized, clear, and teacher friendly.
- Learned lots and lots but need to review and “find it” in the curriculum.
- I love it - I think the activities are very teacher friendly.
- Love it. Can’t wait to implement!
- Wish we had the notebooks- that would have helped.
- With binder as a guide.
- Very interesting and fun program.
- It was great to participate in the various activities which helped me to gain a better understanding of how to teach.

Confidence of Teaching PE
Participating teachers were also asked “Are you confident in teaching PE to your students?” They could indicate (1) Definitely No, (2) No, (3) Yes or (4) Definitely Yes. The majority of respondents of the Pre-Test (n=9, 60%) and Post-Test (n=12, 80%) reported Yes, they were confident in teaching PE. Of the respondents of the Nine Month Follow-Up survey 100% (n=13) indicated Yes or Definitely Yes when it comes to their confidence in teaching PE.
Pre-Training Confidence Comments
Are you confident in teaching PE to your students?
• Yes, but I’m happy to have a more concrete plan.
• I am confident to teach games and go outside and have fun, but not to teach PE standards.
• Took PE from Sue Hanson in college, have…children for movement, taught summer fun and afterschool for many years.
• I am sure I will after learning more about SPARK.
• I’m invested in finding movement “games” to incorporate classroom information… science, math, etc.
• I am a very active person. I always do morning exercises with my students to recharge their brains. I love playing games with my kids.

Post-Training Confidence Comments
Are you confident in teaching PE to your students?
• Thank you, this was very helpful in understanding how to use SPARK curriculum.
• I look forward to teaching these lessons, units, etc.
• I feel much more confident now in teaching PE to all my students. Great ideas to get started! Thanks so much!
• After the workshop I feel much more comfortable teaching my students.
• YEP!
• Look forward to using program.
• Yes! Thank you!
• Mahalo for the training.

There were statistically significant improvements in national/state PE standards and SPARK PE curriculum knowledge gained after the training. Before the training, the average knowledge level for national/state PE standards was Slightly Well and after the training, average scores were between Slightly Well and Well for knowledge in national/state PE standards. The average knowledge level for SPARK PE curriculum was between None and Slightly Well and after the training, average scores were Slightly Well to Well for the SPARK PE curriculum. The average score for confidence levels in teaching PE before the training was between Yes and No. Post training scores was between Yes and Definitely Yes.

Comparing Pre- and Post-Training and 9-Month Follow-up
One-Month Treatment Fidelity Surveys

A follow-up reflection form was completed one month after the respondents had implemented the SPARK PE curriculum in their classroom. Of the 15 participants, 14 (93%) completed this post-training reflection form.

Respondents were asked “How well do you think the material/information helped your students achieve our national/state standards?” After the SPARK curriculum implementation all respondents reported the material was either Extremely Helpful (n=11, 78.6%), Helpful (n=1, 17.1%), or Slightly Helpful (n=2, 14.3%).
One Month Follow-Up Material/Information Helped with Standards Comments

How well do you think the material/information helped your students achieve our national/state standards?

- The lessons address … standards very effectively.
- I didn’t have the book- and that would have been helpful when the material was being introduced.
- I think after the workshop and I was able to effectively teach skills to my students that will help them achieve state standards.
- Yes! It helped me plan PE sessions with little effort: materials and directions on lesson plan.
- We are working on the standards and enjoying it.
- I liked the in-service that also went with it. Liked the idea of having children do “stunts” individually but when I did it with the children I ran out of interactive and physical games.
- Use to follow directions per lesson. I also like that it tells you exactly what materials to use and how you can adapt using other materials/equipment.
- Each PE lesson is presented in a clear, organized and systematic manner which made it fun to present and the kids has fun participating (while meeting standards!).
- The kids are learning and having fun at the same time.

The One Month Follow-Up Survey also asked “Overall, how engaged were the students in the material/information that was presented to them in the classroom?” Over half of the respondents reported the students were Extremely Engaged (n=8, 57.1%), followed by Engaged (n=4, 28.6%), or Slightly Engaged (n=2, 14.3%).

One Month Follow-Up Engagement of Material/Information Comments

Overall, how engaged were the students in the material/information presented to them?

- Students are very engaged in the activities and thoroughly enjoy the activities. They don’t even realize they’re learning because it is so much fun.
- We have only done a couple of lessons.
- Kids enjoy the games.
• I made sure there was enough materials for all students to participate so all students were doing the activities at the same time.
• There’s a difference between 5th and 6th graders- 5th is very enthusiastic- some 6th graders are too jaded for some activities.
• Students are engaged, having fun, and exhausted. They love PE.
• We all broke a sweat. (Every PE!)
• Found the book did not really have enough ideas written out. Also liked the dance activities- but where is the CD?
• They are having lots of fun.
• Students not only were engaged, but they were having fun!
• The students were often bored with some of the initial activities as soon as possible once we started the aerobic games- there was more participation/engagement.
• Kids love the activities and interaction.

The One Month Follow-Up Survey then asked “Do you intend to share this information with others that did not attend the workshop?” Participants reported a range between Definitely Yes to No. After the implementation, over half reported, Yes (n=8, 57.1%), followed by Definitely Yes (n=4, 28.6%), and No (n=2, 14.3%) to sharing this information with others.

![Bar chart showing responses to sharing information](chart.png)

Respondents were asked “Would you use the material/information from the workshop again?” All participants reported Yes (n=14, 100.0%).
Would you use the material/information from the workshop again?

<table>
<thead>
<tr>
<th>Number of Responders</th>
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Respondents were asked “If you would teach this material again, what additional changes, if any, would you make the next time?”

- Now I can, I have the notebook. My problem was waiting for the notebook- if it had been given to us at the class that would have been REALLY helpful.
- At this point I need to just be more familiar with the entire program. See the big picture.
- I wouldn’t change anything.
- I’d request additional training for some of the activities (or videos); and a glossary for some of the terms (i.e. “jump tuck”).
- Yes! I wouldn’t change anything.
- The only thing is the length of time. I might consider shortening the time or trying some of the warm-ups indoors because of the heat from the sun, students tire out easily.
- None, it’s great.
- I feel the workshop was very good but I was disappointed in the book. There does not seem to be enough activities. Write out more “specific” teacher talk ideas.
- Some activity/game directions need to be written more clearly.
- I wouldn’t make any changes. Easy to follow lessons!
- Some of the lessons I had to read through several times and discuss with teachers in order to understand it clearly.
- More activities in a 45 minute period. Starting with more aerobic activities after warm up.
- Organize it better in my plan books.

Lastly, the survey asked “Thinking about your own professional development, what might be your next steps? Responses were grouped into two themes: Continued Learning and Improvements, and Curriculum and Delivery.

**Continued Learning and Improvements**

- Get more input from other teachers on other lessons and what worked and what didn’t.
- I plan on talking with others to see what works best. How can I integrate other areas into PE?
- Check out more games for the children.
• Investigate further – tasks children can do individually to meet teacher standards (ex. Locomotor activities).
• To read further in the book, and to keep practicing the games and starters.
• I would be interested in attending another workshop if available.
• It would be helpful to have another day of workshops to see more variety of activities in action.
• Getting more in shape to keep up with the students.
• Keep teaching/learning!

Curriculum and Delivery
• To plan a years curriculum.
• To continue to implement the SPARK curriculum. I just received my binder so I am excited to try new activities.
• Improve on how I deliver the lessons. It’s still trial and error on some things like length of time teaching lesson, evaluating the kids.
• I need time to look over the notebook and plan- that is what I will do during the break.

Additional Information from Nine Month End of Project Follow-Up
A follow-up survey was completed nine months after the respondents had completed the SPARK PE training. Of the 15 participants, 13 (87%) completed this post-training reflection form.

The Nine Month Follow-Up Survey asked “The SPARK training helped you implement PE during the school year?” Over half (n=7, 58.3%) of the respondents reported that Yes the training helped them implement PE and the remaining respondents Definitely Yes to the same question (n=5, 41.6%). The majority of the respondents (n=7, 58.3%) responded with Definitely Yes when asked “The SPARK binder helped you implement PE during the school year?”

![Bar graph showing responses to the question: The SPARK training helped you implement PE during the school year?](chart.png)
The SPARK binder helped you implement PE during the school year?

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<th>Responses</th>
<th>Number of Responders</th>
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<tr>
<td>Yes</td>
<td>8</td>
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<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Definitely No</td>
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</table>

Nine-Month Follow-Up Comments

- I enjoyed the curriculum and so did my students. They were active and having fun.
- I enjoyed the beginning workshop put on by the UH instructors.
- The training was the key to being successful with using the program. Without it the binder would have been much more intimidating to use.
- I like the program and ideas. Students love it.
- This is the first year I have taught 4th grade. I am learning more about the standards and curriculum as I progress through this year and into the next. Being as P.E. is 1x a week I am doing my best to familiarize myself with standards and curriculum more and more. *This year I was very fortunate to have a parent volunteer teaching P.E. to my class with me.
- I started out strong and now do very short warm-ups, then go straight to playing a game.
- We have to share binders for 3 1st grade teachers. More would have been nice.
- SPARK is an excellent program that sure makes teaching P.E. easier!
- I wanted to listen to the dances and teach the children the dances. I listened/put the cd into the computer and it had the words to the dances but it didn’t have the music. I was informed that the cd was $50 and I think that is a little steep. Also I was disappointed with text cd because there was not anything extra that was not in the book.
- Furlough days have been on Friday, our P.E. time was also Friday – while we did P.E. from time to time other days, we mainly did line dancing on Wednesday afternoon for a half hour.

Conclusion:

Overall, the SPARK Elementary Teacher Training was well received. The Pre, Post, and Follow-Up survey results indicated that participants significantly improved their knowledge on national and state PE standards, as well as SPARK PE curriculum. Additionally, most participants indicated the materials and information presented at the training were Extremely Helpful in getting the students Extremely Engaged in the classroom after the SPARK PE curriculum was implemented. Every participant reported that they would use the information and material presented to them again.
Continued learning and improvement, and curriculum & delivery were suggested as possible next steps for future professional development.

**Recommendations for Future Implementation**

1.) Insure binders/curricula are with the teachers prior to or at the SPARK training.
2.) When organizing the initial training, schedule a booster for midway through the school year to refresh.

**Acknowledgement:**
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Department of Education, District Physical Education Resource Teacher: Nancy Graf
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The Effective Integration of Mobile Computing Devices: Lessons Learned from Four Case Studies of Teachers Involved in the School Palm Academic Leaders’ (PALs) project

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Abstract

The acquisition and use of mobile computing devices by school districts is projected to increase by 50 percent over the next five years (America’s Digital Schools, 2006). Mobile computing devices (e.g., handheld computers and iPods) offer some of the same applications (e.g., word processing) and functionality (e.g., Internet access) as laptops with enhanced portability at half the cost (Education Week, 2010). Additionally, they afford students the opportunity to access learning resources anytime/anywhere and can facilitate communication and collaboration.

Research indicates mobile devices can help students meet content standards in English Language Arts (ELA) and improve student engagement and productivity (e.g., Vahey & Crawford, 2003; van t’ Hooft et al., 2004). Furthermore, they can meet the National Educational Technology Standards (NETS) requiring the use of digital tools and resources to develop students’ critical thinking and problem-solving skills (ISTE, 2010). Yet access to mobile devices alone is not sufficient for teachers to effectively integrate them into their instruction (Lawless & Pellegrino, 2007; Warschauer, 2006; Wenglisky, 2005). Teachers need support, including models of effective integration into instruction aligned with standards-based curriculum in order to effectively use of these devices to support academic achievement (Educational Support Systems, 2008; Lawless & Pellegrino, 2007). Further research is needed to provide teachers with these models and support.

In 2005, the Palm Academic Leaders (PALs) project was launched by the Los Angeles County Office of Education in fifteen schools across the County. The program provided a set of 30 handhelds site for teachers to integrate into their ELA instruction.
These in-depth case studies examined the integration of handhelds in 4-5th grade ELA instruction among four teachers deemed “highly effective” at integrating handhelds into their weekly instruction for a three year period (based on program and administrator observations). The objectives of the case studies were to identify (1) effective practices for integrating the handhelds to support achievement of ISTE’s National Educational Technology Standards (NETS), and the California English Language Arts (ELA) content standards, and (2) factors that support the ongoing integration of the devices. Teacher interviews, classroom observations, and teacher/student artifacts were used to meet these objectives. The teachers described a variety of ELA reading, writing and vocabulary development activities aligned with these standards along with support features essential to their ongoing integration of the devices. Results can assist educators in supporting the successful integration of mobile devices.

**Introduction**

Increasing access to computers and integrating them into the curriculum to meet State Academic Content Standards and National Educational Technology Standards (NETS) remains a challenge for educators (Educational Support Systems, 2008). Furthermore, limited resources hinder district efforts to purchase new computers, upgrade aging equipment, and provide the necessary professional development for teachers. The acquisition and use of mobile computing devices by school districts is projected to increase by 50 percent over the next five years (America’s Digital Schools, 2006) because mobile computing devices (e.g., handheld computers and iPods) offer some of the same applications (e.g., word processing) and functionality (e.g., Internet access) as laptops with enhanced portability at half the cost (Education Week, 2010). Additionally,
mobile computing devices afford students the opportunity to access learning resources anytime/anywhere and can facilitate communication and collaboration.

**Problem Statement**

Research by Lawless and Pellegrino (2007) and Warschauer (2006) and Wenglisky (2005) conveys that providing schools and teachers with access to technology alone will not improve the integration of technology into classroom instruction. Instead, extensive professional development including strategies and models of technology integration, along with planning time and ongoing technical support are essential (Bauer & Kenton, 2005; Becker, 2000; Lawless & Pellegrino, 2007). In order to effectively integrate technology, teachers need models of how to implement seamless lessons aligned with standards-based curriculum. The use of technology to support curricular standards is endorsed by the National Educational Technology Standards (NETS) and Performance Indicators for Teachers developed by the International Society for Technology in Education (ISTE, 2007). Yet various reports including the 2008 California Technology Assistance Project (CTAP) annual statewide Evaluation and the EdTech Profile teacher self-assessment confirm teachers are seeking assistance on how to effectively integrate technology to meet these standards. Professional development is essential because, "the true digital divide is not the quantity, but the quality of computer use that makes a difference to student achievement" (Wenglisky, 2005,p. 48).

**Background to the Problem**

Professional development to help teachers meet English Language Arts Standards is priority for many states. A review recent National Assessment of Educational Progress (NAEP) statistics shows that Black and Hispanic students are still not achieving in
English Language Arts skills such as reading at the same rate as their White counterparts. On average, minority students at the 4th grade are scoring 27-30 points lower on standardized tests and only 23% are at the proficient or above level as reported by NAEP (National Center for Education Statistics, 2007). These statistics are similar in California where recent California Standards Test (CST) test scores indicate that the percentage of students at the 4th and 5th grade achieving proficient or advanced levels in English Language Arts has steadily increased over the last four years. However, a more detailed analysis indicates that 4th and 5th grade minority students (Black and Hispanic) are not increasing at the same rate as their White or Asian counterparts. In 2007 the State Superintendent for Instruction, Jack O'Connell, indicated a commitment to develop partnerships and identify resources that will help close the achievement gap for all students. The goal is to have all students achieve at the proficient or advanced level in English Language Arts skills as identified in the content standards (California Department of Education, 2007c).

**Literature Review**

A review of research suggests that the use of computers can increase students' level of engagement and that increased engagement can lead to higher achievement (Norris & Soloway, 2004; van 't Hooft & Vahey, 2007; Warschauer, 2006). Recent studies on the use of handheld computers to support English Language Arts instruction show that handhelds can improve student engagement in English Language activities such as note-taking, vocabulary development, and collaborative writing (Vahey & Crawford, 2003; Yarnall, Carriere, Stanford, Manning, & Melton, 2007). Studies also show that the use of handhelds can facilitate more student-centered instruction along with
increased student achievement. A study of one elementary school district that implemented the use of handhelds for reading and writing activities found that teachers became more student-centered in their instruction and attributed an improvement in student reading scores to their use of handhelds (Tomasino, Doubek, & Ormiston, 2007).

The potential of handheld computer use to address the needs of students in English Language Arts and improve student engagement and productivity is evident (Vahey & Crawford, 2003; van t' Hooft et al., 2004). However, there is a need to further investigate the conditions in which this can occur and the effective instructional strategies that support their integration into the curriculum.

**The School PalmOne™ Academic Leaders Program**

In an effort to promote the effective use of technology in teaching, the Instructional Technology Outreach (ITO) division of the Los Angeles County Office of Education (LACOE) in partnership with K12 Handhelds, a private business, initiated the School PalmOne™ Academic Leaders (PALs) program in March 2004. As the regional lead agency for the California Technology Assistance Project (CTAP) in Los Angeles County, LACOE's goal in 2004 for the program was to increase the use of handheld computers in Los Angeles County public schools to improve teaching and learning. This is consistent with CTAP's goals to (a) increase technology integration through professional development, (b) assist technologically underserved communities, and (c) introduce emerging and cost-effective technologies (Los Angeles County Office of Education, 2004). Based on its experience training administrators and site-based coach/mentor teachers, LACOE recognized that handheld computers are cost-effective...
and mobile and can provide one-to-one access for students. In 2004, 15 schools were selected through an application process to receive a school set of 30 handheld computers and related training for use at grades 4, 5, or 6 in the 2004-05 school year as part of the School PALs program. These grade levels were deemed appropriate by project coordinators because most classrooms at this level are self-contained and cover all content areas, thus providing the opportunity to explore the use of handhelds in a variety of subjects.

School proposals submitted to LACOE in 2004 for participation in the School PALs program provided insight into the motivation, expectations, and objectives of the handheld computer program at each school site. Teachers described their instructional objectives and how handhelds could benefit their instructional program. Two teachers from each school were selected by the principal or volunteered to participate and implement the use of handhelds in their instruction.

During the first three months of the 2004-05 school year, the site administrator and two teachers from each school (totaling 30 teachers) were provided three days of training in the use of handheld computers by LACOE and K-12 Handhelds trainers. LACOE and K-12 Handhelds also did a presentation at each school for school parent or community groups to launch the program. Almost every school held this presentation at an evening meeting with parents of participating students. Some sites conducted the meetings in both English and Spanish. Other schools also distributed the handhelds to each student at the end of the meeting.

During the 2005-06 school year, two days of training were added to the project to further enhance and support the continued use of handhelds by the 28 teachers
participating in the project. (After the first year, one school opted to discontinue due to site administrative and staffing changes.) Based on the positive feedback of teachers and students using handhelds, some schools expanded the project to other classrooms and grade levels in 2005-06.

In July 2007, Tech Ed Services, a private company based in Downey, California, completed a summary evaluation report on the School PALs program. Based on LACOE project coordinators' observations, teacher and student questionnaires, and videotape testimonials of teachers, 70% of the teachers demonstrated some success in integrating handhelds into their instructional program. Through informal interviews and questionnaire responses, teachers reported that students and parents were enthusiastic about the use of handhelds, noting an increased interest in school and classroom activities. Teachers' observations and reviews of student work revealed that student productivity and engagement increased with more students completing assigned work and staying on task (Tech Ed Services, 2007).

The summary report, along with project coordinators' informal observations of classroom lessons using handhelds, showed the potential of handhelds to support the instructional program. The report indicated that 96% of the 28 teachers who participated in School PALs felt that handheld use improved student engagement and productivity while promoting collaborative work among the students. A majority of the teachers indicated handheld use is effective in English Language Arts instruction for activities such as vocabulary development and writing skills. However, not all School PALs classrooms were successful integrating this tool into the curriculum. About 30% of the project teachers reported some difficulty in integrating handhelds into their classroom
instruction (Tech Ed Services, 2007). Based on informal observations, School PALs project coordinators also indicated some teachers focused on the basic operation of the handheld and did not necessarily integrate technology into the curriculum to support content standards. Through questionnaires other teachers in the School PALs program indicated a need for more strategies on how to effectively integrate handhelds into the curriculum (Tech Ed Services, 2007).

The School PALs project ended in 2007 and schools were encouraged to continue the project on their own initiative with local school and district support. A review of Schools PALs schools and teachers by project coordinators found a majority of schools did not continue the program due to (a) lack of ongoing technical support and professional development, (b) changes in their teaching assignments, (c) change in leadership (principal), and (d) a focus on other newer technology tools. However, some schools expanded the program and continued to use handhelds on a regular basis.

In 2007, project coordinators reported there were three schools and four teachers that participated in the School PALs program that were integrating handhelds in their elementary instruction on a regular basis (2-4 times a week) and their use of handhelds focus primarily on English Language Arts activities. These data were consistent with prior School PALs’ questionnaires, which indicated that teachers indicated their use of handhelds mainly focused on English Language Arts activities such as writing, vocabulary development, and spelling (Tech Ed Services, 2007). The success these schools and teachers provided the motivation for this study.

**Purpose of the Case Studies**
The purpose of these in-depth case studies was to examine the integration of handhelds in 4-5th grade ELA instruction among the four teachers deemed “highly effective” at integrating handhelds into their weekly instruction across. The objectives of the case studies were to identify (1) effective practices for integrating the handhelds to support achievement of ISTE’s National Educational Technology Standards (NETS), and the California English Language Arts (ELA) content standards, and (2) factors that support the ongoing integration of the devices, to inform professional development and support for the effective integration of technology into curriculum and instruction.

Methods

Four teachers who were teaching 4th or 5th grade and had been using handheld computers for at least three years (2006-2009) were purposefully selected for in-depth case studies from the School PALs project schools. The teachers represent a sample of 28 PALS teachers who described ways they integrated handhelds in their instruction and indicated (i.e., through School PALs questionnaire and informal interview data) that they feel comfortable developing standards-based, technology-infused lessons (Tech Ed Services, 2007). Each of the teachers had a classroom set of handheld computers and provided one-to-one access for each of the students. The four teachers were selected because they:

• were recommended by their school principal based on observations of their effective teaching and use of technology in the classroom.

• were recommended by School PALs project coordinators who informally observed classroom uses of handhelds and implementation of the program.
• indicated through questionnaires they use handhelds to support English Language Art activities such as writing and vocabulary development.
• shared resources and samples of activities that support the use of handhelds through web links and demonstrations of activities to other teachers.

(Tech Ed Services, 2007).

These studies utilized interviews, classroom observations, and review of teacher artifacts to gather data on the use of handhelds over a six-month period from April through October 2009. Table 1 summarizes the use of these data collection tools in relation to the research questions.

Table 1

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Teacher Interviews</th>
<th>Classroom Observations</th>
<th>Teacher Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Question 1:</strong> How do experienced upper grade (4-5) School PAL teachers who are identified as “effective” with handheld use, integrate handhelds into English Language Arts instruction?</td>
<td>Semi-structured interviews provided insight into how the handhelds were being used by the teachers.</td>
<td>Observations identified how handhelds were being used including the types of applications (i.e., word processing) and how teachers were managing their use.</td>
<td>Data from teacher lesson plans provided information on how handhelds were used in the English Language Arts curriculum and the specific activities that addressed ELA content and NETS standards</td>
</tr>
<tr>
<td><strong>Research Question 2:</strong> What attitudes, beliefs, and backgrounds are associated with the effective use of handhelds?</td>
<td>Interviews provided insight to teacher attitudes and beliefs on handheld use.</td>
<td>Observations identified attitudes or beliefs articulated by teachers related to the continued use of handhelds.</td>
<td>Data from teacher materials provided information beliefs associated with continued use of handhelds.</td>
</tr>
</tbody>
</table>

Two semi-structured formal interviews lasting 30-45 minutes took place with each participant between April and June 2009. Then, informal follow-up interviews took place with all four teachers to confront and validate data gathered from prior interviews. All
interviews were recorded and transcribed with participant permission. Classroom observations were completed using a modified version of the ICOT tool developed by ISTE. Each observation was scheduled in advanced and included a pre-conference, 30 minute observation, and post-conference. During the pre-conference, participants were asked to identify the content standards the lesson will address. The classroom observations then focused on the teaching strategies and student activities that supported the achievement of the NETS and ELA content standards while integrating the use of handhelds. Finally, teacher artifacts provided evidence of practices described in interviews and observed in classrooms. Throughout the studies the teachers collected and submitted materials relevant to the effective use of handhelds in their ELA instruction including past or present teacher lesson plans, assignments, samples of student work, applications, and other electronic or printed documents.

As suggested by Miles and Huberman (1994) data collection and analysis were interwoven throughout the case studies. The process included gathering, coding and confronting data using HyperResearch. Codes were aggregated into themes related to the handheld applications, ELA activities, alignment with NETS and ELA standards and factors associated with ongoing use. Only practices that met the English Language Arts content standards for instruction and the NETS standards for teachers were identified as effective. A clear picture of each teacher was provided through detailed descriptions of the setting and events (Creswell, 2003; Yin, 1994)

**Summary of Findings**

The following provides a summary of findings from teacher interviews, classroom
observations, and a description of teacher artifacts. For the complete findings please see Chavez (2010).

Schools and Teachers

The four case studies were conducted in three different southern California school districts. The studies included four teachers, two from grade 4 and two from grade 5. Table 2 provides a summary of the schools and teachers. Pseudonyms were used for the teachers and schools to ensure privacy and confidentiality of the participants.

Table 2

Participant Demographics

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Gender</th>
<th>Grade Level</th>
<th>Tchg. Exp.</th>
<th>Years using handhelds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern</td>
<td>Mrs. Jones</td>
<td>Female</td>
<td>5th</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Adobe</td>
<td>Mrs. Smith</td>
<td>Female</td>
<td>4th/5th combo</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Adobe</td>
<td>Mr. Cruz</td>
<td>Male</td>
<td>5th</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Tech</td>
<td>Mrs. Clark</td>
<td>Female</td>
<td>4th</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

Each of the teachers participated in the School PALs program, attended six professional development day/workshops (including two one-on-one sessions held at their site) and used handhelds for at least four years in their English Language Arts instruction. In addition, each teacher had a classroom set of handheld computers (one for each student) and associated peripherals including keyboards. Table 3 summarizes the findings for each of the teachers.
### Table 3

**English Language Arts (ELA) Activities and ELA/NETS Standards Alignment**

<table>
<thead>
<tr>
<th>Teachers</th>
<th>ELA Standards</th>
<th>NETS Standards</th>
<th>English Language Arts (ELA) Activities</th>
<th>Handheld Applications</th>
<th>Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Jones 5th grade</td>
<td><strong>Reading-3.1</strong> Identify and analyze components of poetry and themes of literature.</td>
<td>1. Facilitate and inspire learning and creativity. 1a. Promote and model creative thinking.</td>
<td>-Create Poems</td>
<td>-Documents-To-Go (Word processing) -Memos</td>
<td>Students: -Created poems. -Identified theme and character roles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Do character analysis of selected literature.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td><strong>Listening-1.7</strong> Identify and analyze communication styles.</td>
<td>2. Design and develop digital age learning. 2a. Adapt learning experiences to include digital tools.</td>
<td>-Listen to audio narratives of literature books. -Identify communication styles (i.e., voice patterns)</td>
<td>-E-Books</td>
<td>-Increased analysis skills</td>
</tr>
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</tr>
<tr>
<td></td>
<td><strong>Writing-1.1</strong> Create narrative composition.</td>
<td>3. Model digital-age work and learning. 3a. Communicate relevant info and ideas using digital media and formats.</td>
<td>-Share writing assignments with other students (beaming) for revision.</td>
<td>-Documents-To-Go (Word processing, database, slideshow) -Memos -Notes</td>
<td>-Wrote more sentences -Were excited to write</td>
</tr>
<tr>
<td>Mrs. Smith 4th/5th combo</td>
<td><strong>Writing-1.1</strong> Use word conventions correctly.</td>
<td>1. Facilitate and inspire learning and creativity. 1c. Promote student reflection using digital tools.</td>
<td>-Identify vocabulary words in text - Create sentences using words appropriately</td>
<td>-Plucker (Pre-selected websites downloaded to handhelds)</td>
<td>Students: - Paid attention to detail (i.e., conventions)</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Speaking-2.2</strong> Deliver oral presentation.</td>
<td>3. Model digital-age work and learning. 3a. Communicate relevant info and ideas using digital media and formats.</td>
<td>-Create slideshows to present information</td>
<td>-Documents-To-Go (slideshow)</td>
<td>-Improved presentation skills</td>
</tr>
<tr>
<td>Teachers</td>
<td>ELA Standards</td>
<td>NETS Standards</td>
<td>English Language Arts (ELA) Activities</td>
<td>Handheld Applications</td>
<td>Student Outcomes</td>
</tr>
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</tr>
</tbody>
</table>
| Mr. Cruz  | Writing-2.1                        | 3. Model digital-age work and learning. 3a. Demonstrate fluency in technology systems. | -Create essays  
-Create sentences and paragraphs | -Documents-To-Go (Word processing) | -Increased writing productivity. |
| 5th grade | Write narratives                   |                                                                                |                                                                                                       |                                                             |                                                                                  |
|           | Reading-1.1                        | 1. Facilitate and inspire learning and creativity. 1a. Promote and model creative thinking. | -Input and review meanings of vocabulary words  
-Draw pictures to define words | -Quizzler (Create quizzes) | Students:  
-Identified definitions of words |
|           | Understand synonyms, antonyms.     |                                                                                |                                                                                                       |                                                             |                                                                                  |
|           | Writing-1.1                        | 3. Model digital-age work and learning. 3a. Communicate relevant info and ideas using digital media and formats. | -Create sentences and paragraphs  
-Write persuasive essays | -Documents-To-Go (Word processing, database, slideshow)  
-Sketchy (Draw and paint) | -Improved sentence structure  
-Spelled better (i.e., noun, verb) |
|           | Create narrative composition.      |                                                                                |                                                                                                       |                                                             |                                                                                  |
|           | Listening-1.7                      | 2. Design and develop digital age learning. 2c. Customize learning activities to address learning styles. | -Listen to audio recordings of text | -E-Books | -Increased analysis skills |
|           | Identify and analyze communication styles. |                                                                                |                                                                                                       |                                                             |                                                                                  |
| Mrs. Clark| Reading-1.3                        | 1. Facilitate and inspire learning and creativity. 1a. Promote and model creative thinking. | -Identify parts of speech  
-Write sentences | -iKWL (Graphic organizer) | Students:  
-Identified parts of speech (i.e., verbs) more easily |
| 4th grade | Identify and use parts of speech (i.e., verbs). |                                                                                |                                                                                                       |                                                             |                                                                                  |
|           | Writing-1.2                        | 1. Facilitate and inspire learning and creativity. 1b. Promote student reflection using digital tools. | -Input and share journal entries  
-Create memos with multiple paragraphs  
-Write letters. | -Documents-To-Go (Word processing)  
-Memos | -Used words appropriately in sentences.  
-Were excited to write. |
<p>|           | Create sentences using words appropriately. |                                                                                |                                                                                                       |                                                             |                                                                                  |</p>
<table>
<thead>
<tr>
<th>Teachers</th>
<th>ELA Standards</th>
<th>NETS Standards</th>
<th>English Language Arts (ELA) Activities</th>
<th>Handheld Applications</th>
<th>Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Reading-2.2</em> Discern main ideas</td>
<td>2. Design and develop digital age learning. 2c. Customize learning activities to address learning styles.</td>
<td>-Listen to audio recordings of text</td>
<td>-E-Books</td>
<td>-Increased comprehension skills</td>
</tr>
</tbody>
</table>

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Writing Activities

The use of handheld computers in grades 4-5 by the four teachers studied indicates a focus on English Language Arts activities with an emphasis on writing activities. Each teacher described some type of writing activity (i.e., essay assignments) in his or her interviews and how students were motivated to increase their productivity (i.e., more sentences) through the use of handhelds. Mrs. Jones described her use of handhelds in having students create poems while using the beaming feature of the handhelds to provide immediate feedback to students. Mrs. Smith and Mr. Cruz described using handhelds to have students write sentences and create paragraphs. Mrs. Clark described having students write journal entries and create sentences using vocabulary words. In each of these instances, the four teachers emphasized that students were more motivated to write and increased their productivity due the ability to compose with handhelds using a keyboard, revise easily electronically, and see their output (i.e., printouts).

The teachers attributed some of these positive results to the use of handhelds versus the use of traditional paper and pencil for writing activities. In the past using pencil and paper was more time consuming (i.e., loss of papers) and challenging for students with poor cursive writing skills. Each teacher mentioned student writing was difficult to read, students were not attentive to detail (i.e., spelling), and some students lost interest (i.e., no revision) using paper and pencil.

Alignment with English Language Arts Standards

As the four teachers described their use of handhelds in the classroom and classroom observations were conducted, it became evident that their instruction and use of handhelds was aligned to the English Language Arts content standards. For example, Mrs. Clark described the specific content standard (Writing Content Standard 1.3 – Using Adverbs) being addressed in her
lesson as she had her students create sentences using adverbs. Students created sentences using their handhelds and included adverbs as part of their anthology reading (i.e., “Wildfire Story”) assignment. In another example Mrs. Smith cited the requirement to create a “500 word essay” as part of the 5th grade writing standards. Most of the students completed their essays with more than 500 words. Mr. Cruz in his use of the Open Court reading curriculum cited the alignment of the adopted curriculum with California standards as he adapted suggested curriculum activities using handhelds. Mrs. Jones cited the content standard related to using poetry and icons in literature as she conducted her lesson with students.

Many of the activities described by the teachers are aligned under the areas of Reading and Writing in the English Language Arts Content Standards. For example, the overarching goal of the 5th Grade Writing Content Standard 1.0 states: Students write clear, coherent, and focused essays. The writing exhibits the students’ awareness of the audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students’ progress through the stages of the writing process as needed. (English Language Arts Content Standards for California Public Schools, 2010). Mrs. Smith, in her Personal Narrative Writing assignment and rubric for students, demonstrated the alignment with Writing Standard 1.0 by asking students to “have a main point that is clear and well developed” along with “precise and vivid sensory details” that support the main idea. A further review of the California English Language Arts Content Standards for writing in grades 4 and 5 reveals that many of the writing activities teachers described or demonstrated are in alignment with standards.

Alignment with National Educational Technology Standards

Many of the teacher practices and student activities observed in this study are also in alignment with the National Educational Technology Standards (NETS) for teachers. In 2008 the
NETS standards were updated to reflect more process and learning experiences in the use of technology in instruction rather than a specific technology application/proficiency (i.e., word processing). The focus of the standards is on the teacher’s ability to facilitate effective learning experiences using digital tools while exhibiting the knowledge, skills, and abilities to participate in a global/digital society. For example, NETS Standard 1: Facilitate and Inspire Student Learning and Creativity states, “Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.” One of the performance indicators under NETS standard 1.b indicates teachers should “engage students in exploring real-world issues and solving authentic problems using digital tools and resources.” Mrs. Jones demonstrated alignment with this standard in her “Weather Project” by asking students to do a research report and slideshow presentation using handhelds computer applications (i.e., slideshow) on the weather in different states and its impact on the lifestyle/economy of the respective state. Many of the other handheld activities utilized by the teachers in this study were also alignment with the most recent NETS Standards (2008).

Factors that Promote Ongoing Integration

Table 4 provides a set of recommendations for teachers and administrators seeking to integrate mobile computing devices into instructional programs. These recommendations emerged from the factors the teachers identified that as influencing their ongoing use and integration of handhelds into their instructional program.
Table 4.0

Summary of Administrator and Teacher Recommendations

<table>
<thead>
<tr>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development - Provide teachers professional development in the use of the device on an ongoing basis (yearly) including at the school site on a one-on-one (teacher-trainer) basis. Introduce new technologies to teachers who have a positive attitude towards technology use and believe its use can have a positive impact on student learning.</td>
<td>Personal/Instructional productivity – Seek to utilize the device for personal productivity (i.e. calendars) and ways to meet content and technology standards. Spend time beyond the regular school day to gather more information on how to use the tool to meet student outcomes.</td>
</tr>
<tr>
<td>Technical Support – Provide teachers technical (i.e. trouble-shooting) support via phone or online during the school day to address technical problems.</td>
<td>Student Assistance – Seek to utilize students for technical support and as “assistants” to help other students use the device. Develop management strategies/policies that allow students to take responsibility for maintaining devices.</td>
</tr>
<tr>
<td>Access and Use – Provide teachers the use of the device for their own personal productivity on a 24/7 basis. Also provide students 24/7 access on a one-to-one basis.</td>
<td>Student Exploration – Allow students to explore and “play” with the device to become comfortable using the tool. Also allow students to use the device 24/7 to complete assignments and get assistance at home from parents or others.</td>
</tr>
<tr>
<td>Collaboration – Create a forum (Community of Practice) for teachers to collaborate online and/or face-to-face to share ideas, lessons, and frustrations in the use of the device. Consider pairing teachers at the school site who are simultaneously integrating the tool into their instruction for ongoing support.</td>
<td>Teacher and Student Collaboration – Work with other teachers to share ideas, lessons, and strategies for integrating the device into instruction. Look to develop lessons that are student-centered and align with content standards. Allow students to work collaboratively on assignments and encourage peer review.</td>
</tr>
</tbody>
</table>

Key factors to the use and integration of handhelds into the curriculum include professional development and technical support along with the opportunity to network with fellow teachers for discussion on issues/ideas related to integration into the curriculum. These findings are consistent with Silvernail and Lane’s (2004) study of laptop computer use in one-to-one learning environments where students were allowed to use laptops 24/7.

Studies on the use of laptop computers in one-to-one learning environments suggest that 24/7 access helps students spend more time outside of regular class on
instructional activities such as writing (Jeroski, 2003; Rockman, 2000). These case studies suggest that students benefited from having their own handheld for 24/7 access. Teachers described students being more engaged in writing activities and seeking more help with assignments outside of class (i.e., parent help). The students valued the opportunity to create and share assignments electronically. As educational agencies seek to provide access for students and teachers, agencies should consider the benefits of providing access on a one-to-one, 24/7 basis. The cost of handheld computers provides a viable solution for schools seeking to provide access for every student.

Conclusions

Previous research conducted on the use of handheld computers in K-12 education has focused on how handheld computer use affects student motivation, engagement, and productivity. These four case studies contribute to the literature by describing effective teacher practices in the integration of handh olds into the English Language Arts instruction in grades 4 and 5 and the factors that contributed to teachers’ ongoing integration of the devices.

In 2003, handheld computers were touted as the solution for schools interested in providing computer access at an affordable cost for every student (Norris & Soloway, 2004). Studies on the use of handhelds suggest they could provide the same applications as more expensive desktop or laptop computers and have the same impact on student engagement and productivity (Norris & Soloway, 2004; van ‘t Hooft et al., 2004). In spite of the initial success in the use of handheld computers as described in the Palm Education Pioneer (PEP) program (Vahey & Crawford, 2003), the K-12 educational community did not embrace the use of handhelds on a large scale as compared to laptop computers. Some in the educational community speculate this was due to the small screen size of the
handheld and the inability to utilize high-level multimedia applications afforded to laptop computers. Some studies show teachers had difficulty integrating handhelds on a regular basis (Velastequi, 2005; Warschauer, 2006). For example, Velastequi’s (2005) study of handheld use across one school district in grades 6-8 found teachers did not embrace the continued use of handhelds after one year due to technical and management problems associated with a class set of 30 handhelds. Contrary to Velastequi’s (2005) findings, these case studies suggest the type of applications (i.e., word processing) utilized by students and teachers is not necessarily dependent on one particular type of handheld device, and can be effective in English Language Arts instruction.

These case studies indicate handheld computer use can help students in reading, writing, and vocabulary development activities by increasing student engagement, motivation, and productivity. Additionally, the teachers indicate key factors to the use and integration of handhelds into the curriculum include professional development and technical support along with the opportunity to network with fellow teachers for discussion on issues/ideas related to integration into the curriculum. The findings are similar to studies on laptop computer use in one-to-one learning environments (e.g., Silvernail & Lane, 2004) that convey the importance of technical support and professional development with an emphasis on student writing activities.

It is important to emphasize handheld computers utilized by the teachers in these case studies (i.e., Palms) were never fully embraced by society nor were they embraced by the educational community. As a result, they are no longer manufactured and have been replaced by newer smaller mobile technologies such as the Smartphone and iPod Touch. The evolution of handheld computer devices has seen the incorporation of more sophisticated
applications/functions including access to the Internet, into much smaller and more powerful devices. Despite this evolution, the teachers in these case studies demonstrated success in the use of Palm handhelds and offer insight into effective practices likely to transfer to new emerging mobile computing devices (i.e., iPods).

Schools interested implement newer computing devices such as Netbooks and Thin Clients in alignment with content standards, especially English Language Arts standards, could benefit from the insights provided by these case studies. English Language Arts practices to consider include the use of word processing applications for student writing assignments such as journal entries, poetry creation, and essay assignments. The use of applications such as slideshow for projects or presentations can allow students to demonstrate communication skills. The practice of using handheld computers to send or share files with students and teachers also provides for increased collaboration and opportunities for review to improve the quality of student work. Schools should consider the deployment of mobile devices on a one-to-one basis to help facilitate the effective use.

The teachers also described the technical support and professional development provided by LACOE and K-12 Handhelds as essential to their integration of handhelds into their instruction. Other studies (Becker, 1998; Becker & Reil, 2000) confirm the importance of providing this support for the integration of technology into the curriculum. The teachers described in detail the value of having professional development provided on a one-to-one basis and onsite as part of the School PALs program. Additionally, the teachers described the value of having a partner teacher integrating the use of handhelds at the same time. This enabled the teachers to share ideas for using the handhelds and solutions for technical problems. Having a larger “network” of teachers using handhelds also enabled teachers to share practices online and
create a type of “community of practice.” Wenger (1998) describes a community of practice as having the potential to have a positive impact on teacher practice. The value of providing professional development and a forum for collaboration among teachers should not be understated when considering the introduction of new technology tools for classroom instruction. Schools should consider creating a type of community of practice for the introduction and integration of new handheld technologies.

Lastly, these findings suggest teacher attitudes and beliefs affect their ability to integrate handhelds into their classroom instruction. Consistent with Windschitl and Sahl (2002), all four teachers displayed a positive attitude towards the use of handheld technology in the classroom and a firm belief that students must be exposed to technology tools to better prepare them for the 21st century workplace. The teachers confirmed that their attitude and beliefs helped them spend additional time outside their regular workday to learn how to use the handhelds and not become discouraged. As new technologies are introduced to teachers (i.e., Whiteboards), it is important to select teachers for initial use who have a positive attitude towards the potential of technology to support classroom instruction.

**Strengths and Limitations**

The strength of these case studies was the ready accessibility to the teachers for interviews and their openness to allow the researcher into their classrooms for observations to gather data. The researcher was able to observe teacher practices as a non-participant and follow up with teachers to discuss data gathered. This access allowed for in-depth analysis into teacher practices and the factors that contribute to the effective integration of handheld computers.

One of the limitations of the case studies was that there were only a few remaining teachers still using handheld computers. Many of the teachers in the original School PALs
program were not available. The small number did not allow for a larger or random sample of teachers using handhelds. The opportunity to include a larger sample of teachers together with teachers who stopped using handhelds would have provided for a comparison of why some teachers stopped using handhelds. The lack of a large number of teachers using handhelds also limited the amount data gathered and analyzed.

Another limitation of this study was that the teachers using handhelds agreed to participate in the study because they were very grateful for the resources provided and interested in participating in future projects like the School PALs program. It was also noted the teachers were demonstrating model lessons when being observed that may have not been indicative of everyday practice. Social desirability limited the study as many of teachers most likely wanted to please the researcher and demonstrate success.

A final limitation of the case studies was the timing and the ability to gather more data through classroom observations. Teachers were readily available for interviews; however, scheduling classroom observations was challenging due to student testing and school events taking place in the spring. This limited the opportunity to gather data through classroom observations. Data analysis was more dependent upon data gathered from interviews.

**Directions for Future Research**

Thomas Greaves, president of the Greaves Group, an educational consulting firm, indicated the need for large-scale empirical data on the use of mobile computing devices to determine the impact on student learning. He noted, “data and related research will better help districts develop the policies and practices needed to effectively implement this technology” (Education Week, 2010, p. 10).
The following are directions for future research that would help other educational agencies seeking to implement the use of mobile computing devices: A similar study of teacher practices using other types of handheld computing devices such as Smart phones or iPods.

- A large-scale longitudinal study of the impact of mobile computing devices on student learning in different content areas and at different grade levels.
- A study of professional development practices that contribute to the effective integration of mobile computing devices in classroom instruction.
- A study of teacher attitudes, beliefs, identities, and backgrounds associated with the effective integration of mobile computing devices in classroom instruction.
- A study of the policies needed to effectively utilize mobile computing devices while ensuring the safety of students and network security.
- A study to identify the critical steps in preparing students to use the technology.

As further research studies are considered for the use of mobile computing devices it is recommended these studies include how the use of these devices promotes 21st century learning skills such as communication, collaboration, and critical thinking. Critical thinking skills are referenced in current content standards and are the focus of many content standards. How teachers address these skills and measure or assess them effectively is a critical need for the educational community. A research study on the specific aspects of the technology that promote 21st century learning skills is needed. Related factors of teacher/student access, frequency of use, applications, and teaching strategies would need to be examined to identify the impact on student outcomes. As educators promote the use of technology to improve teaching and learning, they would be well served by a large-scale longitudinal study on how mobile computing devices can prepare students for the 21st century workforce.
References


Combine creative dance with picture book thematic teaching model—A case study in a kindergarten in Taiwan

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Abstract

Young children perceive themselves and the surroundings through movement. What is learned in the early stages of child development and knowledge acquiring in the later stages is based on the development of movement. By experiencing movements, young children not only improve their movement ability but also learn to know, express themselves and build positive self-concept during exploration. Movement curriculum is commonly administered in three ways in kindergarten: music games, physical fitness curriculum and singing with movements. If only one of the three activities is administered, or that the activity is heavily relied on memory or imitation, reaching the goal of comprehensive learning and self-expression would be difficult. Creative dance, which is characterized by openness and exploration with stimulating effect on creativity, could break the emphasis on memorizing and imitation, leading to the goals described above. Therefore, bringing the concept of creative dance into movement curriculum could lead to comprehensive learning in young children.

Picture books have long been a favourite in young children. It has been considered a very useful material for developing children’s’ literacy. In the early stages where children start learning writing and developing interests in reading, picture books provides them a way to “read”. Furthermore, picture books can have multiple educational values. These include expanding everyday encounters, enrich learning experience, improving cognitive skills, increasing language expressing skills, developing personality and providing aesthetic experiences. For this reason, it is widely applied in child education. The phoneme, music of language, structure of story and picture in a picture book has beneficial effects on young children’s language, cognitive and art experiences. Picture book can have abundant knowledge, which is essential in early childhood education.

In recent years, integrated curriculum has become the main stream in general
education. Educators who supported this notion believe that this is a way for learners to achieve comprehensive, integrated learning. The present study also adopts this notion by integrating picture books with dance. Specifically, the study uses the case study method, focusing on a kindergarten which adopts “picture book thematic teaching model” in Taiwan. The objective is to understand the picture book thematic teaching model and to develop a guide/principle for the integration of movement and the model. The time spent for observation is one theme of picture book thematic teaching. During this period, the author observes one class, participate all activities in the kindergarten, takes pictures, scan students’ works and collects data. Teaching rational is acquired through interview with teachers of the kindergarten. Conclusion and recommendation will be developed from the data collected.

**Key words**: creative dance, picture book, thematic teaching
Course Design – Veterinary Exam Room Communication

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EXAM ROOM COMMUNICATION

Abstract

Professionals in the small animal health industry have long theorized the existence of a gap between technical and non-technical skills of practicing veterinarians. A consortium of veterinary educators identified the competencies necessary for professional veterinary success and agreed that a strong foundation of non-technical skills, such as communication, is more likely to lead to success. Given this hypothesis, management executives of XYZ designed the “Exam Room Communication” course to meet the skills gap identified. This paper will address the course design including objectives, target audience, needs assessment, design methodology, development and evaluations of the course along with financial and implementation issues. Formal evaluation of the course will allow XYZ to determine its business value as well as the immeasurable value of the increased level of quality medicine practiced by doctors who are better able to connect and relate to their clients.
Course Design – Veterinary Exam Room Communication

Introduction

“Exam Room Communication” is designed to meet a skills gap that has long been theorized in the small animal health industry, but never been empirically proven nor addressed. This course in its development will go through a rigorous target audience analysis and needs assessment to determine the specific skill set to assist veterinarians in creating a stronger bond with the humans and their animals both in and outside of the exam room. It is through this human animal bond that pet owners and veterinarians are able to work together to provide the highest level of care for animal companions who cannot speak for themselves.

The conception behind the course development and how it came to fruition will be discussed in this paper. To provide some structure to this journey, the instructional design model, ADDIE, will be roughly followed. ADDIE is an acronym for analysis (target population analysis and needs analysis), design, development, implementation, and evaluation.

Overview of company

“Exam Room Communication” is a course designed for veterinarians employed by XYZ Animal Hospitals. XYZ is a publicly traded company (on NASDAQ) that owns and operates more than 525 animal hospitals. It is the largest free standing animal hospital company in the United States. Within XYZ Animal Hospitals there are 15,000 employees that support these hospitals as well as the corporate offices. Of these 15,000, 2,200 are veterinarians. XYZ provides more medical continuing education in the United States for veterinarians than any other
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organization. XYZ Animal Hospitals aspires to provide the highest quality medicine for the pets that visit their hospitals.

While XYZ veterinarians are some of the most technically proficient doctors in the industry, XYZ has never provided any “soft skill” training for this population. Once the training organization had established itself within XYZ, executive management sought to implement the idea of soft skill training for doctors. The first iteration for the soft skill training was to provide XYZ doctors with “sales” training. While veterinarians may actually be “selling” their services, this is not an idea that is embraced by the profession; veterinarians went to school to provide medical care to animals, not sell their services to owners. The benefit of this training was determined that the underlying need for “sales” training is the desire to increase revenue, retain clients, and provide high quality medical care. Translating the objective of sales training into a language palatable to the target audience is of obvious importance. Hence, “Exam Room Communications” was determined to suffice and cover all of the bases in a politically sensitive manner.

Objectives

The business objective in financial terms is to increase revenue as measured by average transaction charge. The second business objective is to reduce client churn as measured by average client tenure. Finally, the business sought to increase the value per client based on average annual sales per pet. Increasing revenue, reducing client churn and increasing per client value are perfectly suitable to share with the board of directors and shareholders, however to ensure acceptance and openness with the veterinarian population, the objectives need to be restated.
The learning objective for “Exam Room Communication” is simple and straightforward: improve patient care through the demonstration of strong communication skills in the exam room. This learning objective assumes communication skills are the foundation of open relationships between veterinarians and clients, which has been demonstrated in the literature to lead to better quality medicine being practiced. Much research has been done around the correlation between the perceived quality of the doctor and their communication skills (Buller, 1987; Hall, 1981; Roter, 1987). Evidence suggests the higher the level of communication skills will equate to a higher the level of client satisfaction (Simpson, 1991; Howells, 2006). It has been suggested that improving basic communication skills may also simply advance the interviewing skills of some doctors therefore increasing the quality of information provided by the client (Roter, 1987). Finally, when a doctor possess strong communication skills, they increase their ability to generate a positive impact on the clients, and on patient care in general (Maguire, 2002). Upon identifying the primary learning objective for the development of this course, the next step is to better understand the primary audience for the course.

Target audience analysis

Veterinarians are a unique group of professionals. Veterinary students study as many as five different species during their four years of medical school and must be proficient in each of those species in order to pass the licensing exam, also called “boards.” However, the veterinarian has an additional challenge because he or she works with a patient that cannot communicate for themselves and they must also interact with the client, a human being. In order to pass “boards,” every veterinarian must know how to diagnose and treat animals, but no “boards” require any interpersonal skills whatsoever. This lack of attention to what is a critical component of the role of a veterinarian is concerning for many. The KPMG Mega Study, the largest study conducted...
to date within the veterinary industry, found that “Many [veterinarians that participated in the study’s focus groups] said that they did not get enough management, communications, and other skills necessary for nonprivate practice” (Brown & Silverman, 1999, p. 163).

The concern is so great that a group of veterinary educators came together to address the issue. This group of veterinary schools formed a consortium to identify the competencies necessary for professional veterinary success (Lewis, 2003). The group agreed the veterinary students entering school with a stronger foundation of “non-technical” skills, such as communication, are more likely to succeed (Lewis, 2003). At this time, a few veterinary schools have adopted basic communication training for the students, however the veterinarians currently in practice are not benefitting from this addition to the veterinary curricula.

XYZ recognized from its own experience with client concerns that much of the feedback on doctors (veterinarians) did not concern lack of technical competence, but rather communication skills, a gap which can also be seen in human medicine. “Most complaints about [human] doctors relate to poor communication, not clinical competence…” and “(a)ssessing and discriminating patient’s emotions could have an impact on the quality and accuracy of history taking and diagnosis” (Birks, 2007 p.370). As mentioned earlier the KPMG Mega Study The Brakke Study, in addition to the KPMG Mega Study, identifies that while veterinarians are adequately trained in technical skills, few possess the “non-technical” skills to connect with clients or manage a practice (Brown & Silverman, 1999; Cron, Slocum & Goodnight, Cron, 2000; Lewis, 2003). Having identified this skill gap in veterinarians, a thorough needs assessment will be conducted to identify the exact elements on which to focus the training course.
Needs assessment

Working with an external company, four different data collection tools have been identified: online survey, interviews, focus groups and direct observation. Each of these tools has different benefits and detriments, therefore being pooled to minimize the detriments while maximizing the benefits. It is also very important this needs assessment provides valid and reliable results, so that XYZ Animal Hospitals can make the best choice for the business.

The first tool identified is the online survey. The online survey is appealing for this needs assessment because it is an inexpensive, effective way to reach a large number of veterinarians in a relatively short period of time. Having over 2200 veterinarians across 40 different states, this wide reaching tool is ideal for gaining insight from a large group of people across many different sections. The downside of an online survey includes the limiting factor of a static instrument. The questions may be interpreted incorrectly, there is not an opportunity for follow up questions, it can have low response rates, and the online nature of the survey will bias our sample set as many of our more seasoned veterinarians are not comfortable using email or the internet (Sanders, 2008). By adding telephone and in-person interviews, we are able to address some of the challenges with online surveys.

Telephone and in-person interviews will be the next level of data collection. Interviews were identified as means for collecting data because they allow greater depth of knowledge to be shared with the interviewer. Since the interviewer is not static, he or she has the ability to ask the veterinarian further questions about responses provided. The use of questions allows ideas and understandings to be further explored allowing the interviewer to provide greater depth to the initial answers. The downside to interviews is their consumption of time. The data from
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Interviews must be synthesized and corroborated with other interviews or one of the other data collection methods. In order to improve data validity and reliability the interviewer must be well trained and experienced at collecting the information as well as the data analysis personnel must also be well schooled in combing through the data to identify themes.

Focus groups are the third form of data collection used to determine the skill gaps in veterinarians. Focus groups allow participants to build on each others’ ideas often times creating a synergistic feeling and great ideas that would not otherwise be uncovered. As was mentioned before, the facilitator must be skilled in managing a focus group as it can deteriorate into an unproductive complaint session if not managed appropriately. It is also important the groups be carefully selected watching to not place subordinates in the same group as their supervisor, creating an expectation of confidentiality, and assisting participants in understanding the reason for the group. When structured and facilitated appropriately, focus groups will provide great insight into the thoughts from our doctors.

Our final means for gathering data for the “Exam Room Communication” needs assessment is observation. Observation is an important component in our needs assessment as many of the doctor-client interactions only happen behind closed doors. Only through observation can a third party truly see how a veterinarian interacts with his/her clients and any performance barriers that may inadvertently exist. The obvious downsides to observation are the impact the observer has on the performance of the veterinarian, the amount of time and cost involved and the massive data analysis that must follow observations (Sanders, 2008). Knowing all of these challenges, a matrix of data collection methods will be created to minimize the downsides of each individual method, maximize the benefits of each method and validate the information gathered.
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The data gathered through this extensive needs assessment will be the first thorough empirical study of the skill gap in practicing veterinarians. Whether the data shows that the skills needed for veterinary success are trainable behaviors or simply personality factors, the benefits of uncovering this information will be revolutionizing for the small animal health industry. Second only to gathering the data for this initiative, the design of the course will be challenging.

Design methodology

Based on the results of the needs analysis, the goal of the design of “Exam Room Communication” is to create a format that will most effectively deliver the skill training needed. It is likely that a blended learning approach will be used. Instructor lead training will maximize the benefit of human interaction through role play and simulation as well as the visibility of non-verbal communication. Online information distribution will be used to disseminate foundational reading prior to the instructor lead session. After completion of training, online collaboration spaces will allow small groups of doctors to share video recordings of exam room performance, so the group can provide ongoing feedback to each other, keeping the learning alive.

The only assignments made during this course will be the follow-on learning as mentioned above. Doctors will be divided into small groups and required to meet virtually on a monthly basis, to share how they have applied the learning in their practice. These sessions will be structured with a mentor doctor that will serve to add structure to these meetings. During each session one doctor will be asked to share his/her experience using communication skills either through a verbal story or an uploaded video snippet. The sharing doctor will be asked to address what he or she learned from that particular client interaction and what they can apply to
future client engagements. After the doctor has presented his/her scenario for 20 minutes, the floor will be opened for others to share what they saw or heard during the doctor’s statement. All participants will be instructed to only provide feedback to the sharing doctor if it is requested; otherwise the group will speak on what they learned from the case presented or what they have learned in their own practice of communication skills in their hospital. These small group meetings will be a required assignment, however as this is a professional environment, no grade will be provided. In an effort to convey the importance of these interactions, participation will be included as a component of the doctors’ annual performance evaluation.

Development

Development of the training both instructor lead and online will be outsourced. It is critical that presentation of this training be as engaging and professional as possible to deliver the value proposition for this initiative by XYZ. While actual development will be monitored and reviewed closely by a team of XYZ executives, regional medical directors and XYZ doctors, the process will be completed by a company that has demonstrated success in the past on these types of initiatives within other large organizations.

Evaluations

“Exam Room Communication” will be an ongoing training initiative beyond initial roll out, so it is important that as feedback is received the course is adjusted to reflect the needs of the group. Evaluations will be conducted at the completion of each segment of the training i.e. after the online pre-training, the instructor lead segment, and at a preset number of small group meetings. Each of these situations will provide us with a level one, reaction evaluation allowing us to fine tune the presentation of the material (Kirkpatrick, 2008).
The follow-on small group interactions will provide us with an informal level two evaluation (Kirkpatrick, 2008). The discussion within these groups will provide insight into the learning that has been carried back into the hospitals and what is being put into practice.

The final level of evaluation to be conducted on “Exam Room Communication” will be a level three/four evaluation thus looking for a change in behavior through business metrics/results (Kirkpatrick, 2008). This final level of evaluation will be conducted through annual performance evaluations and monitoring of business metrics. Performance reviews include measurements on client relationships and retention, which a change in behavior should be effected by the “Exam Room Communication” course. Additional metrics to be observed include average transaction charge and client churn. The average transaction charge is expected to increase for each doctor. Meanwhile, client turnover should decrease over the measured timeframe. These two evaluation levels are combined, because they will not be formally measured, but rather casually monitored.

Financial issues

XYZ Animal Hospitals will independently fund this training initiative. The only investment expected on the part of participants is their commitment, dedication and time. XYZ feels that the value of this program will bring an increase in revenues and therefore is a good investment in the veterinarians in the XYZ organization.

Implementation issues

Implementation of this blended learning course will present many challenges. The XYZ internal learning management system will be used to distribute the pre-training materials, whatever they are deemed to be. Meanwhile, the instructor lead training will be done live in
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central locations across the country. With over 2,000 doctors, roughly 120 instructor lead classes will need to occur in order to accommodate a student/instructor ratio of 1:20, which will allow for more interaction. A team of instructors made up of professional facilitators coupled with experienced mentor doctors will attend a train the trainer session to equip them with the basic material presentation to be done across the country. Periodic conference calls will be conducted to share experiences in the classroom and make any needed adjustments to the course materials. Depending on the number of training teams created, the full national roll out will likely last between two and three months. The combination of professional facilitators along with experienced veterinarians both attending train the trainer together with the ongoing conference calls will allow the full roll out to happen in as smooth a manner as possible.

The follow-on small groups will be facilitated by some of the mentor veterinarians. Each of these mentors will be asked to submit a minimal report on the attendance and general discussion of the group he or she mentors. This is not an effort to monitor individual doctor performance, but rather the themes that are being carried from the training into discussions after the fact and will assist with level two evaluations as mentioned earlier. The mentor veterinarians will be asked to participate in ongoing periodic phone conferences to ensure that the direction of the follow-on learning is appropriate.

After the national roll out of “Exam Room Communications,” the course will continuously be offered at various locations across the country to accommodate new veterinarians as they join the XYZ family. The frequency will be determined by the level of veterinary turnover.
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Conclusion

“Exam Room Communication” will attempt to be the first course of its kind in the small animal health industry. While communication skills have long been hypothesized as being the primary skill gap for practicing veterinarians, this has never been empirically proven. The development of this course will include an in depth need assessment that will identify the trainable skills that exist between outstanding doctors and struggling doctors. The design of the training will play to the distributed environment that exists in XYZ while also meeting the learning needs of the veterinarians by combining the power of online learning for the distributed nature of the company, while also delivering multiple live instructor lead sessions to deliver interactive communication learning. Formal evaluation of the course will allow XYZ to determine the business value of the training; however, the immeasurable benefits of this training include increasing level of quality medicine doctors will be able to practice and the greater care our pets will receive, if they are better able to connect and relate to the client. Which for those of us that have pets in our lives, as MasterCard would say, “is priceless.”
References


Critical Evaluation of Multimedia Courseware

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Although multimedia is not a new concept in the field of educational technology, its meaning has changed radically in the last two decades. Traditionally, the term multimedia would refer to “the use of several technologies during a course.” Currently, however, it refers to “a complex system integrating various technologies managed by the computer toward certain instructional goals.” It means purposeful integration of visual, auditory, and textual messages. The shift in the new definition is on integration rather than separate uses of various technologies.

The success of multimedia technologies in education depends largely on software used. If software is designed according to principles of effective instruction, learning is successfully facilitated. If software is not effective, on the other hand, the technology itself does not bring any success. This means that multimedia software should be critically evaluated before use in order to assess whether it can promote higher achievement and better attitudes.

There are several methodologies of software evaluation. These are checklist evaluation, expert review, case study, experimental comparison, and meta-analysis. There are also modified versions of these approaches. For example, traditional checklist method is revised and known as perspectives interaction method, media comparison method is revised under the name of pedagogical dimensions approach, simple case study is now known as enhanced case study, and several other methods are criticized and replaced with postmodern perspectives.

The purpose of this paper is to create a functional combination of critical evaluation methods for multimedia courseware. Toward this purpose, a number of methods have been analyzed for their individual comprehensiveness and strengthening compatibility with other methods. Results generally suggest that a congruent combination of multiple methods representing various educational orientations provide more reliable information about the appropriateness and quality of courseware than employing any well-known individual method of courseware evaluation.
Abstract

Preventing and Treating School Bullying: Understanding Teacher’s Role

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Bullying is becoming one of big issues in schools in Indonesia. Data from research done in bullying showed that most bullying cases happened in elementary education. This research focused on the role of teachers on preventing and treating school bullying cases at schools. Thirty one teachers in a school were trained in "Guru Peduli" training. This training aimed to improve teachers' awareness, knowledge, and skills in preventing and reducing bullying cases. The teachers filled out questionnaires on bullying to measure their knowledge, behavior and attitude scales. Questionnaire on bullying aimed to know into what extent the teachers understand how much they understand what bullying is. The questionnaire on attitude and behavior scales on bullying aimed to get teachers' responds towards bullying cases at schools. The data showed that bullying knowledge and attitude and behavior scales means increased after the training. There was an observation done to the school's students after the training. The data obtained from the observation showed that the number of bullying cases was decreasing significantly after the training.

Keywords: bullying, teacher’s knowledge, teacher’s attitude and behavior

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6. Abstract:

Task-based language teaching has been reported as an effective way of promoting interaction between learners in language classrooms in recent years, with an increasing amount of research appearing that incorporates technology to facilitate these tasks. While much of this research has focused on the positive aspects of these interactions, there is evidence that problems also occur, such as conflicts between group members during collaborative work (Jeon-Ellis, Debski and Wigglesworth 2005) and a general lack of structure (Debski 2000; Lynch 2000; Toyoda 2000). The current study reports on one such case, where the task outcomes fell far short of the level expected by both the teacher and researcher. This paper attempts to identify the factors that worked against the successful achievement of two collaborative tasks: message exchanges through a bulletin board system (BBS) with Japanese students, and production of websites in Japanese based on the BBS messages, which were assigned to Year 10 Australian students learning Japanese in two Computer-Assisted Language Learning (CALL) classes. Audio recordings of on-task talk, BBS messages, and student websites were analysed to see if any clues regarding the unsuccessful task outcomes could be found. The factors that influenced the learners’ task performance were examined from four perspectives; 1) the tasks, 2) teacher attributes, 3) learner attributes, and 4) the learning environment. In the first category, the tasks, the communication task and the web task were looked at to see if the learners were clearly instructed and the levels of the tasks were appropriate for the learners. In teacher attributes, characteristics of teachers’ attitudes, assistance and computer skills were examined. In learner attributes, task productivity (both the BBS messages and learner web pages) and computer skills were analysed to see if there were patterns or characteristics in unsuccessful output. The learning environment included analyses of the computer hardware and software, availability of technical support, time constraints, and other environmental or circumstantial factors to see how they affected learner performance.

The results indicated that there were several factors that limited learners’ successful task outcomes, including a lack of technical support, explicitness and frequency of task instructions, an inaccurate assessment of the learning environment, a lack of teacher motivation and expertise in CALL, failure by the learners to actively engage in the tasks, learners’ limited computer skills, and features inherent to the mode of interaction. These issues are discussed with regard to the creation of tasks that are conducive to active learner engagement.
References


This report is being submitted to the Hawaii International Conference On Education. This report documents an action research innovation in teaching. The Nova Scotia Community College piloted the program from October 2008 until June 2010, the following comes from the interim report. More details will be available prior to the presentation date as the final report on the pilot will be completed.

1. Title: LINKING ADULT LEARNING TO EMPLOYMENT: THE NOVA SCOTIA COMMUNITY COLLEGE LINK PROGRAM
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The Link Program: Connecting Adult Learning Program to the Labour Market

Description:
The Adult Learning Program at Nova Scotia Community College provides adult learners with a High School Graduation Diploma. The Link Program was designed to create a direct link from the Adult Learning Program (ALP) to participation in the labour market. Connecting ALP, post-secondary programs and workplace experience will create a seamless program leading to employment.

Retention is a significant issue within all adult-based programming. One of the many reasons is that learners do not see the link between their secondary (high school) programs, their post-secondary (core) programs, and their employment goals. Often adults enter programs uncertain of their final destinations. During times of difficulty and stress, the lack of long-term employment goals exacerbates this uncertainty making programming exiting more likely.

The Link Program creates a pathway from out of school to High School to Post-Secondary (Continuing Care Certificate) to a Career. The program uses a blended learning cohort model and combines what is traditional three years of programming into 2 years.

Essential program components:
· Dual credit program options: Dual crediting allows the learner to apply learning bundled as a credit to two programs. In the Link Program it was significant that the courses from the Continuing Care Assistant Program could be applied as electives to meet the required credit hours for the Nova Scotia High School Graduation Diploma for Adults.
Prior learning assessment and recognition: Learners were assessed prior to entering the program and any prior learning was credited towards the program. Nova Scotia Department of Education houses a database for credit equivalency that was access in this process.

Student support: The learners in this program had access to a counselor who met with them regularly regarding fit, progress, career aspirations, financial management, wellness and goal/career planning. They also benefitted from experienced faculty, the support of a program co-ordinator, disability services and accommodations, tutoring and a student/employer mentorship program.

Project-based, workplace-oriented credits: The curriculum in both programs was reviewed and areas identified for project-based instruction and connection to workplace skills and realities.

Work experience: The learners were exposed to the workplace within the first eight weeks of the program. This exposure continued throughout the program cumulating in a five week work placement.

Targeted Audience:

The Link Program targeted employment insurance and income assistance recipients who had completed at least grade 10 and who had the desire and capability to complete a long-term career plan consistent with the needs of the Nova Scotia labour market (e.g., Continuing Care Assistant).

The program was offered in three rural campuses where there was a need for Continuing Care Assistants: Truro Campus (Truro Campus), Annapolis Valley Campus (Middleton NS), Marconi Campus (Sydney, Cape Breton). Each location had 20 potential seats.

In October of 2008 the enrollment in the program was:
Annapolis Valley Campus - 20
Marconi Campus - 13
Truro Campus - 23

To be eligible for the program participants needed to meet the following criteria:
• 19 years of age or older
• Out of school at least one year
• No high school diploma
• Completed at least grade 10 or ALP Level III or equivalent (i.e. GED)
• Clean criminal record
• Child abuse registry check will be required for work placement and employment
• Updated immunizations, including Hepatitis B
• Proof of English language competency
• Employment insurance and/or income assistance recipient (some exceptions may apply)
Participants also signed a statement of Understanding that reinforced the career requirements of Continuing Care Assistants. The statement of understanding included conditions such as:
• Ability to work all shifts – evenings, weekends, holidays and overnights
• Ability to meet the physically demanding CCA working conditions
• Driver’s license and access to a vehicle is required.
• Willingness to sign one-year Return of Service Agreement with an employer

Benefits:

Dual-crediting and applied learning will be the foundations of this program. Learners will complete compulsory credits toward their high school diplomas and will use credits earned in core programming as electives. This will significantly reduce the number of courses required and the length of time spent completing the educational component (for some, this may be up to one year of full-time study). Programming elements will be connected so that students understand the link between what they are learning and its practical work-related application. Prior learning assessment and recognition practices will be embedded to ensure learners are not repeating outcomes that they have mastered. Upon graduation, learners will receive their high school diplomas and their post-secondary program diplomas.

Completing The Link Program means students will have acquired the credentials and skills required to secure long-term employment in the Nova Scotian workforce.

Partnerships:

The Nova Scotia School for Adult Learning worked with the Nova Scotia Community College to create and deliver The Link Program. Department of Community Services was involved in the identification and support of program candidates. Employers provided one year return-of-service agreements, orientation, class visits, student mentorship, job shadowing and work placement opportunities.

Outcomes

a) Long-term

• Increased both the participation of those who are not currently in the labour force and providing opportunities for those who may be participating but who are under skilled will assist with the impending negative demographic shifts.

• Those with higher literacy skills require fewer services from both the health and social services systems.

b) Short-term
Increased access and opportunities for individual Nova Scotians to quality programs and services.

Created higher skilled pool of labour.

Increased number of Nova Scotians with high school diploma through the Nova Scotia High School Graduation Diploma for Adults.

31 graduates with both their High School Graduation Diploma for Adults and their Continuing Care Assistant Certificate.

12 learners moved on to other educational programs (ALP, Adult High School).

98% of learners passed the Provincial on the first attempt.

100% of learners had two or more job offers prior to Graduation.

Faculty reported their level of engagement and satisfaction with the program as the highest they have experienced in their career (average years of experience >25).

Employers reported their highest level of satisfaction with Link Program learners’ work placements.

Learners’ reported a significant increase in confidence and life satisfaction.

Lessons Learned

Specific to Link
Although we are still documenting the numerous lessons learned some stand out very clearly based on stakeholder feedback:

- Ensure a program coordinator has industry knowledge and is hired early the process
- Hold advisement meetings with each learner prior to acceptance
- Connect learners with the employers early and often
- Conduct professional development for the sponsoring agencies early
- Add a transition period at the beginning of the program to ease the learners into the culture and workload
- Ensure that the curriculum outcomes are achieved with consistent workplace applications
- Focus on employability skills throughout the program
- Embed service learning projects throughout the experience
- Ensure student support is available for both academic and non-academic needs
General

- Cohort learning enhanced learner success and satisfaction
- Learning connected to career goals and employment was a strong motivator for learners
- Employer mentors benefitted both the employer and the learner
- Team teaching model or two instructors was optimal
Validities of the Signed and Unsigned Lecture Questionnaires using the Item Response Theory

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Abstract

Teachers often raise a question that the lecture questionnaires are necessary or not. In this paper, we first show the recent statistical analysis for the official unsigned questionnaire evaluation results took in our faculty. We have found that, 1) the evaluation scores of lectures by students have been proportionally risen up to years, which means that lectures have been improved, 2) to take a look at the distribution of the evaluation scores as well as the mean value is crucial. These two indicate that taking the questionnaires enhances the teaching skills of teachers.

In addition to the official questionnaires, the author has been taking the Web-based signed lecture questionnaires to three mathematics subjects for more than five years. Using these stocked data, we have, next, analyzed the relationship between the signed and unsigned lecture questionnaires, and have found that, 3) since there are few synchronized relationships between the signed and unsigned evaluation scores, we should be cautious of using one of either signed or unsigned questionnaires, and 4) detailed analysis for the questionnaires is also important to grasp the student lecture comprehension and satisfaction, via the item response theory to investigate whether the official lecture questionnaires in the department and the Web-based signed lecture questionnaires are reliable or not; the questionnaires are reliable.

Keywords: lecture questionnaire, evaluation, item response theory (IRT), signed form (registered form), unsigned form (bearer form), Web-based questionnaire.

1 Introduction

Although the official faculty development systems (FD systems) are mandatory since 2008 in Japan by the suggestion of MEXT (Ministry of Education, Culture, Sports, Science and Technology), our faculty has been continuing our own FD activities since 2002. The main subject is the lecture questionnaires. Until 2004, the results of the questionnaires are sent to each teacher, and the whole statistics are closed. From the second semester in 2004, we have changed the system; each result became open to teachers, students, and staffs.

At the beginning, we tackled the FD activities aggressively. However, as the day passes, teachers often raise a question that the lecture questionnaires are still necessary or not. I also began to use the minutes paper [11], and have been using the Web-based lecture questionnaires since 2002. I feel vaguely that continuing such an activity is still important [2]. Thus, let me investigate here what the continuing FD activities brought us.
First, we show the recent statistical analysis for the official unsigned (bearer) lecture questionnaires took in our faculty. All the statistics regarding the questionnaires are being processed in open. The basic statistical tools are such as the correlation to know the relationship between the unsigned official lecture questionnaires and Web-based signed (registered) lecture questionnaires.

Next, we analyze the relationship between the signed and unsigned lecture questionnaires in detail using the item response theory. That is, we investigate whether the official lecture questionnaires in the department and the Web-based signed lecture questionnaires are reliable or not. This analysis will show that it is important to grasp the student lecture comprehension and satisfaction.

2 Trend of Faculty Official Unsigned Lecture Questionnaires

In our faculty, we have two semesters, and more than 350 lectures are opened in a semester. The number of students is about 1,500 from freshman to senior. All the teachers are mandatory to carry out the lecture questionnaires at the end of the lectures. Students mark 2, 4, 6, 8, 10 scores as the evaluation points; the higher, the better. The class sizes are from 10 students to 100 students.

Figure 1 shows the trend of the mean values of the evaluation points since 2004. The results for the first and second semesters are separately dealt with because the types of classes are a bit different from each other. We can see that the evaluation scores of lectures by students have been proportionally risen up to years, which means that lectures have been improved. I believe that the decision of score opening to the public made this progress as well as the teacher’s effort.

3 Trend of Web-based Lecture Questionnaires

Since 2003, the author has been using the Web-based questionnaires at each lecture time; thus, 15 times answers are obtained to each student. The questions are that 1) to urge review of the lecture, I ask what the point was, 2) to know how attractive the lecture, I ask what the discovery was, 3) to know what extent students understand the lecture, I ask what the questions were, 4) to find the technical skill for lectures, I ask what the improvements were. In addition, the comprehension points and the overall satisfactory points are marked by 1 - 10 scores; the higher, the better.

Figure 2 shows a trend of the evaluation points to Subject A (Statistics and Data Analysis); scores are understanding points and the overall points. We can see that 1) the overall points are a bit larger than the understanding points, 2) there are high correlations (correlation coefficient value is 0.83) between the overall points and the understanding points, 3) the points have been risen up to years similarly to the official unsigned results. This also shows that continuing the questionnaires will
improve the lecture skills.

Figure 2: Trend of the mean evaluation points of a signed lecture questionnaire result.

4 Signed and Unsigned Web-based Lecture Questionnaires

The official questionnaires are carried out in unsigned, on the contrary, the Web-based questionnaires are carried out in signed. Are there any differences between the two answers? Although we cannot know the differences to each student, the mean values can be compared with each other. Figure 3 shows the differences between the two evaluation scores to Subjects A, B (Mathematical Computation), and C (Probability Theory). If there is a strong relationship between the two evaluation scores, we can use one of either signed or unsigned questionnaires. However, this might be in vain. Any synchronized indications are not observed. The unsigned questionnaires are carried out only one time at the final lecture time, and the Web-based signed questionnaires are carried out at every lecture time. Did this cause the difference? Figure 4 indicates a denial to this conjecture. The figure shows the evaluation scores to each lecture time; fluctuations due to the lecture time are not observed. Thus, we should be cautious of using one of either signed or unsigned questionnaires. We will later discuss the detailed analysis for the unsigned Web-based lecture questionnaires using the item response theory (IRT).

5 Distribution of the Evaluation Scores

We can roughly grasp the trend of evaluation by looking at the mean values of scores for questionnaires. However, we should be cautious; mean value 5 is obtained when all the students give point 5 every lecture time, and also obtained when half the students give point 1 at every lecture time and the rest of half gives point 9 at every lecture time; the evaluation distribution reveals the details for the evaluation. Figure 5 shows typical cases for evaluation distribution.

Figure 6 shows an actual distribution of Subject B. This subject starts in 2005. First, the teacher delivered the high level to students; in 2006, he changed the lecture level much easier; in 2007, he could find the appropriate lecture level. To know the distribution of the evaluation scores is important.
Analysis of Lecture Questionnaires using the Item Response Theory

So far, we have investigated the results of the evaluation scores for questionnaires using the basic statistical methods believing that the evaluation scores are true. However, some students may give scores 5 every time, and some may carefully give appropriate scores. We may not believe in the scores for questionnaire as they are. Thus, we have tried to analyze the scores as accurate as possible using the item response theory (IRT) which will be shown in appendix.

Figure 4: Evaluation scores to each lecture time.

Figure 7 on the left shows the score data matrix of Subject A in 2006; column corresponds to lecturing date (lecture time) and line corresponds to student id; dark purple regions mean the absences. We can see that 1) some students give high points at every lecture and some low. With a small number of exceptions, we do not observe the drastic fluctuation during the series of lectures. On the right in the figure, the IRT analysis results are given. After obtaining the IRT parameters of problem difficulties and student abilities, we have rebuilt the score matrix using the success (evaluation) probability (1) to every cell in the matrix. Looking at the two figures, we can see that 1) there is a similarity between the two matrix, 2) the unreliable evaluation fluctuations seem to be relaxed, 3) each student evaluation stands out sharply, 4) there seems little fluctuations among lecture times. Therefore, we may believe in the true scores.

The parameters of problem difficulties are seen in Figure 8 where the item characteristics curves to each lecture day are shown; the discrimination parameters are all small and similar to each other. Then, we can proceed to use this result with confidence; that is the results of the lecture questionnaires are reliable.

Figure 9 shows the re-evaluated trend for
overall scores using the IRT from 2003 to 2008 fiscal years. Comparing this figure with Figure 2, we can find the sharpness to Figure 9. That is, it is recommended to use the IRT re-evaluation together rather than to use the basic statistics alone.

7 Concluding Remarks

In this paper, firstly, we have shown the recent statistical analysis results for the official unsigned lecture questionnaire evaluation results took in our faculty, where we have found that 1) the evaluation scores of lectures by students have been risen up to years, which means that lectures have been improved. Making this progress is due to the decision of score opening to the public. We have, next, investigated the features for the signed and unsigned questionnaires. We have found the following: 2) continuing the questionnaires will improve the lecture skills; 3) since there are few synchronized relationships between the signed and unsigned evaluation scores, we should be cautious of using one of either signed or unsigned questionnaires; 4) it is important to know the distribution for the evaluation scores. Lastly, we have analyzed the questionnaire evaluation results using the item response theory, where 5) the results of the lecture questionnaires are found to be reliable.

The author appreciates Mr. Sakumura for his cooperation to this study.

8 Appendix: Item Response Theory

For effective evaluation of students’ abilities, the item response theory (IRT) [5, 6, 9, 1] can be used, and this gives the students’ abilities accurately in addition to the problem difficulty. Adaptive e-learning systems [10] and test methods appropriately used may enhance this feature. We have introduced a student self-learning system embedded [15] in the e-learning system, via Moodle [12], and a new adaptive test method is also proposed recently [7] to perform the optimal test. Moreover, we have introduced a Web-based students’ evalua-
In the IRT, we assume a student $i$ having ability $\theta_i$ takes a problem $j$. If the student is successful in giving the correct answer with probability $P$, such that
\[ P_j(\theta_i; a_j, b_j) = \frac{1}{1 + \exp(-1.7a_j(\theta_i - b_j))}, \]
the likelihood for all the students, $i = 1, 2, \ldots, N$, and all the items, $j = 1, 2, \ldots, n$, will become
\[ L = \prod_{i=1}^{N} \prod_{j=1}^{n} P_j(\theta_i; a_j, b_j)^{\delta_{i,j}} \times (1 - P_j(\theta_i; a_j, b_j))^{1-\delta_{i,j}}, \]
where $\delta_{i,j}$ denotes the indicator function such that $\delta = 1$ for success and $\delta = 0$ for failure; $a_j$ and $b_j$ are constants in the logistic function, and they are called the discrimination parameter and the difficulty parameter, respectively; the larger the value of $a_j$, the more discriminating the item is, and the larger the value of $b_j$, the more difficult the item is. In a statistical sense in common, $P_j$ in Equation (1) is a logistic probability distribution function with unknown parameters $a_j$ and $b_j$; the random variable is $\theta_i$. However, $a_j$, $b_j$, and $\theta_i$ are all unknown here; see Figure 10.

By maximizing $L$ in Equation (2), the maximum likelihood estimates may be obtained. However, it is not easy to obtain the item parameters and the students’ abilities together. There are $2 \times n + N$ unknown parameters to be estimated. Therefore, the item parameters are first estimated by using the marginal likelihood function by eliminating the students’ abilities such as
\[ L(U|a, b) = \prod_{i=1}^{N} \left[ \int_{-\infty}^{\infty} g(\theta) \prod_{j=1}^{n} L(u_{ij}|a_j, b_j) d\theta \right], \]
where $g(\theta)$ denotes the ability common to all
Figure 9: An example of the re-evaluated trend using the IRT from 2003 to 2008 fiscal years.

the students (usually a standard normal distribution) and $U$ denotes all the patterns of $u_{ij}$, taking the value of 0 and 1. The EM algorithm [4] is usually used in such a case [1]. Then, the students’ abilities are obtained by maximizing the corresponding likelihood function. To circumvent the ill conditions so that all the items are correctly answered or incorrectly answered, the Bayes technique is applied [1].

To the scores of the lecture questionnaires, we cannot use Equation (2) as it is; that is, we have assumed that $\delta_{i,j} = 0, 1$, the discrete value. Thus, we have modified to allow the continuous value to $\delta_{i,j}$ such as $0 \leq \delta_{i,j} \leq 1$. For convenience, the vacant cells are occupied in advance with the mean observed values to each student.

Figure 10: Item response theory estimation procedure.

References


Leadership Style in Higher Education During Time of Fiscal Distress

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LEADERSHIP STYLE IN HIGHER EDUCATION

Abstract

This paper explores leadership characteristics of individuals in higher education during a time of fiscal crisis. The implications of this review of the literature and the research discussed looks at the commonalities, trends, purpose, and a generalized view of future leadership characteristics as it pertains to the context of application in crisis. This paper examines (1) leadership in higher education during a time of fiscal crisis, (2) crisis management/leadership styles, and (3) leadership in higher education using California as a case study. The paper concludes with the overarching idea that as long as leaders within higher education uphold effective crisis management traits like strong communication skills, goal-setting, and establish strong relationships, the institution will triumph over the challenges presented during a time of economic instability.

Keywords: higher education, leadership style, fiscal crisis
LEADERSHIP STYLE IN HIGHER EDUCATION

“No generalizations about higher education [leadership] are true except this one: No generalization about higher education is true, since each campus has its own heritage, its own setting, its own course of future development.”

(Kerr, et al, 1994, pp. 41)

All over the news, the topic of conversations with neighbors, and concerns in the workplace, all originate with the uncertainty of the end date to the current economic recession. While people are screaming “jobs, jobs, jobs,” the question of preserving the institution of higher education and guaranteeing an educated workforce is also of great concern. Education in the United States is the driving factor in generating workers for the future in addition to being a huge provider of jobs itself. In 2010, there was the largest fall in jobs in the education sector since the Department of Labor started maintaining records in the 1950s; a loss of 121,000 jobs in public and private elementary, secondary and technical school and higher education (Mandel & LeVine, 2009).

This literature review will look at the traits of leaders within higher education during a time of economic distress. This paper will examine (1) leadership in higher education during a time of fiscal crisis, (2) crisis management/leadership styles, and (3) leadership in higher education using California as a case study.

Why study leaders in higher education during a time of fiscal crisis?

Similar to many other sectors of the United States economy, the institution of higher education has undergone and will continue to undergo great strain as a result of the struggling economy. Typically, in times of fiscal crisis, many patrons go back to school in pursuit of a higher education. However, unlike most businesses, which strive for an increase in demand, the institution of higher education has limited, and now scarce,
resources. When the economy slows down, the amount of funds from taxes decreases because the sale of goods declines in addition to the reduction of property values. Public higher education depends on government funding, specifically funds collected through taxation. With the decrease of funding, public higher education is faced with the challenge of sustaining the institution with fewer resources.

According to the National Bureau of Economic Research (NBER, 2008), a private, nonprofit and nonpartisan research firm founded in 1920, whose main focus is to explain the workings of the economy, the United States entered into its current recession in December 2007. As defined by NBER, a recession is a decrease in economic activity across the economy, which lasts more than a few months. Recession indicators can include real income, manufacturing and wholesale-retail trade sales; however, domestic production (GDP) and employment are the primary gauges (National Bureau of Economic Research, 2008). During the first 10 months of the recession, 1.2 million employers cut payrolls along with the downturn in the housing market, leading to one of the more severe recessions since the Great Depression of the 1930s (Isidore, 2008).

During a time of fiscal deficit, the public institution of higher education is typically undergoes great pressure to make change. However, the product they produce, educated citizens, is of greater value to society than ever before. Dealing with diminishing funds caused by a decrease in property taxes, cuts in state and federal funding, attenuating endowments, and limited educational donations, schools are forced to maintain the same amount of service with fewer resources. Some colleges have undergone such harsh deficits, forcing them to pull from reserves. No prediction of change or relief appears in sight for the recent future (Masterson, 2008).
While primary education is struggling to provide children with the building blocks they need to thrive as adults, pupils considering higher education are seeing their options dwindle before their eyes. According to a poll conducted by the College Board and the Art and Science Group, from a random sample of students who registered for the Scholastic Aptitude Test (SAT), one in six college-bound students had changed their future higher educational plans. Due to the recession, 41% of the 971 polled respondents expressed interest in attending a public university or college close to home, while 15% said they considered attending a community college (Supiano, 2009). While students are looking for financial alternatives as a means to save money, only four percent stated the recession directed them to consider avoiding college all together (Supiano, 2009).

Periods of economic instability are by no means a new phenomena to the institution of higher education. Aside from the Depression of the 1930’s, the United States has undergone a period of economic recession approximately every 10 years; near the end of each decade (Breneman, 2008). Now, in the current recession, which started in 2007, it becomes imperative to review the past in order to adapt and prepare for the future.

In the stagflation of the 1970s, the costs to run a college or university exceeded the revenues generated from tuition fees. However, enrollment increased by more than three million from 1979-1980 as students found themselves in an unaffordable or dreary labor market. The peek in student enrollment tripled the amount of college revenues between 1970-1980 (Breneman, 2008). Advocates like the Carnegie Commission and the Committee for Economic Development lobbied for a cost of public higher education shift and placement of the financial burden to the student, rather than the taxpayer. As a result,
the federal government passed the 1972 Amendments to the Higher Education Act, thus creating the Pell Grant program as a means to expand federal loans to students to assist in lessoning the burdens of increased fees (Breneman, 2008).

With the election of President Ronald Regan and his emphasis on less government, the trend to pass the burden of higher education onto the student rather than the taxpayer flourished. As state appropriations for higher education decreased, the cost of tuition continued to increase at public colleges. However, college enrollments were stable because the baby-boom generation began to age and the population of 18-year-olds began to decline, which lasted until the mid 1990s (Breneman, 2008). During the 1980s, a leader within the realm of higher education was fortunate because enrollments remained strong, no student revolts came about and there were no OPEC oil issues; in essence no major crises occurred to effect higher education (Kerr et al., 1994). While crisis management was not a huge focus during this decade, as the population evolved, the institution of higher education underwent a paradigm shift and started focusing attention on the teaching and learning of adult students.

Unlike previous recessions, which greatly targeted blue-collar employees, the fiscal volatility of the ‘90s greatly impacted the lives of many white-collar workers, who found themselves unemployed. As unemployment increased, the taxes collected by the state began to decrease because of the economic lull, and later government spending towards higher education fell. In order to accommodate the challenging times, colleges and universities started to increase class size, eliminate courses, not fill open faculty positions and even initiated another increase in the cost of tuition (Breneman, 2008). The federal government developed programs like the tax-preferred college-saving plans and
tax credits for tuition, to assist middle to high-income families and was followed with the 1992 Amendments to the Higher Education act to expand loan availability (Breneman, 2008).

In looking back at the recession of the 1990s, three valuable lessons were learned from this turbulent time. First, when revenues are less than anticipated, higher education institutions will undergo a greater percentage loss than their K-12 counterparts. Next, when states cut higher education funds, the financial burden is likely to shift onto the student and parent. The final trend learned from the 1990s was that during the time of a recession, states are not likely to increase the investment in financial aid programs (Callan, 2002).

As the economic climate began to clear up in the 2000s, state appropriations neglected to provide additional funds to higher education as a means to keep up with the inflating demands of Medicaid, thus triggering another increase in tuition costs (Breneman, 2008). However the demand for higher education was strong and colleges and universities underwent another hike in student enrollment (Breneman, 2008).

The current higher education system now experiences multiple-tuition hikes and ever diminishing funds. As a professor of economics at the University of Virginia, Breneman (2008) concluded that, “Contrary to popular view, colleges have proved to be adaptable and creative in their responses to changing economic circumstances. They have been particularly skillful at diversifying their sources of revenue. Whether colleges can find a source of support not already tapped is far from certain” (pp. A-112). In the midst of these trying economic times, the system of higher education must undergo the strength and talent of a leader equipped in leading during a time of crisis.
What is Crisis Management/Leadership?

Similar to the vast amount of definitions used to describe leadership, the specific title of “crisis leadership” is not much different. A working definition for this paper identifies crisis leadership as “the process of responding to a low-probability, high-impact situation by influencing others to overcome or take advantage of the situation, regardless of its cause, optimizing the effect, in a timely framework” (Pearson & Clair, 1998, pp. 60). A crisis could include, but is not limited to, economic challenges, actions from individuals, government influence, political transformation, natural disasters, and spread of disease (Shrivastava & Mitroff, 1987).

Going a step further, Klann (2003) explains crisis leadership as “a special case in which these specific tools of influence [communication, clarity of vision/values and caring] perform a critical role. In a crisis, timelines are more critical,” (pp. 12). However, being in a designated role of leadership does not necessarily make a leader qualified to handle a crisis situation, let alone the current fiscal crisis (Klann, 2003).

In his book Managing in Turbulent Times, Peter F. Drucker (1980) advises and cautions public institutions, who may believe their strategy is best because it aims at a ‘happy medium,’ that…. Most commonly an institution only profits during the extreme: when standards are set by a market leader or when a specialist supplies a specific product or service. Drucker supports his notion with the example of the success of small denominational colleges in the United States, which have found a niche, concentrated their resources, and offer a small campus with a “home”-like environment (Drucker, 1980).
Effective leaders in the time of a crisis have the ability to influence others and avoid using fear as a tactic. The three most influential tools for a leader to apply and positively affect one’s followers are: communication, clarity of vision and values and compassionate action towards one’s followers (Klann, 2003). Communication is essential, even in a non-crisis environment in that it confirms the vision and values of an organization. The leader’s ability to communicate includes one’s aptitude to articulate verbal and oral expressions, make eye contact, and not interrupt while others are speaking, as well as to reiterate the key points of the communication in order to confirm the understanding of the respondent (Klann, 2003). Ensuring an organization’s vision and values are clearly presented must be relayed by the leader, especially in a time of crisis. A leader must ensure the vision is interrelated with the values of the intuition in order to present a common goal and objective.

In agreement with Klann (2003), former president of Nassau Community College and author Sean Fanelli (1997), explains that in times of a crisis, a leader within the community college system must act efficiently and quickly while being able to “communicate, communicate and communicate. Communicate with the board, communicate with the college community, and communicate with the stakeholders” (pp. 65). An open relationship between the board of trustees and the president is necessary when pre-planning for a crisis. Although difficult because of its unexpected nature, pre-planning for a time of crisis will assist in lessening the impact of the crisis. Another term for a community college president could easily be “chief communicator,” because of his/her capacity and close relationship with the college. During both times of crisis and non-crisis, the president must uphold his/her leadership role and be the one who
communicates with the college, not the trustees who are frequently detached from the
day-to-day functions (Fanelli, 1997). If addressed appropriately, a crisis situation can
strengthen the relationship between the president and board of trustees to increase the
president’s ability to act as an authentic leader.

The last method Klann (2003) presents, to be applied by a leader during time of
crisis, is genuine interest and concern for others in the organization, also known as an
authentic leadership style. In order for affective communication to occur, a leader must
be empathetic: to imagine what it feels like to be on the receiving end. In having a
concern for the followers, a leader will meet the emotional needs of the people. Klann
claims, “When normal, emotionally healthy people are treated with respect, dignity,
approval, appreciation, attention, significance, value and trust they will generally respond
in kind” (2003, pp. 15). A leader’s authentic style will allow them the ability to sell the
vision and goals while leading the organization out of a situation of crisis.

In addition to Klann’s three key components and styles a leader should uphold in
time of crisis, there are leadership traits that can assist the leader as well as hinder their
ability to formulate a solution. A crisis is best managed when the leader takes charge and
executes greater authority than they would during times of non-crisis (Simone & Baker,
2003). In addition, leaders are to act in a confident and decisive fashion as a way to
increase their effectiveness (Yukl, 2002).

To avoid a crisis from escalating, there are four main response mechanisms a
leader can practice: dominance, hierarchical appeal, restructuring and negotiation
(Simone & Baker, 2003). Although dominance, through the application of fear, and
hierarchical appeal by forwarding issues to “the next” level of authority, may be effective
in some scenarios, for higher education in a time of crisis, restructuring and negotiation are more likely to have a positive impact. Restructuring is literally the concept of reorganization of the institution, whether it is through the merger of two departments, elimination of job positions or an alteration of hours (Simone & Baker, 2003).

The last mechanism, and most frequently used to prevent a negative occurrence from advancing into a crisis, is bargaining and negotiation (Atkinson, 1980). Bargaining is suggested for the leaders well versed in this skill because it does require practice in order to be effective. When financial resources decrease, either integrative or consensus bargaining should occur. Integrative bargaining happens when a solution is mitigated to benefit both parties, while consensus bargaining allows both parties to participate in the development of a solution (Atkinson, 1980; Simone & Baker, 2003).

In a time of crisis, when little compromise is attainable, very similar to the current environment with the limited amount of funds allocated to higher education, Daniel Goleman (2000) suggests a leader adopt an authoritative leadership style and support this style of leadership with affiliative and coaching leadership approaches in order to efficiently and effectively find a solution. Authoritative leaders organize followers and work towards a vision, communicate effectively, and generate confidence (Goleman, 2000). While authoritative leaders possess self-confidence, affiliative leader are better at communicating and mobilizing followers to join. Because crisis has no established end date, it is necessary for leaders to coach and grow new leaders for future occurrences. A coaching leadership style works to develop future teams and strives to improve performance (Goleman, 2000).
Leadership in Higher Education

Evolving from an institution consisting of one school, Harvard University, with nine students in 1640, to a system of over 18.2 million students enrolled in over 3,300 schools nationwide in 2009, the institution of higher education faces many challenges as it continues to mature (National Center for Education Statistics, 2009; Kerr, Gade, Kawaoka & Ebrary, 1994). As a result from the changes occurring in higher education a call for a new form of leadership is apparent in order to uphold the vital part that higher education plays in the United States. Colleges and universities must work through the current economic conditions as a means to sustain the U.S.’s possession of three-quarters of the world’s best universities (Kerr et al., 1994).

According to the evolving role of the president, Kerr (1994) presents three models addressing how president in higher education are viewed: “organized anarchy,” “faculty opinion,” and “presidents make a difference.” The first model, “organized anarchy,” explains that the role of the president is mainly important to the president him/herself. The function of the president is an ambiguous role, where the president often times does not know what he/she should be doing. While each presidential position comes with a job description, often time the day-to-day responsibilities encompass much more. In the second model, “faculty opinion,” the president is viewed by faculty as “autocratic” or “despotic.” This model is present when more than two-thirds of the faculty sees the president as doing an average or poor job in the role of leadership. The last model presented by Kerr, entitled “presidents make a difference,” is when the president upholds his/her role, takes on the most responsibility and provides the glue to hold the entire organization together (Kerr et al., 1994). In the publication of his book *On Leadership,*
John W. Gardner (1990) supports Kerr’s model of “presidents make a difference” (Kerr et al., 1994). Garner explains that the role of the leader is to help in selecting and developing goals and values, motivating followers, promoting unity through their influence of the followers. During a time of fiscal crisis, the leader must strive to demonstrate model three: “presidents make a difference” in order to lead the institution out of the debris.

Upholding Kerr’s notion that a generalization cannot be made regarding leadership in the institution of higher education, no one model fits all situations. However many modern theories suggest the use of authentic leadership be applied in the realm of education (Begley, 2001; Crippen & Wallin, 2008; Villani, 1999; Evans, 2000). Authentic leadership, being a rather new paradigm of leadership, is still in its formative phases and continues to maintain a high probability of undergoing continued change and evolution (Northouse, 2010). For use in this paper, authentic leadership, as defined by the developmental perspective of Avolio, states that this leadership style is “something that can be nurtured in a leader, rather than as a fixed trait. Authentic leadership develops in people over a lifetime and can be triggered by major life events, such as severe illness or a new career” (Avolio & Gardner, 2005, pp. 207). Authentic leadership is embedded in one’s strong ethics and is made up by four elements: self-awareness, personal moral perspective, balances process and transparency within a relationship (Avolio, Walumbwa, & Weber, 2009).

Using the theory of authentic leadership, Bill George developed a practical approach to the style of leadership looking at the characteristics, qualities and traits of a leader. George claims that an authentic leader possesses five basic characteristics: (1)
clear understanding of purpose, (2) strong values, (3) development of solid, trusting relationships, (4) practice self-discipline regarding one’s values and (5) zealous about one’s mission (2003). According to the theory, these characteristics must be upheld by today’s higher education leaders.

Specific Concerns

The economic challenges facing the higher education system have varying effects from institution to institution. The community college system has been viewed as the “workhorse” of higher education because it must respond to the needs of the specific community (Boggs, 2001). The primary role of leaders within the community college system is to provide vocational programs and workforce development, thus increasing the stakes in the push to transfer funding from the university level to the community colleges.

With the initial purpose of defending a civilized way of thought and to provide schooling of ministers, the role of universities has greatly evolved (Kerr et al., 1994). During a time of shrinking budgets, undergraduates at public colleges will bear the bulk of the pressure through higher tuition, larger classes, and less ability to communicate with tenured faculty (Lewin, 2009). States are now facing deficits totaling around $350-billion and higher education has and will see an additional decrease in funding allocations. The federal stimulus package of 2009 included approximately $40-billion intended to offset the cuts to education, however these funds did very little to actually offset deficits (Kelderman, 2009).

As governmental funding decreases, community colleges are now looking to external funding. Universities are turning to online education in an attempt to decrease the overhead of the college (Cejda & Leist, 2006). Meanwhile, distance education may
appear as a cheaper alternative, yet comes with the increased costs of training staff and the necessary upgrade of technology products.

To increase the weight of the floundering economy onto the college and university system, this sector of higher education may undergo even greater cuts. A *New York Times* article entitled “State Colleges Also Face Cuts in Ambitions,” presents the issue of transferring funds from the university system to the community college level (Lewin, 2009). The costs to run a community college are far less than the expenditures needed at the university level because there are no funds needed for research. While community colleges can run on smaller budgets, there has been an increase in the discussion of decreasing funding at the community college level in order to distribute more funding to public universities in California.

At the community college level, the most important qualities to be demonstrated by a president are adaptability, flexibility, and sound judgment (Pierce & Pedersen, 1997). Personal adaptability and the skill to work with an array of stakeholders, including students, parents, boards of trustees, government entities, as well as the community at large, is vital to the success of a president. In addition to a president’s adaptability, he or she must be flexible and mediate among the various entities involved at the community college level. The skill to bargain and negotiate is critical for a president in times of crisis as well as non-crisis (Simone & Baker, 2003; Pierce & Pedersen, 1997). Lastly, the hardest to achieve is the aptitude to listen to an eclectic range of issues, weigh the options, and finally make a strategic and sound decision. As community colleges find themselves in the current financial struggle, a president’s capability to make tough choices will determine which campuses will thrive and which ones will dwindle.
Similar to the preparations that would take place in response to the threat of an earthquake or flood, a college must prepare for a time of economic recession. Though the date a crisis may hit is unknown, a strong leader must be able to anticipate a time of disaster. According to Brian Kelly, author of “Colleges in the cross hairs: Consumers must be careful but also have more choices,” it was only a matter of time for the bursting of the educational bubble (2009). Higher education was one among many industries, like investment banks, condominium sales, and subprime mortgage lenders, to benefit during the past two decades (Kelly, 2009). Kelly explains that alumni giving was up while tuition was inflated much more than cost of living increases, thus leading to the “golden age of campus life” (2009). Instead of being an avid student of physics and understanding the concept of “what goes up, must come down,” colleges did not prepare themselves for the bubble burst and a recession expansion across industries.

As higher education continues to undergo a negative fiscal climate during the current recession, leadership is becoming very political (Gunter, 2001). Politics, the notion of who gets what, when and how, increases when resources become scarce. Potential leaders in the realm of higher education are being scouted from the political and business sectors, rather than from academic or administrative arenas (Appadurai, 2009). The university president’s role as a fundraiser to the campus is ever-increasing as private giving, and state and federal dollars shrink. College and university presidents from the business and political realm come into the position with a database of potential financial contributors. In addition, as the recession places pressure on the economy, business leaders see working in education as a stable sector of the economy, ensuring job security.
The “new” wave of leaders in higher education will prove to be beneficial as well as a liability to the institution. A president with a business or political background is predicated to better handle the media, create a positive relationship with the board of trustees and to master the social factors embedded in the role of leadership. Besides, a president with a business background will most likely stick to and uphold a performance-based model, which should be beneficial during a time of fiscal crisis, this might be costly to class sizes, the field of research and curriculum. Conversely, relationships with faculty, maintaining clarity of new educational practices and published research, and sustaining a genuine concern for the institution of higher education will likely suffer (Appadurai, 2009).

Despite the challenges posed to the level of higher education during a time of financial crisis, with the direction of a strong leader who has a vision for a positive future, the system can reorganize to be better than before. Never before has there been a better time to improve upon the institution of higher education.

Higher Education in California: A Case study

Receiving final approval by February 1960 from the Board of Regents, the California State Board of Education as well as the legislature, the original Master Plan for California’s Higher Education set out to accomplish four goals (University of California: Office of the President, 2009). The first objective is for the Master Plan is to create a system to uphold quality and allow access to higher education for all students. The second dimension set out to generate a cohesive and rational system to include universities and colleges in California. In doing so, colleges would be less likely to compete and work together in providing a universal system of higher education attractive
to all students. In correlation to the second mission, the plan established a framework for higher education and encouraged the three segments of higher education (University of California universities, State colleges and Community colleges) to reach excellence within their respective realms. The mission of the University of California schools is to become the state’s primary research institutions; meanwhile, state schools are to provide undergraduate education and graduate research for students in pursuit of a higher degree. The last piece to the higher education equation is community colleges, which are to provide academic and vocational instruction, allowing students to complete lower division courses or obtain a certificate or credential. Finally, the Master Plan recognizes the critical role of private and independent colleges, thus creating a continuum of higher educational opportunities in California (University of California: Office of the President, 2009).

The term “social contract,” coined by Rousseau and conceptually present in the U.S. constitution, is an agreement between the government and citizens. People are to give up freedoms as a means for the government to ensure social order through its assertion of authority (Rousseau, 1762). On a micro level, the social contract of higher education is the agreement between colleges/universities and the citizens to be provided with the opportunity of higher education to all. In the report “Breaking the Social Contract: The Fiscal Crisis in California High Education,” paid for by the William and Flora Hewlett Foundation and commissioned on behalf of the California Education Round Table, suggested that the course of higher education in the late 1990s was unsustainable (1998). The study reported that the increase of college costs out-paced available funding. A frequent tactic used in the past to offset the cost of higher education
was to raise tuition rates because higher education had been seen by some as a private good, thus the justification that a student should bear more of the funding burden rather than the taxpayer was an obvious conclusion (Breneman, 2008).

The increase in tuition fees has prevented many California residents from being able to pursue their goals in higher education. As predicted in the report, as tuition fees increase, by 2015, up to 45% of students will be denied access into college (Benjamin et al., 1998). In order to prevent this prediction from becoming a reality, the report recommends: (1) political leaders in California reallocate additional public funds to higher education; (2) colleges restructure in order to redistribute scarce resources; (3) institutions in higher education diversify their mission; (4) colleges and universities establish a sharing mechanism to capitalize on the efficiencies of increased productivity; (5) the state creation of a strategic plan to distribute scarce resources and; (6) Californians be open to pursue an alternative form to postsecondary education (Benjamin et al., 1998). While these are all worthy suggestions, it is essentially up to the decisions of the legislature and executive offices in California to determine what the future will likely hold.

As California enters into a new decade, the predictions made over ten years ago have become a reality because little action was taken to address the needs of higher education in the state. Between furloughs, a term made familiar to many government employees by Governor Arnold Schwarzenegger, frozen budgets, and IOUs, the entire state of California has become a prime case study of fiscal disaster (Associate Press Writer, 2010). As of February 14, 2010, California was $6 billion short of funding needed to maintain basic programs in the current fiscal year and estimated another $14 billion in
shortcomings on July 1. With the increasing deficit of the state, higher education will not go unharmed (Associate Press Writer, 2010).

While the politics in Sacramento further cripple the economy and viability of the state, the system of higher education have not passively stood by waiting for the legislature to comprise a “fix.” Leaders in higher education are considering every solution. For example, UC Berkeley’s public policy professor proposed entirely eliminating student fees. The universities would receive funding through a required percentage of alumni income (Gordon, 2010). No possible solution is being denied attention as the system of higher education must take action to hopefully succeed, or otherwise go by the wayside.

**Recommendations in moving forward during times of fiscal crisis**

The current state of economic crisis throughout the United States and the great pressures placed on the system of higher education is a call to action for all leaders within the system. When a crisis arises, leaders must rise to the occasion (Quinn, 2005). Leaders within the state governmental roles of power (governor and legislature) and leaders within higher education can no longer disregard the structure of higher education in hopes that the fiscal crisis will soon pass. Though the economic cycle is often times predictable, and should recover on its own according to Adam Smith’s theory of the invisible hand, the institution of higher education is in need of reorganization in order to ensure the continued vitality and the possibility of continued public higher education in the United States.

As stated by Clark Kerr, author of the California Master Plan for Higher Education, it is highly difficult to predict the future of higher education (Kerr et al.,
Nevertheless, history does repeat itself and an economic downtown is not unknown to the budgets of higher education. Higher education managed to survive and even prevail after the most severe fiscal crisis in the United States: the Great Depression of the 1930’s. However, a new trend has developed during the previous recessions, which may limit the favorably of public higher education, and that is the advent of private education. Private colleges such as the University of Phoenix and DeVrey University are increasingly becoming viable options as they accommodate students, focus on customer service and, most importantly, are now comparable at cost to public colleges and universities. “Our traditional institution can learn valuable lessons from these new entities [private colleges], particularity in their focus on accessibility, convenience and service to nontraditional students” (Breneman, 2002). By reviewing the trends of private colleges, the public institution of higher education may remain competitive in attracting students and faculty.

As proposed by Klann (2003), the ability to communicate, develop a clear vision and strong values, as well as to express empathy, are all integral leadership traits (2003). Communication is vital not only in time of non-economic hardships, but imperative during times of crisis. Communication must occur between the leader and his or her employees, but the stakeholders such as community members and customers, which in this case are students. When a leader establishes, communicates and remains focused on the mission of the organization, all parties involved will know the direction of the college or university. For example, the original vision of the California community college system was to “offer academic and vocational instruction at the lower-division level” (Rosenhall, 2010). Though during the past decade, community colleges have taken
on additional roles in the community, such as providing remedial education, recreational courses, and allowing high-school students to get a head start on their college courses free of charge. If community colleges were to go back to their mission and decrease the additional services provided, they might be able to cut their budget and better adapt to limited state funding (Rosenhall, 2010).

Coming out of a recession will require thinking outside of the box and reorganization. While many industries are struggling, leaders in higher education must seek out synergies. For example, if a college campus is in need of infrastructure expansion, its leadership should look at the use of other local facilities. In doing so, the community becomes a unit working together to overcome harsh economic barriers. While some revenue can be raised from private-public partnerships, public colleges and universities must look at diversifying their sources of income; again looking at synergies and mainly turning towards private fundraising (Breneman, 2002).

Due to the federalist structure implemented in the constitution of the United States, state government has been given the greatest authority regarding public education. However, during a time of fiscal crisis, it is necessary for all levels of government to work cooperatively. For example, the Republicans in the House of Representatives introduced a bill that would prevent California, along with nine other states, from providing lower tuition to illegal immigrants at the cost of the taxpayer and the general institution of higher education (Wall, 2010). While education falls under the jurisdiction state government, this bill introduced by Congress is an example of the federal government getting involved and working at the state level.
There are also other tactics to be considered as a means to conserve funds. First, outsourcing entities like the bookstore, food service and maintenance will get educational institutions out of industries they are not familiar with and can return focus on their key mission: education, and in some instances, research. In addition, outsourcing will encourage competition, thus lowering the cost of service. Second, if the demand still exists, colleges should look to international students and out-of-state students who are willing and able to absorb a higher tuition. Implementation of distance education will attract a new body of students, but will also accommodate current student enrollment while maintaining and even decreasing the overhead costs (Breneman, 2002). Finally, community colleges should charge a premium program fee for specialized degrees such as nursing and culinary arts. The fee would still fall lower than that of private institutions, thus remaining competitive and allowing for some expansion of resources (classes offered, faculty, etc.), therefore accommodating additional students.

Similar to not having one solution to addressing the fiscal crisis in public higher education, one leadership style will not fit all situations undergoing crisis. The affect on higher education caused by the recession of the late 2000’s will not have a ‘one size fits all solution.’ All 50 states undergo much variance in the way their institutions of higher education are structured as well as in the allocation of state funding. Finally, studying financial hardships in the past will provide leaders with suggestions for the future, though each recession is unique, unpredictable, and with an unknown end date (Callan, 2002).

One thing is certain and apparent in previous studies; a leader in higher education who sets out to see his or her or her organization flourish must be well versed at communicating and establishing a vision. A college with a concert vision will ensure all
faculty and staff are on the same page working towards the same outcome; at this time, a means to conserve funding.

Conclusion

Though it is safe to say that most Americans have in some way, shape or form, been affected by the recession, there is a light at the end of the tunnel. A time of fiscal crisis will force the institution of higher education to examine its current functions, and reorganize in order to rise to the occasion (Quinn, 2005). Higher education in the United Stated has proven and must continue to be adaptable (Pierce & Pedersen, 1997), while favorably positioning itself post-crisis (Breneman, 2008). With leaders upholding effective crisis management traits such as strong communication skills (Klann, 2003; Fanelli, 1997), being visionaries of the organization (Klann, 2003; Garner, 1990), all while displaying an authentic style of leadership (Klann, 2003; Begley, 2001; Crippen & Wallin, 2008; Villani, 1999; Evan, 2000; George, 2003), the institution of higher education will continue to thrive. The new wave of leadership will need to be politically savvy through their relationships with the various groups within the organization like the faculty, elected officials, unions, donors and students (George, 2003). The next couple of years will lead the way for the increased use of technology and an offering of effective and efficient education for all.
References


Using Fading to Enhance Perception of Compression in Novice Listeners

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Abstract

The ability to detect subtle nuances in full-frequency sound is a necessity for individuals in the fields of audio production and post production. However, training competence in critical listening is a difficult and lengthy process. The present experiment explores means of enhancing perception of compression, a signal processing technique that involves dynamic attenuation of an audio signal, and its artifacts in casual listeners. In the present experiment, the effects of gradual reduction in the intensity of compression (fading) and visual feedback on acquisition of perception of subtle compression were investigated. College undergraduates were exposed to short clips of music and were required to make yes/no judgments regarding the presence of compression. Participants in the experimental group received visual feedback about the accuracy of their performance, while participants in the control group were not provided with feedback. Results suggest that fading and visual feedback are effective and cost-efficient techniques for enhancing acquisition of perception of compression. Applied implications of the findings in the context of music industry education are discussed.
The field of audio post-production has traditionally consisted of a small, elite club of professionals whose practices involve the use of complex and expensive equipment such as signal processors (Izhaki 2009). For almost half a century, the restrictive nature of the industry was advantageous to major record labels who exercised near absolute control over the recording and distribution of music (Terrell 2005). However, recent developments in low-cost audio recording technology, and websites such as “YouTube,” have greatly increased interest, as well as a sense of personal empowerment, amongst the general public in regards to all aspects of recording equipment and techniques (Huber and Runstein 2010).

However, as the aspiring audio engineer begins to explore this formerly restrictive world of audio, it becomes apparent that simply possessing professional-quality recording equipment does not in itself produce professional results (Huber and Runstein 2010). When novices encounter these technical and intellectual barriers, many seek guidance and find that there is no shortage of books, instructional CDs, online courses, university degree programs and tips-n-tricks websites available to everyone from the hobbyist to the working professional on the recording, mixing and mastering processes involved in audio production and post-production. Ironically, as the individual sifts through the overwhelming amount of information in their quest for knowledge, many find application of the techniques increasingly difficult. This difficulty may be reduced by quality instruction in college or university degree programs in audio production and post-production.

The reasons for the high failure rate among the general public in this area are not altogether clear. It is possible, although unlikely, for an individual to acquire knowledge of the subject without formal training and then successfully apply that knowledge. For example, anecdotal evidence indicates that the average child can quickly acquire knowledge of computers
that surpasses most adults. Considering the ease with which children learn about new technology, adults should be able to learn to produce professional quality results within a Digital Audio Workstation (DAW). Certainly information is readily available on how to operate all major DAW software including ProTools, Cubase, SONAR and Logic. Furthermore, there is a wealth of information available on how to operate software run within DAW hosts such as VST plugins and ancillary audio hardware such as A/D/A converters. We have observed that the average college freshman can learn what equipment to buy in order to assemble a project studio capable of producing professional quality recordings in a short period of time, and we believe that the average person can acquire sufficient knowledge to operate this equipment after approximately one to two semesters of intense study. If our assumptions are valid, then the airwaves, TV and internet should be filled with professional quality recordings produced by a variety of independent artists. However, this is not the case. Leaving ancillary factors, such as TV and radio program directors, record labels and web content managers aside, the reason for this deficit must be related to a failure to apply these complex processes adequately.

Common to all aspects of quality audio production is the need for an engineer to possess a requisite skill set that contains a theoretical knowledge of audio, signal flow, acoustics, psychoacoustics and critical aural perception (Huber and Runstein 2010). Information on all aspects of recording and producing audio, with the exception of aural perception, is ubiquitous and can be readily acquired by motivated individuals. The possible deficiency in available pedagogy in the area of aural perception may be a critical inhibiting factor in the full development of individuals seeking to become audio engineers via self-directed study.

If the primary distinction between the professional audio engineer and an educated novice is a trained critical ear then the following questions must be examined:
1. What do engineers need to be able to hear in order to produce quality recordings?
2. Have effective methods been developed to train the ears of the aspiring engineer?
3. What are the best techniques for developing critical listening and technical competency?

The purpose of the present research is to examine the aforementioned questions and propose pedagogical techniques for one subset of audio engineering, specifically competency in the perception of compression that can be adapted to other subsets within the discipline.

Everest is among the few audio professionals who have developed a formalized ear training regimen for audio engineers. The author offers this work with the intent to “accelerate, not replace, the usual slow learning process [of the audio engineer] on the job” (Everest 1997, 2). The regimen, which contains both text and audio CDs, includes numerous examples and exercises useful for training the ear to identify various frequencies, changes in sound level, distortion, masking, binaural perception and certain types of reverberation. However, with the exception of the training exercises related to frequency perception, the material fails to address the perception of signal processing techniques used in audio production and post-production such as compression and limiting.

Compressors

The audio processors traditionally used in mixing and mastering processes, many of which are attributable to Les Paul’s work during the 1940s-1950s, include reverb, delay, modulation effects (e.g. chorus, flange) noise gates and dynamics processors such as expanders, limiters and compressors (Shea 1990). The functional durability of these devices is evidenced by the development of their digital corollaries in the last quarter century. The consensus of traditional audio professionals is that the effective use of audio processors, whether as analog
hardware, digital hardware or software plugins, requires both theoretical and practical knowledge of processor functions (Izhaki 2009). Additionally, an audio engineer’s ability to aurally perceive the subtle nuances of sound change, while manipulating various types of dynamic processors, is a fundamental skill required during production and post-production processes (Katz 2002).

Of all the signal processors available to audio engineers, perhaps the most critical is the compressor and its variants, the limiter and expander. The compressor is often applied at all stages of recording, from tracking to mastering. However, both novices and audio professionals may experience deterioration in perceived sound quality from their use. Authors such as Izhaki, do not hesitate to observe that, “the most misused and overused tool in mixing is the compressor - an especially worrying thing considering how predominant compressors [are] in contemporary mixes. Compressors, to a large extent, define much of the sound of contemporary mixes” (Izhaki 2009, 272). Similar opinions are held by Huber and Runstein who state that “the use of compression, limiting and/or expanders is one of the most misunderstood aspects of audio recording. . . [but] a well-done job won’t be obvious to the listener” (Huber and Runstein 2010, 491).

The compressor is a member of a family of devices known as dynamics processors. The primary function of these devices is to adjust the overall dynamic range of the audio track to which it is applied. Because the overall dynamic range of music can periodically exceed 140 dB and the specified dynamic range of a commercially released CD can not exceed 96 dB, a compressor may be inserted into a signal chain to reduce the dynamic range of the recording to accommodate Redbook CD specifications for the 96 dB ceiling (Huber and Runstein 2010). In contrast, if a recording’s dynamic range is less than 96 dB and the genre of the song being
mastered lends itself to having both loud and soft passages, the engineer can use an expander to lower the volume of the softer sections and raise, if possible, the level of the louder passages.

The typical modern compressor includes threshold, ratio, attack, release and gain controls. The threshold is the level, usually described as dB below 0dBFS, at which the compressor begins to operate. Signals below the threshold are unaffected, whereas signals above the threshold are attenuated by a degree set by the compressor’s ratio control, which defines the degree of signal attenuation that will occur. Ratio determines the degree of output relative to input. For instance, a ratio of 4:1 indicates that for every four dB input, only one dB will be output.

Attack and release controls affect the envelope of attenuation produced by compressors. The user can define the amount of time required for onset (attack) and offset (release) of compression. Incorrect selection of attack and release times can increase the number of sonic artifacts, such as distortion, produced by the compressor. Finally, the gain stage of the compressor is used to either attenuate or boost the signal after compression.

The ability of compressors to alter the dynamic range and sonic quality of audio tracks, combined with the complex interactions of its controls, allows for effects ranging from subtle control of peaks to ‘squashed’ and distorted signals containing little to no dynamic range. Audio professionals consider the setting of a compressor primarily a series of critical listening exercises. Specifically, the engineer (1) evaluates the raw track within the mix, (2) listens to the soloed track and makes initial settings, (3) listens to the soloed track with initial treatment, (4) evaluates the track within the mix, and if necessary (5) repeats steps 2-5 until desired results are achieved (Izhaki 2009). It should be acknowledged that the audio engineer will often revisit the initial compressor settings applied in the later stages of production.
Among signal processors, compressors are perhaps the most subtle and difficult to master. This is at least in part due to the change in frequency balance caused by dynamically altering the perceived loudness of a signal. Bruce Swedien, legendary engineer for Quincy Jones, emphasized this by noting that, “compression in general will remove high frequencies” when applied to audio (Clark 2005, 51). Like any signal processing technique, application of compression involves a compromise between the desired effect of the processor and sonic artifacts unrelated to signal attenuation that can be produced by compressors. As highly respected mastering engineer Bob Katz has noted, “audio processing is the art of balancing subjective enhancement against objective degradation” (Katz 2002, 202). It is unfortunate that, given the complex interaction of cognitive and technical skills required of the engineer while compressing a track, many college audio textbooks offer little more advice than “pay attention to the overall amount of compression that goes on in each song you hear and develop your own values for how much compression you like” (Gibson 2005, 191). We contend that aural competency in the use of compressors requires more than a simple “listen and copy what you like” approach; extended exposure and organized feedback are necessary components of acquisition of competency in these tasks.

If, as we contend, audio engineers’ ears must be adequately trained in order to successfully apply compression to audio, and no known comprehensive pedagogical technique addressing this specific skill exists, the development of such a technique may have broad benefits for all individuals attempting to acquire the skillset.

For over a hundred years, colleges and universities around the world have utilized a codified pedagogy for the training of music students’ ears. These courses, usually called Ear Training or Musicianship, are used to develop the music student’s skills in melodic, harmonic
and rhythmic perception, dictation and sight reading. This method involves presentation and feedback from the professor in the classroom, and it has been used successfully to develop musical competence.

A Black-Box Model of Music Perception

Because of the extreme variations in the frequency and timbre of different instruments, many of whose exact mechanisms of timbre modification are poorly understood, the acoustics of instruments are often modeled with a ‘black box’ approach in which the output of any given instrument is a function of both input and system variables. Input variables consist of the sound source. For instance, the input to an acoustic guitar could be the strumming, plucking or striking of strings at various locations on the guitar. Both the location and manner of string stimulation contribute to the input variable. System variables consist of sound modifiers and are far more diverse between instruments than input variables. For instance, the sound modifiers of an acoustic guitar are controlled primarily via the bridge of the instrument and include the top and bottom plates of the guitar, the air between plates, type of material used to construct the plates, material used to construct the neck and fretboard, type of strings used and the shape and size of the sound hole in the body. Both input and system variables contribute to the actual output of the instrument, but this is rarely heard by the listener. Rather, the output of the instrument serves as input to the room in which the instrument is heard. System variables in the room such as size and materials used to construct the room act to further modify the sound. The room’s output is what is ultimately heard by the listener.

Room effects can be greatly reduced in a number of ways. An anechoic room can be constructed in which all room reflections are absorbed via sound-absorbing material such as acoustic foam. However, eliminating all reflections can be difficult and expensive. An
alternative to the creation of an anechoic room is presentation of instrument output in ‘free space’ such as outdoors on grass. However, extraneous stimuli such as wind noise may act as system modifiers of the instrument’s output. The most practical and controllable method of eliminating room effects is through the use of headphones. Because the sound of the instrument is projected directly into the ear, the problem of room reflections is eliminated. However, projection of sound via headphones requires amplification of sound which represents another system variable. Fortunately, audiophile-grade signal paths and headphones have been developed that transduce instrument output into a perceptually identical signal. Thus, system variables produced by amplification have far less effect on the perceived sound of an instrument than do room variables (Howard and Angus 2009).

Applying the ‘black box’ approach to a complex musical signal (rather than a single musical instrument) is considerably more difficult for a variety of reasons. First, since a complex musical signal will encompass various frequencies within the full range of human hearing, the input variable of the source varies with the material being presented. That is, the input of ‘rock’ music will differ based on the instruments being played and their influence on each other, instrument tuning, scales and modes of the music being played and dynamic range of the music. Second, studying a complex musical signal necessarily involves recording and amplification of the source. Since the signal path used to record the signal can flavor the sound, the signal path itself must be considered a system variable. To minimize the effects of the signal path, high-grade components must be used throughout the entire signal path. Third, professional recording of music almost always involves the use of one or more room microphones in order to capture the music in a natural way. That is, the signal of the instrument is combined with controlled room acoustics to create a natural sound. In the absence of room microphones, music
tends to sound dry (due to a lack of natural reverberation) and incoherent (slight reverberation helps to aurally connect the sounds of instruments). Finally, since most audio is now recorded in a digital format due to the clarity and lack of noise that it provides, the manner in which digital audio is recorded must be considered a system variable to the input signal. Furthermore, professionally recorded music almost always involves some level of compression and equalization to individual instruments, an entire mix or both. Audio engineers add these elements to create ‘smoothness’ and loudness that is perceived as pleasant by the listener. Thus, compression and equalization represent system variables that are not specific to digital music but are an important component of all recorded music. To better understand how these factors contribute to perception of quality, the influence of additional room variables can be eliminated by presenting all music via studio-grade headphones.

It is important to recognize that black-box models are not created with the intent of explaining internal processes related to perception. Instead, they represent tools that allow researchers to make informed decisions regarding how to isolate variables and predict behavioral outcomes. The present model meets these criteria. If one is interested in understanding how audio production techniques such as compression and equalization (third-level modifiers) affect perception of sound quality, the model indicates that first-level (instrument) and second-level (room) modifiers must be carefully controlled in order to isolate the effects of the third-level modifiers. Furthermore, the model makes a variety of predictions regarding how sound quality will be assessed. For instance, assuming that professionally recorded audio involves each of the nine stages described in the model, the elimination of any of these stages (e.g. feeding instrument outputs directly into third-level system modifiers) should result in the perception of sound quality being less natural than if all stages were included. Similarly, reducing the number of
third-level system modifiers should result in perception of music being more natural (although not necessarily better) since hearing live music does not involve any third-level variables. That is, following room modification the instrument sound sources are output directly to the ear.

The Black-Box Model of Music Perception. In the first level, input and system variables related to individual instruments are output to the second level in which room-related sound modifiers further change the complex audio signal. During recording, the combination of instrument and room variables are combined and form the input for a complex musical signal. System variables in the third level are sound modifiers that are introduced during mixdown, mastering and digital conversion.

Fading

While many of the basic principles underlying learning are well understood in psychology, the dissemination of information to fields that could potentially use that information has often been slow. One reason for this is a lack of collaboration between disciplines. While
the information is available in many articles and books, its immediate applicability is not always apparent. One area in which many of the basic principles of learning can find utility is music industry education.

_Fading_ is a technique in which the intensity of a prompt is gradually altered based on the participant’s performance. Fading inherently involves the intrinsic or extrinsic reinforcement of response forms, as this is the criteria by which the intensity of the prompt is modified. This procedure and the processes underlying it have been studied for decades and are well understood. Fading is a central technique in the field of Applied Behavior Analysis and has been used extensively to treat a variety of behavioral issues. Although historically used primarily to treat behavioral issues related to developmental disabilities (e.g., Sidman and Stoddard 1964; Berkowitz, Sherry and Davis 1971; Luiselli, Ricciardi and Gilligan 2005), it has been successfully used to treat common behavioral issues as diverse as caffeine abuse (James, Stirling and Hampton 1985) and childhood insomnia (Piazza and Fisher 1991). Furthermore, the efficacy of fading has been established in a variety of non-human animals ranging from monkeys (Meisch 1995) to pigeons (Ploog and Williams 1995).

While there is little evidence of its formal use in music training, it may be useful for training musical competence. For instance, in training basic rhythm, an instructor may introduce a metronome to guide rhythm. Generally, the metronome is used to establish rhythm until internal rhythm is established. Once established, the metronome is removed. An alternative to this approach, and one that may be more effective, is to gradually reduce the loudness of the metronome as internal rhythm improves. Because auditory attention is largely a cognitive phenomenon, that is to say that the ears do not need to be pointed at the metronome for the sound to be processed, reducing the loudness of the metronome may allow the learner to allocate more
of their attention on their instrument and less attention on the metronome. As metronome loudness decreases, a greater proportion of the learner’s attention may be directed toward their instrument and internal rhythmic processes. Since auditory attention is cognitive, a learner could dynamically allocate attention to the metronome as needed. However, as the loudness of the metronome decreases, it will represent a smaller proportion of the available auditory stimuli and will thus be less likely to attract the attention of the listener.

Carefully arranged fading procedures may also be exceptionally useful in the training of many of the critical listening skills necessary for audio engineering. One difficulty in using fading for training critical listening skills is the inherent subjectivity of judging sound quality. Because there are not universal standards regarding what makes music sound “good,” using fading to enhance overall perception of sound quality may not be possible. However, most audio engineers agree that the creation of professional-quality mixes and masters involve the application of certain processes. These processes include, but are not limited to, compression, limiting, equalization, A/D conversion and reverberation. While there is a great deal of disagreement about what constitutes “good” when applying any of these processes, most agree that an understanding of the processes and equipment necessary to implement them are essential.

While disagreement about the nature of sound quality exists, an understanding of the way signal processing equipment affects sound is a necessary prerequisite to success in audio engineering. This is an area in which fading may prove exceptionally useful. The present experiment was designed to determine how fading of compression may enhance novice listeners’ ability to detect the presence of compression in unfamiliar music. In the experiment, we used clips of traditional jazz and modern electronic music. These genres were selected because they
represent opposite ends of the compression spectrum; traditional jazz is often compressed lightly or not at all, whereas modern electronic music tends to be very heavily compressed.

In the present experiment, participants were presented with a set of compressed and uncompressed music clips. Fading was used during training to gradually reduce the intensity of compression in each of the clips. During training, participants were provided with visual feedback regarding their performance in order to guide identification of compressed music clips. We hypothesized participants who were exposed to heavily compressed clips whose degree of compression was gradually reduced as a function of participants’ performance would correctly identify more compressed clips during testing than participants who were not exposed to fading training prior to testing.

Method

Participants

Sixteen psychology undergraduate students at a small state university were selected as participants. None of the participants had received any formal musical training, and none of the participants reported any history of hearing deficits.

Materials

Four 15-20 s clips of music were used during experimentation. Two clips were traditional jazz and two clips were instrumental electronic music. The jazz clips were performed by a jazz combo consisting of piano, guitar, bass, drums and voice. The clips were recorded using two AKG 414s for piano, two Neumann KM185s for overheads and a Coles 4040 on electric guitar into Steinberg’s Cubase 4 DAW software at 24-bit/96kHz quality via MOTU A/D/A converters.
Both electronic clips consisted of drums, bass, synth lead and synth pad. All sounds were produced using Native Instruments Battery 3, Native Instrument Kontakt 3 and Cakewalk Dimension Pro software instruments. The clips were recorded and mixed at 24-bit/96kHz in Cakewalk’s SONAR 7 DAW software using MOTU D/A converters.

All clips were normalized and then compressed using Sonitus:Compressor at a ratio of 3:1 with a 15 ms attack. Release time of the compressor was adjusted to fit the tempo of the song. Training clips were compressed at compression thresholds of -40dB, -30dB, -20dB and -10 dB. Another training clip was processed to produce 5dB of signal attenuation (compression threshold of approximately -6dB). Gain was added to each of the compressed clips to equalize the perceived loudness of each clip. Each clip was then published in 24-bit/96kHz quality in three forms: loud (no additional processing), moderate (-3dB) and quiet (-6dB). Digital music clips were presented to participants via Sony MDR-7506 headphones connected to a MOTU A/D/A converter. Clips were played using Cakewalk’s SONAR 7 DAW software.

Prior to training, participants were required to complete a questionnaire containing demographic and hearing-related questions. Experimenters recorded all responses using custom data recording forms that included participant and session demarcation, randomized numbers corresponding to music clips, correct/incorrect response selection area and criterion change checklist.

Procedure

Prior to experimentation, experimenters recorded music clips in two locations. Acoustic jazz clips were recorded at Alabama State University’s audio recording studio using the equipment described above. Electronic clips were recorded at Burning Hammer Audio Laboratory, a small, home-based studio in Montgomery, Alabama using the equipment described
above. Whereas both electronic clips consisted of original material arranged for the purpose of the present experiment, both jazz clips were extracted from a recording of Miles Davis’ “Donna Lee.” Once recorded, each clip was mixed and normalized. Compression was not added to individual tracks. While this produced mixes that sounded less polished than if track compression had been used, it avoided participant confusion related to discriminating between track compression and mix compression. The two tracks used for training were then compressed at a ratio of 3:1 at thresholds of -40dB, -30dB, -20dB, -10dB, (approximately) -6dB and 0dB, producing a total of 18 training clips. Although it resulted in no gain reduction, the uncompressed clip was passed through the compressor with a 0dB threshold to ensure that any sonic artifacts unrelated to compression produced by the compressor would be present in all clips.

All participants were psychology undergraduates who were selected due to their normal hearing and lack of musical training. Each participant, tested individually, was seated at a small table facing the experimenter. The participant was fitted with headphones and was presented with a set of automated instructions that explained the process of compression, provided examples and described the procedure of the experiment. All music clips used in the instructions were presented at the loudest level that would occur during experimentation, and participants were encouraged to adjust the volume knob on the MOTU converter to ensure that the clips were comfortably loud. The instructions with examples lasted approximately three minutes.

Following the instructions, participants in the experimental group began the training phase of the experiment. Each training session consisted of up to 100 trials, and participants were required to complete as many sessions as necessary to achieve competence in identification of the lowest level of compression (i.e. 5dB of attenuation). On each trial, participants were
presented with one of twelve music clips. Half of the clips were compressed, while the other half were uncompressed. While only four different clips were used at each criteria level of the experiment (compressed jazz, uncompressed jazz, compressed electronic and uncompressed electronic), each of the clips were presented at three loudness levels resulting in a total of twelve clips. Each of the six compressed clips changed when participant response criterion was reached in the manner described below. Order of clip presentation was randomized in each session via a random number generator.

All participants began the experiment being exposed to uncompressed and heavily compressed (-40dB threshold) music clips. On each trial, a randomly selected clip was played by the experimenter and the participant was instructed to indicate whether or not the clip was compressed. When participants made a verbal yes/no response, the experimenter provided visual feedback about their performance via a “thumbs up” or “thumbs down” hand gesture. Each session consisted of 100 trials divided into ten blocks of ten trials. Participants were required to reach a performance criterion of 80% correct responses per block in order to reduce the compression threshold. That is, when participants obtained at least eight correct responses in a block of ten trials, the compression threshold was increased by 10dB, thus resulting in less severe attenuation of the compressed signal. This process of gradual reduction of the intensity of a stimulus based on the performance of the participant represents the psychological principle of fading. In order to complete the training stage of the experiment, each participant had to reach the criterion for each compression level (-40dB threshold, -30dB threshold, -20dB threshold, -10 dB threshold and -6dB threshold). Participants required between two and six training sessions to reach criterion with the clip attenuated by only 5dB. Each training session was separated by no less than one day and no more than four days.
Following completion of training, each participant was tested using different music clips. Again, twelve clips of music (four clips x three loudness levels) were presented in random order for 100 trials. Each participant completed 100 trials, irrespective of performance. All compressed clips were presented at the lowest compression level (5dB of attenuation). Participants were again asked to indicate whether each clip was compressed, but no feedback was given by the experimenter regarding the accuracy of the participants’ responses. Following completion of the testing session, participants were provided with evidence of participation for purposes of extra credit in psychology courses and were dismissed.

Each participant in the experimental groups was then matched with a control participant based on age and sex. Like participants in the experimental group, participants in the control group were psychology undergraduates with no formal musical training and no reported history of hearing deficiencies. Participants in the control group were treated identically to their matched experimental participant, except that they were not provided with feedback regarding their performance during training. Each control participant completed the same number of training trials as their matched experimental counterpart and completed 100 testing trials.

Following completion of the experiment, mean number of correct responses during testing was calculated for each group and compared using a one-tailed paired t-test.

Results and Discussion

Mean numbers of correct responses were compared between the experimental (n=8) and control groups (n=8) using a one-tailed paired t-test. As hypothesized, participants in the experimental group (M=56.875, S=10.162) made significantly more correct responses than participants in the control group (M=47.5, S=5.632). This was confirmed using a one-tailed
paired t-test, \( t(7)=1.908, \ p=.049 \). These results suggest that fading accompanied by immediate organized feedback produces more correct responses than simple exposure.

The observed differences between group performances are relatively modest. This could be due to a number of factors. First, data were analyzed using a paired t-test. This was due to our intention to match participants across a variety of factors. Unfortunately, our participant population was relatively small and did not allow for matching across factors such as amount of time spent listening to music per week. Instead, participants were matched only across age and sex. Selecting a paired t-test for analysis involves the assumption that there is a definite relationship between pairs. Paired t-tests are often used to compare pre-treatment and post-treatment performance. In such situations, the comparison being made is between the same individual at different times. In this case, the assumption of relatedness of pairs is accurate since the comparison involves the same individual. It is not clear that matching across such a narrow set of criteria as that used in the present experiment is sufficient to create a definite relationship between pairs. This point is important, because the criteria for reaching significance are lower when using an independent t-test. That is to say, the difference between experimental and control group means would have produced a lower p-value if an independent t-test had been used. We chose to select more conservative criteria for analysis to avoid overstating the effectiveness of fading and visual feedback on the perception of compression.

Second, all participants were novice listeners with no formal musical training. Furthermore, none of the participants had declared majors or minors in music-related fields. Thus, we may assume that their inherent level of interest was lower than that of students actively pursuing degrees in music-related fields. This was confirmed repeatedly in informal conversations with participants. Some participants reported being bored during the experiment
and disinterested in the topic of study. The lack of interest may have resulted in insufficient attention being directed at the music clips. Presumably, this would be less of an issue with Music Industry majors, since they have voluntarily declared an interest in music via their selection of major.

Finally, the modest difference between groups may stem from the inexperience of participants. Since all participants were novice listeners, perception of sonic artifacts as subtle as those produced by compression may have been overly difficult. It is likely that some minimal critical listening skills are required to benefit most from the training program, and because participants were novice listeners, they did not possess the requisite skills necessary to gain the most from the training experience. It is worth acknowledging that compressors reduce gain and each clip was presented at three loudness levels. It is possible that participants had difficulty distinguishing between gain reduction caused by the compressor versus changes in gain made manually for each clip. If the modest differences between groups are a function of inexperience, it is likely that extended training would enhance performance.

It is also worth noting that the primary difference between groups was in the receipt of visual feedback. Participants in the control group were exposed gradually to less compressed music, but they did not get feedback about their performance. Simple exposure may be sufficient for the development of some degree of critical listening competence, and the difference between groups may have been greater if the control group was exposed only to the most lightly compressed music clips. That possibility is currently under investigation.

Irrespective of the cause of the modest difference between groups, the difference was still significant. Thus, a program involving fading of signal processing techniques and immediate
feedback about performance appears to be an efficient and economical means of developing critical listening skills related to audio engineering.

As indicated in the black-box model of music perception discussed earlier, it is possible to use fading and feedback to emphasize listening competency at virtually any level of music creation, production and post-production. For instance, system variables in the first level (sound modifiers) such as string tension could be gradually modified to enhance perception of tuning. System variables in the second level (room modifiers) such as degree of reverberation could be gradually decreased to enhance perception of wetness/dryness of a music signal. Considering the robust applicability of fading and immediate reinforcement across a variety of behaviors and species, it is reasonable to assume that competency in identifying any of the modifiers in the black-box model could be acquired via fading and immediate reinforcement.

The issue of criteria for training completion is currently unresolved. We set a criterion level of 80% correct responses on a block of ten trials for advancement to the next lower compression level. Performance during testing could likely be enhanced by increasing the criteria, although this would almost certainly lengthen the duration of training substantially. One must consider that issues such as frustration and fatigue may contradict the effects of training, so selecting criteria that meet the needs of a program while avoiding such issues is important.

**Implications for Music Industry Education**

A critical consideration during course development is ensuring that students have the basic prerequisite skills required to benefit from the course. This is often accomplished through prerequisite courses that must be taken prior to enrollment in the course. However, in music industry programs, critical listening courses are rarely required as prerequisites. Instead, critical listening is often integrated into entry level courses such as Physics of Music and Basic
Perception of Compression

Recording. This is problematic for two reasons. First, even introductory courses require some degree of critical listening competence, and by integrating critical listening training into the course throughout the semester, students may be required to retrospectively apply those skills to previously presented audio material. Second, critical listening skills are developed over an extended period of time, and there is a great deal of variability in the amount of time necessary to acquire each of the skills that contribute to the general skill set of critical listening.

The results of the present experiment suggest a low-cost means of establishing basic listening skills prior to beginning the curriculum of any music technology or audio production academic program: automated, feedback-based programs involving fading that emphasize competence in a single signal-processing technique. This approach overcomes some of the problems associated with integrating critical listening skills into courses. First, it allows instructors to safely assume that a basic set of listening skills have been acquired prior to enrollment in their courses. The skill set required by each institution could be tailored to the needs of each program. This would not only assure that the skill set necessary for success in the course had been acquired, it would also free up additional time to address issues directly related to the course.

Second, it would allow students to develop the skill set at their own pace. In the present experiment, we found a high degree of variability in the number of training sessions required to reach full competence. Because participants were tested individually, they were able to spend the necessary time required to correctly identify compression-based artifacts. This would not be possible in a group-based classroom. Furthermore, it allows flexibility in when the skills are acquired. Students who have spent several hours in classes prior to critical listening training may be fatigued or may have difficulty focusing auditory attention. A software-based training
program can be made freely available to students so they can benefit from the training when they feel prepared. This could be accomplished by making the program available on student service sites such as BlackBoard and WebCT or could be provided to students for installation on personal computers.

An automated system also has the advantage of providing consistency in training. Because courses are often taught by a number of instructors, assurance of consistency between sections of a course is difficult. An automated system overcomes this by allowing an objective assessment of skills deemed necessary in the field of audio engineering.

In summary, critical listening skill acquisition is necessary for success in the music industry. In any academic program, time- and resources-management are prime considerations in course development. Results of the present research suggest training using fading of signal processing artifacts combined with visual feedback can enhance perception of the presence of those artifacts in unfamiliar recordings. Such a technique is advantageous because it can be automated for computer-based training, is relatively inexpensive and allows instructors to ensure that all students have met the minimum criteria necessary to benefit from courses.
Bibliography


Alten, Stanley. Syracuse Faculty & Staff Webpages. http://newhouse.syr.edu/Faculty_Staff/Bio/index.cfm?id=5 (accessed May 15, 2010)


The Effects of Comic Books and Graphic Novels on Literacy

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The Effects of Comic Books and Graphic Novels on Literacy

Comic books, when knowledgeably selected and made easily accessible, may help to promote literacy, increase overall language skills, and encourage further exploration into other forms of media. Comic books are beginning to be acquired in libraries, including school media centers, classroom libraries, academic libraries and public libraries. Some teachers have even integrated them as part of reading and writing curricula, an activity which increases the benefits of this media for struggling or reluctant readers. The scholarly world has finally begun to reconsider the potential of comic books and graphic novels as educational tools. This may be due to the positive changes that have occurred (and are continuing to occur) in the comic book industry. Furthermore, few people involved with teaching literacy would argue that comic books are not attractive reading materials (Hill, 2006).

The American Library Association began promoting comic books as a tool for teen literacy in 2003. These materials have proven to circulate in public libraries at a rate twice that of traditional books and are extremely popular with readers of all ages. In fact, comic books and graphic novels are even being used by some college professors to increase literacy skills. English professor Rocco Versaci in San Marcos and Physics professor James Kalalios at the University of Minnesota are two such individuals who have brought comic books directly into their teachings. Versaci asks students to “critically examine the very definition of literature” using comics; Kakalios offers an intro to Physics course called “Science in Comic Books” (Pennella, 2004).

Before attempting to determine whether comic books and graphic novels have a significant impact on literacy, it is important to understand the basic concepts behind this idea, namely, the difference between comics and graphic novels and the meaning of the term literacy.
McCloud (1993) defines comics as “juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or produce an aesthetic response in the viewer.” Gaps between the text and images are often just as important as the text and images themselves and demand viewer participation, thereby creating a unique reading experience. Graphic novels may also be defined in this way, although they utilize the book format rather than thin, single issues. They sometimes bring together a series of comics; at other times, they are conceived as novels. Graphic novels are more appropriate for inclusion in libraries because of the durability of their bound format. It should be understood by librarians and educators that graphic novels (and comics, for that matter) are a medium, not a genre.

The definitions of literacy have changed as society has evolved. As recently as 150 years ago, literacy was simply measured by a person’s ability to write his or her own name. The concept of literacy has widened over the years to include the ability to read longer and more difficult texts, to distinguish between facts and opinion, and to write effectively. Due to concerns by researchers such as Eliot Eisner and Howard Gardner, the definition of literacy was broadened even further to minimize unfair advantages to students (Gallego & Hollingsworth, 2000). Since the early nineties, the field of literacy has seen an expanded conceptualization to consist of such inclusive language as new literacies, multiliteracies, media literacy, and visual literacy. Some researchers advocate the power of combined images and text and believe that visual representations deserve to be considered valuable representations of learning in schools. In fact, since literacy is considered necessary to succeed in other subject areas, the association of visual representation with literacy may be seen as one of the most powerful alignments. It is unfortunate that, at a time when young people make up such a large group of consumers of mass media and popular culture, curricular standards and teaching practices have moved further away
from real-life engagements with media to more traditional approaches to teaching and learning (Sanders-Bustle, 2003).

Most children who are provided with adequate instruction do become literate members of society. Unfortunately, approximately thirty percent fail to reach functional levels of literacy (National Center for Educational Statistics, 2003, as cited by Morrison, Bachman, and Connor, 2005). A portion of children in this group are learning disabled or have language or other communication challenges, but many simply receive instruction that is not effective for them (Morrison, Bachman & Connor, 2005).

Purpose of the Study

The purpose of the current study is to closely examine the effects of comic books on literacy by performing an extensive literature review and surveying librarians on The University of Alabama’s School of Library & Information Studies’ Listserv (SLIS-L), as well as employees of comic shops. It is the goal of the author to determine whether comic books have a significant impact on literacy rates among various age groups. This knowledge may be shared with professionals and the public in the hope of increasing understanding and acceptance of this much-maligned media form and thus helping to improve literacy rates.

Literature Review

Many studies have been performed on the effects of comic books and graphic novels on literacy, and “literacy research has shown the potential usefulness and high interest level of comic books” (Horner, 2006). Since 1978, studies have found mainly positive correlations between comic books/graphic novels and literacy, beginning with Arlin & Roth (1978), whose findings contradicted the writings of anti-comic activist Fredric Wertham. When one considers the concept of emergent literacy, there is no debate that “visual images have a valued role in
emergent literacy as young children begin making sense of their worlds through visual cues that inform reading and writing” (Sanders-Bustle, 2003, 159). However, visual images are not only effective for teaching young children.

“The rise of graphic novels, in particular the Pulitzer Prize-winning Holocaust-themed *Maus: A Survivor’s Tale*, by Art Spiegelman, has paved the way for wider acceptance of comic books as literature. Graphic novels represent a real, viable component of literature” (Finkel, 2008).

Further evidence of the respect this medium has garnered is seen in the fact that over thirty comics research libraries now exist (Scott, 1990).

A misconception about comic books and graphic novels is that they are easy to read, since their pages contain many pictures. In reality, they are often more challenging to read than plain prose (Schneider, 2007). Wright (1979) measured three 100-word samples from a variety of comics using the Fry Readability Graph and found that comics were more challenging to read than previously thought. In addition to developing vocabulary, comic books help teach context and introduce plot and sequencing. Moreover, for some students comics may also help pave the way into classroom discussions of higher-level text.

Comic books have also been used successfully to teach English Language Learners and autistic children (Finkel, 2008; Ranker, 2007; Gallego & Hollingsworth, 2000). Norton & Vanderheyden (2004) found that comic books have a positive effect on English Language Learners for the following reasons: they often combine a low reading level with a high interest level; the vocabulary is simple, but unlike many instructional texts, the situations in the comics are entertaining; the situations in the comics and the comics themselves provide an entry into North American popular culture; the comics are a shared experience with peers, and they also
depict daily American high school life, including aspects to which ELL students may not yet have been exposed. Perhaps most importantly, the “interplay between the pictures and the text [allows] the pictures to act as guideposts to unfamiliar vocabulary in the text, providing multiple cues towards meaning.”

Comics and graphic novels have been found to motivate reluctant readers. In fact, Bintz (1993, as cited by Lavin, 2004) found that “reluctant” readers often aren’t; their low reading ability scores did not indicate an inability to read effectively, but rather, a choice not to read effectively in the case of materials they found boring or irrelevant. These readers often used shortcut strategies to get through these “boring” materials as quickly as possible at the expense of comprehension. As the founder and director of the Comic Book Project (hosted by Columbia University’s Teachers College), Bintz has seen real-world examples of the effects of comic books on literacy. The School of Arts and Enterprise, a charter high school in Pomona, California, and the Newton D. Baker Elementary School of Arts in Cleveland are just two examples of schools that have seen positive results after implementing the Comic Book Project. Comic books foster comprehension and help readers visualize meaning and understand inference, which is difficult to teach young children because of its level of abstraction (Finkel, 2008).

Other researchers have found similar results regarding the motivation to read. Ujiie and Krashen (1996) found a correlation between reading for pleasure and reading comic books. In their study, they found that 65 percent of heavy comic book readers read for pleasure daily, compared with 37 percent of non-comic book readers. Sixty-five percent of heavy comic book readers said they liked to read, while only 48 percent of non-comic book readers made this claim. Krashen went on to say in *The Power of Reading* (1993), that light reading may be the “cure” for
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the literacy crisis: the most significant predictor of literacy, he says, is not any specific type of
education program, but time spent in voluntary reading. Marsh & Millard (2001), in their case
study of 69 students whose school developed a comic book lending library, reported that children
had increased motivation to read and increased literacy because of the comics. Twenty-eight
percent of the students surveyed found that borrowing comics had made the children want to
read more at home, and the study also shed light on another interesting fact: even at the age of
seven or eight, children seemed to recognize the low status of comic books in academic settings.
Eighty-three percent of children surveyed thought that teachers would be opposed to letting them
borrow comics. This causes one to wonder: if children are aware of this low status of their
reading interests, what effect does this vilification of their reading choices have on their attitudes
toward reading? Jones (2002) discussed this problem as it relates to teens. The way to improve
adolescent literacy is to “show respect for the reading choices of young people. We compliment;
we don’t condemn…. To say or to convey the attitude of ‘at least they are reading something’ is
to show disrespect for what the teen, for whatever reason, has chosen to read.”

It should be noted that, while this medium is an effective motivational tool for reluctant
readers and those who have difficulty reading, gifted readers have also shown an interest in
comic books (Lavin, 2004).

Interviews with librarians indicate that, although teens are the most enthusiastic readers
of graphic novels, this medium is extremely popular. Amy Alessio, teen coordinator for the
Schaumburg District Library in Illinois, states that with a collection of 6,000 books, her library
circulates approximately 2,000 graphic novels per month. Eva Volin, head children’s librarian in
Alameda, California, echoed this, saying, “Graphic novels tend to turn at least two to three times
more often than general nonbestseller titles do.” David Serchay, youth services librarian for the
Margate Branch of the Broward County Library System and author of *The Librarian's Guide to Graphic Novels for Adults*, says that circulation of graphic novels at his library has been very high—so high, in fact, that they have a separate budget and a graphic novel selection committee (Hogan, 2009).

Gorman (2003) has summarized the popularity of this medium by saying, “Just putting them on the shelf resulted in half the children’s graphic novel collection going out in half an hour.” Furthermore, “very low-level readers may not be ready to tackle a chapter book, but pictures draw them in. Their curiosity leads them to the text” (Reynolds, 2004).

**Research Questions**

Two different surveys were administered for the current study. One was given to library professionals and students in The University of Alabama’s School of Library & Information Studies program, and the other was administered to comic shop employees in Montgomery, Alabama. Once surveys were returned, each participant was assigned a participant number for identification in order to protect privacy and ensure confidentiality.

The number and types of questions asked on each survey differed according to the population being surveyed. The Survey for Librarians contained the following questions:

- What is your position? (Please state your exact position and indicate the type of library where you currently work.)
- Do you believe that graphic novels and comic books improve literacy? If so, in what ways and for what age groups? Please explain.
- Have you ever collaborated with school teachers or comic shops to promote graphic novels or comic books? Please explain.
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- Do you think that comic books and graphic novels can have educational value, in terms of motivating reluctant readers, providing visual cues for low-level readers, etc.? Please explain.

- Do you try to stay up to date on popular comic books, for readers’ advisory and collection development purposes? How do you stay up to date?

- Do you believe that comic books and graphic novels have a positive effect on English Language Learners? Please explain your beliefs on this issue and describe any experiences you have had.

- Please describe your experiences or opinions in general with comic books and graphic novels as they pertain to literacy.

- Are the graphic novel sections in your library separated by age or interfiled with fiction and nonfiction? Please explain.

- Is funding for graphic novels separate, or is it part of the teen, adult, and/or youth collections?

- How do circulation statistics on graphic novels in your library compare to the statistics for fiction and nonfiction titles?

- Since your library acquired a graphic novel collection, have more people begun to enter and use the library? If so, what age groups?

- How long has your library had a graphic novel section?

- How are graphic novels received by staff? By patrons? Is there a specific group who really seems to embrace them?

- Who are the main patrons of graphic novels in your library?
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- Do you find it helpful when publishers put suggested ages on books? If graphic novels are separated by age in your library, how do you decide where to shelve graphic novels for which the intended age of readers is unclear?
- Does managing and maintaining a graphic novel collection pose any special challenges?
- Does your library provide any special programming or publications (storytimes, book clubs, displays, bibliographies, etc.) to promote graphic novels?
- In what ways could library staff better promote graphic novels?

The Survey for Comic Shop Employees contained the following items:

- Name of Business:
- What is your position?
- Are the comics and graphic novels in your business separated by age?
- What percentage of your customers would you say are
  11 years old and under? ______
  Age 12-18? ______
  Age 19-25? ______
  Age 26 and older? ______
- Do you find it helpful when publishers put suggested ages on books? If you separate materials by age, what do you do when you are unsure which age group a graphic novel should be shelved under?
- Do you believe that graphic novels and comic books improve literacy? If so, in what ways and for what age groups? Please explain.
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- Do you think that comic books and graphic novels can have educational value, in terms of motivating reluctant readers, providing visual cues for low-level readers, etc.? Please explain.

- Do librarians or schoolteachers ever partner with you to promote the reading of comic books or graphic novels? Please explain.

- In what ways do you think library staff can better promote graphic novels?

- Please describe your experiences or opinions in general with comic books and graphic novels as they pertain to literacy.

Participant Profiles

Participants included two groups: library professionals and students of The University of Alabama’s School of Library & Information Studies program, and comic shop employees. Of the twelve participants in the library field, two have worked in a school library media center; three were academic librarians; one was a paraprofessional in an academic library; one was an academic library director; three were paraprofessionals at a public library; one was a systems administrator at a public library; one was an adult services supervisor at a public library; one was a branch manager of a public library; and two were students in The University of Alabama’s School of Library & Information Studies. (There was a small amount of overlap in these numbers, as two participants identified themselves as belonging to two different groups.) Only two comic shop employees were surveyed, and they were both comic shop owners.

Method

All participants in the library field were recruited on The University of Alabama’s School of Library & Information Studies listserv (SLIS-L). They affirmed their willingness to participate in the study by replying to an email invitation received via the listserv. Those who
replied to the invitation were sent a consent form and survey via email, and were asked to return both documents via email within one week. Approximately 24 surveys were distributed to this population, and twelve were returned.

All participants in the comic book industry were recruited in person. They were approached in their place of business, given an overview of the study and asked if they were interested in participating. Those who were interested were given a consent form and a survey and were asked to complete both documents within one week. Both documents were picked up by the researcher to minimize the burden on participants.

After collecting the data (receiving the surveys and consent forms), each participant was assigned a Participant Number to ensure confidentiality. From that point on, participants’ names were no longer used but were stored on a thumb drive accessible only to the researcher.

Results

Those surveyed in the library field provided the following information:

- Do you believe that graphic novels and comic books improve literacy? If so, in what ways and for what age groups? Please explain.

Eleven participants indicated that they do believe that graphic novels and comic books improve literacy. One person had mixed feelings; he felt that they may be a good way to spark interest in reading, but may actually limit literacy if they are the only type of book read.

- Have you ever collaborated with school teachers or comic shops to promote graphic novels or comic books? Please explain.

Three people surveyed responded that they had collaborated with others to promote graphic novels or comic books. One person had collaborated with a Reading Intervention teacher; one had collaborated with local comic shops to host “author talks”; and one had loaned
materials to comic shop clerks. (These materials were later ordered and sold to teachers who were encouraging high school students to create their own graphic novels as part of a school assignment.) Nine respondents had not collaborated with others for promotional purposes, but at least one of these nine people thought it was a good idea.

- Do you think that comic books and graphic novels can have educational value, in terms of motivating reluctant readers, providing visual cues for low-level readers, etc.? Please explain.

All twelve participants believed that comic books and graphic novels could have educational value.

- Do you try to stay up to date on popular comic books, for readers’ advisory and collection development purposes? How do you stay up to date?

Four people indicated that they stay up to date on popular comic books by consulting a Reading Intervention teacher; being an active member in organizations; attending professional conferences; staying aware of award winners; or by reading comics blogs, The New York Times’ Graphic Books Best Seller List, reviews, publishers’ catalogs, Library Journal, Booklist, and/or Diamond Bookshelf. Three respondents indicated that they either get a cursory glimpse of what is popular by reading professional materials, subscribe to gaming and comics newsfeeds, or visit comic shops and solicit recommendations from the clerks. Five people indicated that they do not stay up to date on these materials.

- Do you believe that comic books and graphic novels have a positive effect on English Language Learners? Please explain your beliefs on this issue and describe any experiences you have had.
There were no negative responses to this question, but seven people gave more information than others about why they believe that comic books and graphic novels have a positive effect on ELLs. One person responded that, “having a visual seems like it makes learning easier.” Another person, who had a certificate to teach English as a Second Language, stated that the emphasis is on communication skills rather than academic grammar. This person wrote that the “short, pointed dialog that is present in most comics, along with the visual reinforcement, can actually be more effective than having a new language learner read prose-only material.” This same person emphasized the importance of good selection skills on the part of the librarian. Another respondent wrote that, “assisting ESL learners with an easier to digest form of reading and comprehension than straight written library materials” can be accomplished with comic books. Another person stated that verbal humor and pictures are effective in teaching language to ELLs, while another wrote that comic books could help foster cultural literacy. Others believed that the pictures in comic books help build comprehension of English words, allowing greater fluidity while reading, and one person stated that “pairing words with images is a powerful way to learn a new language.” Three people had no experience with English Language Learners but felt that this medium would probably be effective in teaching language skills, and one person felt that it depends on the subject matter presented (i.e., an abundance of graphic violence or sexual content may have a negative influence on shaping an individual’s values). Only one person indicated that he did not know whether this medium could have an effect on ELLs.

- Please describe your experiences or opinions in general with comic books and graphic novels as they pertain to literacy.
Many respondents indicated that anything that gets people reading is worthy, and that comic books and graphic novels can serve as a gateway to other forms of literature. Some said that they could improve literacy by “attracting a new crowd,” and that graphic novels were always “hot” items in their libraries. One person mentioned that she worked at a low-income school and that graphic novels were extremely popular at their annual Book Fair. One librarian stated that graphic novels are slowly becoming more accepted as legitimate reading material, perhaps simply in an effort to attract patrons to the library. Another person wrote that his library commonly sees fathers and sons reading graphic novels together before checking titles out. That same person wrote, “We see young boys spending time reading where they were once idle. We see consumers of audiovisual material moving to books where there is a strong tie-in.” One respondent wrote that comic books helped him become a better reader as a child, giving him “visual experience of some of the words [he] knew only in the abstract.” Another wrote that, “While graphic novels shouldn’t entirely supplant a traditional reading curriculum, they are fun, useful for helping develop literacy skills, and beautiful.” Yet another wrote about how reading comic book adaptations of literary works inspired him to seek out the original works. One respondent summed up all the responses by writing, “They are under-used, high interest literacy tools that have place in the classroom and the library. Why not harness this enthusiasm for literacy?”

- Are the graphic novel sections in your library separated by age or interfiled with fiction and nonfiction? Please explain.

Four respondents indicated that most of their library’s graphic novels are placed in juvenile literature or the young adult section, but adult graphic novels are placed in the general fiction collection. One person wrote that graphic novels are in the fiction collection, since theirs
is a small library with no space to create a separate section. One person who worked in an academic library indicated that graphic novels were not separated by age. Another wrote that they are separated into children’s, young adult, and adult sections, and another responded that all graphic novels are placed in nonfiction and arranged according to the Dewey Decimal Classification system. Four others either did not know the answer to this question or it did not apply to their current employment situation.

- Is funding for graphic novels separate, or is it part of the teen, adult, and/or youth collections?

For two of the respondents, funding for graphic novels was part of the youth collection; for three, it was part of the general collection (two of these were academic librarians). At one person’s library, there was funding for graphic novels in each budget allocated for children’s, young adult, and adult collections. One person simply indicated that the budget was “separate,” and five either did not know the answer or the question was not applicable to their current employment situation.

- How do circulation statistics on graphic novels in your library compare to the statistics for fiction and nonfiction titles?

One respondent indicated that juvenile graphic novels comprised 10 percent of circulation in juvenile fiction in a given year. Young adult graphic novels made up 36.4 percent of the young adult fiction circulating during that time. The same respondent wrote that the turnover is fast on many of these titles. “Roughly halfway through the year, that is approximately 1,500 checkouts out of a collection of 650 items.”

Another respondent wrote, “We can’t keep them on the shelves.” Yet another echoed this, writing that circulation statistics on graphic novels compare “very favorably” to the statistics for
fiction and nonfiction titles; “Generally, a graphic novel title will circulate about as many times in a year as a lower-end best-seller.” Another did not have statistics but indicated that “the graphic novels circulation is heavy.” Seven respondents either did not know or the question was not applicable to their current employment situation.

- Since your library acquired a graphic novel collection, have more people begun to enter and use the library? If so, what age groups?

  One person wrote that boys between the ages of nine and sixteen are using the library more frequently to check out graphic novels; another indicated that more men and boys have begun to use the library but provided no ages. One person wrote that his library does see more traffic, but “it could be because [they] have a spectacular new library building that draws the community in.” One person who works in a school setting wrote that the acquisition of graphic novels has not had an effect on library traffic. Eight others either did not know or the question was irrelevant to their current employment situation. (One of these eight individuals wrote, “We have no such section. Acquiring one might improve that situation, though.”)

- How long has your library had a graphic novel section?

  One person indicated that for children, a graphic novel section had been in place for 2-3 years; for young adults, 5-7 years; and for adults, 1-2 years. One of the libraries had had a graphic novel section for less than one year; three had a graphic novel section for 16 months to 3 years; one had a graphic novel section for 5 years or more; two libraries did not have one; and four respondents either did not know the answer or the question did not apply to their current employment situation.

- How are graphic novels received by staff? By patrons? Is there a specific group who really seems to embrace them?
One person wrote that teens and their young adult librarian seem to embrace graphic novels the most. One person working in a school library media center wrote that, “The teachers are very supportive of the use of graphic novels and would purchase them for classroom libraries. The patrons, both students and their parents, love them.” Another wrote, “Patrons read them in-house frequently, especially in conjunction with wait-times for computers. A great many fathers come in with their young sons and read a few titles together before checking out others.”

Not everyone saw such positive reception of the medium, however. One person wrote, “Some staff questioned the appropriateness of having graphic novels in an academic library collection. Because of the attention brought to graphic novels in the past few years, and especially the mainstream awards won by graphic novelists, faculty and students are interested in them and probably appreciate having award-winning titles as well as other titles in our academic library collection.”

Another person echoed this by saying that some staff see value in graphic novels while others think “they’re a waste of time…. [Despite the fact that] circulation numbers indicate that graphic novels are popular, some parents have expressed concerns that their kids aren’t reading ‘real’ books.” Another person wrote that he has also received complaints from parents, and younger adults (ages 18-35) seem to enjoy graphic novels most. Yet another wrote that some teachers are neutral on the issue, but others see their value for reluctant readers. Five people either did not know the answer or the question did not apply to their current employment situation.

- Who are the main patrons of graphic novels in your library?

One person indicated that juvenile boys were the main patrons of graphic novels; two others identified students in grades K-5 as their main followers. Two respondents wrote that teens are the largest group, and one person wrote that “teen and tween boys, disproportionately
African-American” fall into this category. One other respondent wrote that many ages use graphic novels, but “teens are probably the main graphic novel readers.” Another wrote that their main patrons of graphic novels were “middle class, mostly male, mostly white, with disposable income, between the late teenage years and the early thirties.” One person wrote about a graphic novel course that was offered in their school’s Department of English a few years ago, causing students and the instructor for that class to use graphic novels heavily. Four people either did not know the answer or the question did not apply to their current job situation.

- Do you find it helpful when publishers put suggested ages on books? If graphic novels are separated by age in your library, how do you decide where to shelve graphic novels for which the intended age of readers is unclear?

Seven respondents indicated that they found these age suggestions helpful. One of these people wrote that both publishers and vendors offer this helpful service, and the librarian herself worked with the Guidance Counselor and the Reading Intervention teacher to level books for which age suggestions were not available. This person also noted that she did most of her purchasing through Mackin, “which is very good about suggesting reading or age levels.” Another of these respondents depended on professional reviews to delineate where to shelve graphic novels. However, two people did not find age suggestions helpful; one felt that it showed “fear of visual information” and the other did not find specific age listings necessary, preferring instead labels such as “Suggested for Mature Readers.” Three respondents either did not know the answer or the question did not apply to their current employment situation.

- Does managing and maintaining a graphic novel collection pose any special challenges?
Seven out of the twelve respondents cited special challenges posed by managing and maintaining a graphic novel collection. These challenges included gaining administrative support and support from library clerks who had been in such positions for more than three decades; sending titles to the bindery, which caused slow processing of new acquisitions; greater wear and tear than other titles; the difficulty of keeping up with series; the problem of standing order plans for graphic novels; finding reviews; replacing missing volumes; making cataloging and classification decisions; and proving [graphic novels’] value to funding sources and authority figures, like teachers and principals. Another person wrote, “There is a great deal one must learn to become conversant with the medium, which seems to be continually expanding and developing.”

Two people did not think that graphic novel collections pose any special challenges, and three people either did not know or the question did not apply to their current employment situation.

- Does your library provide any special programming or publications (storytimes, book clubs, displays, bibliographies, etc.) to promote graphic novels?

The responses to this question were evenly divided. Four respondents indicated that they do provide special programming to promote graphic novels, such as giving book talks, providing a manga drawing program in the summer for children and teens, creating face-out displays for graphic novels, and sponsoring discussion panels and “how to” seminars. One of these people wrote that promotion was unnecessary—that graphic novels promoted themselves. Four people indicated that they do not provide special programming, and four others either did not know the answer or the question was not related to their current employment situation.

- In what ways could library staff better promote graphic novels?
The responses to this final question of the survey were wide-ranging and informative. One person wrote that she liked the idea of working with educators to get disinterested kids interested in reading. A school library media specialist wrote that creating Reading Counts tests would encourage the reading of graphic novels, as well as book talks by kids, perhaps via podcast or vodcast. Another person suggested educating parents about the medium; presenting on the cultural significance of comics and how filmmakers use storyboards based on comics; holding workshops for kids and teens to teach them about visual storytelling and helping them create digital comic books; and holding discussions of political cartoons to show that we rely on visual storytelling in different situations. Another person wrote that working more closely with early education teachers may help promote graphic novels, and someone with a similar response wrote that librarians should meet with teachers and administrators to explain their value; book talk them to teachers and students; and develop lessons or units using graphic novels to get them incorporated into the classroom. Yet another claimed that the creation of “Read” posters featuring superheroes is a good promotional activity, as well as holding author talks, developing readers’ advisory skills, and forming book clubs. One academic librarian suggested a review of the subject headings assigned to graphic novels. This particular librarian claimed she was considering creating a research guide that would help patrons identify the titles currently held by her library. One person reiterated that graphic novels need no promoting. “The main thing would be not tucking them away in 741.5, where my prior library system relegated everything from Calvin & Hobbes to Sandman.” Finally, one respondent claimed that, “Nothing is better than reading them and becoming familiar with the artists, the writers, and the limitless potential of this medium.” Two respondents did not have promotional suggestions.

The comic shop owners surveyed provided the following information:
The Effects of Comic Books and Graphic Novels on Literacy

- What is your position?

One of the respondents identified himself as the owner of his shop, and the other indicated that he is the owner, CEO and janitor.

- Are the comics and graphic novels in your business separated by age?

Both comic shops contain a section for younger people and children, but most titles are displayed on main racks and are sorted by company in alphabetical order. One of the respondents wrote, “We leave it to parents to decide if a particular book is suitable for their child, much like the movie industry.”

- What percentage of your customers would you say are
  11 years old and under? _______
  Age 12-18? _______
  Age 19-25? _______
  Age 26 and older? _______

The breakdown of percentages of customers was similar for both stores surveyed. In one store, customers were broken down as follows: one to five percent make up customers age 11 and under; five percent of customers are between 12 and 18; 40+ percent are between 19 and 25; and half of all customers are age 26 and older. In the other store, ten percent of customers are 11 years old and under; ten percent are between 12 and 18; 30 percent are between 19 and 25; and half of the store’s customers are at least 26 years old.

- Do you find it helpful when publishers put suggested ages on books? If you separate materials by age, what do you do when you are unsure which age group a graphic novel should be shelved under?

Both owners find it helpful when publishers put suggested ages on books, and neither
censored materials (although one did state that he sometimes puts specific titles in a sleeve or keeps them behind the counter). Since both shops contain a section for children, most of the other titles are kept in alphabetical order and are not separated by age group.

- Do you believe that graphic novels and comic books improve literacy? If so, in what ways and for what age groups? Please explain.

Both respondents felt strongly that graphic novels and comic books improve literacy. One owner wrote, “Like any skill, practice makes perfect. All age groups (even adults) benefit greatly from keeping their brain active.” The other owner felt that graphic novels and comic books especially help children under the age of twelve (and gave himself as an example).

- Do you think that comic books and graphic novels can have educational value, in terms of motivating reluctant readers, providing visual cues for low-level readers, etc.? Please explain.

Both people surveyed felt that this type of media could have educational value. One respondent quoted Albert Einstein: “Imagination is more important than knowledge.” He also cited the motivational power of stories about heroes and villains. The other participant wrote that, as a child, he was motivated to read due to cliffhanger endings in comic books.

- Do librarians or schoolteachers ever partner with you to promote the reading of comic books or graphic novels? Please explain.

One owner claimed that some of his long time customers are librarians and teachers, and that his shop has donated books to both groups. He stated that his shop would welcome more involvement, and wrote, “Alabama is a poor state and any concept that promotes reading should be a welcome activity.” The other person surveyed did not provide an answer to this question.
• In what ways do you think library staff can better promote graphic novels?

The same owner in the previous question who mentioned Alabama’s lack of funding cited the problem again here as it relates to libraries. He went on to state,

“In my view, graphic novels would be a wonderful method to get kids hooked on reading. I believe that if librarians had attractive graphic novel displays they would be amazed at how many kids checked these books out.”

The other person surveyed did not provide an answer to this question.

• Please describe your experiences or opinions in general with comic books and graphic novels as they pertain to literacy.

One person shared his opinion that today’s children are not reading enough and that there are too many electronic distractions in the modern world. He lamented the fact that less than five percent of his customers are children, since when he was a child (fifty years ago) he and his friends could not wait until the corner candy store received a new stock of comics. This same person acknowledged the fact that comic books are not the most challenging form of literature to read, but wrote, “It is great practice in basic reading skills. Also, today’s books contain first-class writing and art.”

The other respondent shared an inspirational story about helping a local girl learn English through reading comic books. He wrote that there is a Chinese restaurant next door to his business, and one day a Chinese girl three or four years old came in to his shop. She knew very little English but seemed interested in his collection of comic books. She began visiting his shop regularly for comics (such as the Archie series), and each time she visited the shop she learned more and more English by asking the owner about the meaning of words in the comic books. She took three or four comics with her each day, returning the next day with a more expansive
vocabulary. The owner reported that this girl is now going into the third grade and has been
placed in advanced classes in school. He wrote, “I feel Archie, Casper, Dennis the Menace and
Katy Keene comics, as well as many other titles, helped her greatly in her learning to read. I feel
that there are many stories like this.”

Conclusion

Since its conception, the graphic novel has gained respect and larger, more diverse
audiences. Research has shown, and is continuing to show, how this medium increases literacy
rates and motivates people to read. For many modern librarians, the question is not whether to
include graphic novels in their collections, but rather how to handle their cataloguing and
provide access to these materials for patrons.

The results of the current study reflected the findings of other researchers regarding the
effects of comic books and graphic novels on literacy. This study differed from others in that it
focused on the perceptions of comic shop employees (owners) in addition to those of librarians.
Although the current study was small and cannot be generalized to apply to these populations as
a whole, it does provide an interesting look at the current views of information professionals
regarding a form of media that, although it has existed for years, is only beginning to acquire the
respect it deserves.

A strong library collection shows diversity in viewpoints and media, helps promote
literacy, and increases both knowledge of cultures and the motivation to read. The acquisition of
graphic novels by librarians may provide all of these benefits not only to the collection, but also
to the library’s patrons.
References


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**Acculturation, Social Distance, and Second Language Acquisition among English Language Learners who are Refugees**

Through the process of escape and refugee resettlement many survivors of political upheaval, civil war, and ethnic cleansing will enter the United States as legal permanent residents. As the children of newcomers enter U.S. schools the primary concern will be to teach them English. Another consideration must be that of a positive acculturation experience into U.S. American society. Defined as adjusting to a new culture while maintaining the cultural traditions, beliefs, values, and language of the heritage culture, the acculturation process can be quite difficult for culturally and linguistically diverse ELLs and their families (Herrera, Perez, & Escamilla, 2010). Because parents of newly arriving refugee students may suffer homesickness, melancholy, apprehension about the future, and frustration during initial efforts to begin establishing their lives again in the new host country, the acculturation process may occur differently and at a varied pace for members of the same family. The children may feel vulnerable and defenseless if their parents are unable to provide the reassurance and constancy normally associated with parenting, thus faltering during acculturation (Igoa, 1996).

Both children and adults may experience cultural bereavement, or a sense of loss of culture, a feeling of being estranged from what went before and a fear of becoming detached from all that was traditional and comfortable in the homeland. Children experiencing cultural bereavement wonder why they are in the new place, what will happen to them and who they can trust (Eisenbruch, 1988). Without a concerned and informed adult to guide the process and to provide reassurance that the acculturative experience allows the maintenance of the heritage culture and language while learning the new language and adapting to the new culture, the refugee student will be hesitant, constantly wondering if the path he or she takes will cause the loss of cultural and linguistic identity. What is the impact of a failed acculturation experience? What may
teachers do to mediate the negative effects of social and psychological distance experienced by many newcomer refugee students?

The purpose of the presentation was two-fold – to explore the acculturative needs of refugee students and to discuss the impact of the refugee experience on acculturation and second language acquisition. First a demographic overview of the latest new arrivals was provided along with a discussion of current trends in refugee resettlement in the United States. Particular attention was given to the Burmese, Iraqi, and Bhutanese. Subsequently, essential information for educators regarding the refugee experience was offered. Promising ways educators may attend to issues of social and psychological distance as they relate to newcomer ELLs were also discussed.

Schumann (1978) has suggested that learning a new language is actually part of a larger acculturation process. According to Schumann (1986) the success of second language acquisition is dependent in a significant way on how positive the acculturation process is, stating “the learner will acquire the second language only to the degree that he acculturates.” (p.379). He goes on to say that certain factors will either promote or stifle contact between the macro group in society and the newcomers, effectively affecting the acculturative process of the incoming refugees, political asylees, and immigrants. For students, the degree of social and psychological distance they may experience as ELLs will greatly influence the success of their attempt to learn a second language.

During the presentation the possible impact of new trends in refugee resettlement on teaching and learning in the bilingual, ESL, or regular education classroom was explored, particularly in relationship to Schumann’s notion of social and psychological distance. In addition potential auxiliary school-related outcomes of changes in refugee resettlement were discussed in detail.

References


Foregrounding Behaviors and Functions to Promote Ecosystem Understanding

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The ability to analyze complex systems is fundamental to ecology literacy (Jordan, Singer, Vaughan, & Berkowitz, 2009; Sabelli, 2006). Yet deciphering ecosystems is challenging because, like all complex systems, they transcend spatial, temporal, and cognitive boundaries (Pickett, et al, 1997) and necessitate understanding how different components and processes are interconnected (Covitt, Gunckel, & Anderson, 2009; Jacobson & Wilensky, 2006; Jordan et al., 2009; Mohan, Chen, & Anderson, 2009). Furthermore, complex systems are comprised of multiple interrelated levels that are dynamically related, making it difficult even for experts to understand and to predict (Simon, 1996).

The very nature of this complexity makes it challenging for learners to grasp associations and interactions among a system’s components (Ben-Zvi Assaraf & Orion, 2005; Gallegos et al 1994; Penner, 2000). Often, learners focus on simple linear relationships and visible components of an ecosystem (Hmelo-Silver, Marathe, & Liu, 2007; Hogan, 2000; Hogan & Fisher Keller, 1996; Leach et al. 1996; Reiner & Eilam, 2001). For example, when asked to draw or name components of an aquarium system, novices tended to emphasize visible components, such as fish and rocks, and rarely mentioned invisible components, such as oxygen, nitrogen, and bacteria (Hmelo-Silver, Marathe, & Liu 2007; Hmelo-Silver & Pfeffer, 2004). Grotzer & Basca (2003) also report that student explanations favor single causal and linear connections between system components.

In this paper, we present the results of a technology-intensive classroom intervention designed to support middle school students’ understanding of an aquatic ecosystem. The goals of our intervention are to help learners develop deep understanding of ecosystems and to use tools that make the relationships between a system’s structures, behaviors, and functions explicit.

Aquariums as Models for Learning

To help students understand complex systems, we implemented a two-week aquarium unit that was designed by a team of learning scientists, middle school classroom teachers, and ecologists. The technology consisted of a suite of computer tools: a function-oriented hypermedia (Liu & Hmelo-Silver, 2009), simulations of macro- and micro-level processes (Liu & Hmelo-Silver, 2008; Gray et al. 2008), and the Aquarium Construction Kit (ACT; Goel et a. 2010; Vattam et al. in press).

Our instructional approach builds upon structure-behavior-function theory (Goel et al., 1996; Goel et al., 2009). The structure-behavior-function (SBF) approach is useful to explain dynamic systems with multiple components and levels (Goel et al., 2009; Liu & Hmelo-Silver, 2009). We view SBF theory as providing a conceptual representation that is consistent with both canonical explanations in biological systems and with expert understanding (Bechtel & Abrahamson, 2005; Hmelo-Silver et al., 2007). In
addition to helping students organize their system knowledge, the SBF representation provides a scaffold for overall knowledge organization.

In a biological system, structure refers to components of an ecosystem that have form, such as fish or cells. Behaviors represent the processes within systems. These refer to mechanisms such as photosynthesis or nitrification. Functions refer to the outputs of a system or the role(s) of a particular structure within a system. An example of a function would be that fish produce energy.

**Technology Support for Learning about Complex Systems**

It is difficult for learners to understand many aspects of ecosystems because they have not had opportunities to engage with those processes that are dynamic and outside their perceptual understanding (Jacobson & Wilensky, 2006). In addition to helping students organize their system knowledge, the SBF representation also provides a scaffold for overall knowledge organization because it helps learners consider the relationships among form and function as well as the causal behaviors and mechanisms. We make SBF explicit through the use of hypermedia, organized in terms of SBF (Figure 1), through NetLogo simulations that make behaviors visible (Figure 2a and b) and through the ACT tool (Figure 3a and b), which makes SBF explicit as students build models using the language of the SBF conceptual representation.

![Figure 1. Function-centered hypermedia](image)

Along with the hypermedia and ACT tools, students also used NetLogo simulations to learn about the behaviors and functions in an ecosystem (Wilensky & Reisman, 2006). Using these simulations, (Figure 2) students had opportunities to explore factors that would affect the dynamic balance in the aquarium. For example, the macro fish spawn simulation allowed students to manipulate different aspects of the ecosystem such as initial population, spawning rate, filtration level, and amount of food. Thus if the students overfed the fish, then the increasing ammonia (from fish excretion) in the water would affect water quality and have toxic effects on the fish, leading to mortality. This helped problematize water quality, which is a black box in the macro simulation. This created the need for students to identify some of the invisible components within an ecosystem. For example, using the micro-level simulation, students could observe how crucial the nitrification cycle is for the overall health of an ecosystem and understand the important role that bacteria play in converting toxic forms of nitrogen (ammonia) into less toxic forms of nitrogen.
Figure 2. NetLogo Fish Spawn and Nitrification simulations

Figure 3a. ACT: A space to create models
Instructional Context

The science teacher introduced the unit by asking students to articulate their ideas about the functions of ecosystems. This allowed the teacher to gauge the students’ prior knowledge. The teacher then moved on to the ACT modeling tool and asked the students to represent their thoughts about ecosystems as structures behaviors and functions. The students recorded their ideas in a table within the ACT tool (Figure 4).

The teacher also encouraged the students to use the hypermedia to build on their ideas about the ecosystems. The teacher then asked students explore the NetLogo simulations. In the simulations, students could manipulate various ecosystem components (e.g., number of fish, amount of food, number of plants) in order to maintain a healthy ecosystem (Eberbach & Hmelo-Silver, 2010). The students
worked in groups and had opportunities to refine their models. At the completion of the two-week period, students presented their models to the rest of the class.

Methods

Participants
Fifty-four seventh grade students from a suburban public middle school in the northeast United States participated in this study during their regular science instruction.

Data Sources
The students completed tests before and after the intervention. In each pre and post-test, students drew components of an aquatic ecosystem and were asked to show relationships between these components. In addition, students answered open-ended questions about different parts and processes of an aquatic ecosystem as well as solved problems related to ecosystems.

Coding for pre and post tests
The scoring criteria for the pre and post tests are summarized in Table 1. All of the questions (17) were coded based on two different scoring schemes. The first examined student explanations of relationships between structures and their related behaviors and functions. The codes were assigned to the answers/explanations on a four-point scale, shown in the upper part of Table 1. Each response was scored for the complexity of the SBF relationship the student identified.

We also coded for whether the students were able to identify and explain relationships between micro and macro elements within an ecosystem. Only eight of the 17 questions were coded for Macro and Micro (MM) level because only these questions provided opportunities for students to explain both micro and macro level connections. The other questions on the assessment were specific to either macro or micro elements within an ecosystem. The micro-macro relationship score was assigned as shown in the lower part of Table 1.

The following student response on the importance of ‘waste’ to the aquatic ecosystem illustrates how these scoring schemes were applied. The student wrote:

Waste is normally produced by organisms such as fish. It contains ammonia. Through the nitrogen cycle, bacteria breaks it down into nitrite then nitrate (which is a less toxic form of nitrogen), which is then used for plant growth.

The response indicates the presence of multiple structures, such as fish, ammonia, bacteria, nitrites and nitrates. We considered “waste” as a structure; we coded “bacteria breaks it down” as behavior and “which is then used for plant growth” as its function. We assigned this response an SBF relation score of 4 as the student has identified at least one structure in relation to behaviors and functions. In addition, we assigned this response the maximum score of 3 for the micro-macro coding it as reflects connecting macro (waste) and micro (ammonia, nitrogen cycle) level structures and processes. Inter-rater reliability was calculated by having two independent raters code 20% of the sample. The overall reliability was 87% agreement.
Table 1. Scoring criteria for pre and post test

<table>
<thead>
<tr>
<th>SBF Relation</th>
<th>Explanation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Answer</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>Identifies structure <strong>without connecting</strong> to other structures, behaviors, or functions. Ex: “An aquarium has fish, gravel, and bacteria.” Ex: A drawing with no connections (written or drawn).</td>
<td>1</td>
</tr>
<tr>
<td>S:S</td>
<td>Identifies some relationship <strong>between</strong> structures. Ex: “Bacteria are in the gravel.” Ex: A drawing with connections but no elaboration (written or drawn).</td>
<td>2</td>
</tr>
<tr>
<td>S:B or S:F</td>
<td>Identifies structures in relation to behaviors <strong>or</strong> functions. Ex: (B) “Fish eat the food.” (F) “Fish get energy.” Ex: A drawing with connections and elaboration (written or drawn).</td>
<td>3</td>
</tr>
<tr>
<td>S:B:F</td>
<td>Identifies structures in relation to behaviors <strong>and</strong> functions. Ex: “The fish eats food to get energy.” <strong>Considerations:</strong> -Students may include many individual SB’s and SF’s, but to code an answer as SBF, the all three must reflect some relationship to each other. -SBF thinking is not necessarily represented in one sentence as the example here.</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Micro/Macro Level</th>
<th>Explanation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Answer</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Macro or Micro</td>
<td>Identifies only macro or only micro structures or processes.</td>
<td>1</td>
</tr>
<tr>
<td>Macro + Micro</td>
<td>Identifies both macro and micro structures or processes.</td>
<td>2</td>
</tr>
<tr>
<td>Macro ⊅ Micro</td>
<td>Identifies some relationship between macro and micro structures or processes.</td>
<td>3</td>
</tr>
</tbody>
</table>

**Results**

All pre and post tests were compared using a paired t-test. Overall, we found significant gains on all measures from pre to post test as show in Table 2. The maximum score for the SBF relationship is 68 and for macro-micro is 24. We found that students reached near ceiling at posttest on both coding schemes, with moderate to large effect sizes.

Table 2. Results for Pre and Post Tests (n=56)

<table>
<thead>
<tr>
<th></th>
<th>SBF relationship</th>
<th>Macro – Micro score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Mean (SD)</td>
<td>50.07 (24.68)</td>
<td>15.23 (6.48)</td>
</tr>
<tr>
<td>Posttest Mean (SD)</td>
<td>64.30 (17.75)</td>
<td>22.71 (6.62)</td>
</tr>
<tr>
<td>t(55)</td>
<td>3.43*</td>
<td>5.99*</td>
</tr>
<tr>
<td>Effect Size</td>
<td>0.66</td>
<td>1.14</td>
</tr>
</tbody>
</table>

*p< 0.001
Discussion

The results show that using SBF as a tool for instruction helps students deepen their understanding of relationships within a system. Post-instruction, the relationships that students identified were more complex. Students were more likely to identify relationships between the parts and the mechanisms of the system. In addition to considering relationships across different levels of the system (i.e., across structures, behaviors, and functions), students, post-intervention, were more likely to generate ideas at both macro to micro levels, connecting the visible to the invisible. Indentifying more invisible structures and relations is not surprising as it is a major focus of our instruction, but the connections across different scales of a system, we contend, are a robust consequence of SBF oriented instruction.

The SBF language provides students with the opportunity to develop a conceptual framework where multiple levels and non-linear phenomena can interact. Traditionally, such integration about ecosystem abstractions has been difficult for students. As Linn and Hsi (2000) argue, students’ ideas are often distinctly linked to particular contexts and experiences, and confronting novel ideas can cause cognitive conflict. In addition, if students are generating ideas about complex systems in pieces (as suggested by DiSessa, 1993), requiring the students to see the relevance of these pieces or cognitive resources when encountering a problem may be a fruitful approach. Although this remains to be tested, perhaps the SBF framework provides students with a “glue” to link ideas not only about the system being studied but also to the cognitive resources they already hold. Certainly SBF-oriented instruction has resulted in more sophisticated reasoning about problems related to complex systems (e.g., Liu & Hmelo-Silver, 2009). Our future directions include an investigation into the potential for SBF instruction to result in students’ ability to transfer ideas from one complex system to another.

Acknowledgements

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References


1996.


Teaching Foreign Language Reading to College Students with Reading Disabilities: A Pilot Study in Academic Reading Assistance

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Abstract
This study describes an exploratory pilot study in academic reading assistance established for dyslexic Danish university students at the Counseling and Support Center at the University of Aarhus, Denmark. The purpose of the study was to explore the nature of the dyslexic students’ difficulties in relation to reading in English as a foreign language and to provide explicit instruction and practice in reading academic English texts. The need for the training program, the participants, the instructional procedure, and the training materials are illustrated as well as the effects and limitations of the program as observed by the instructors and the students. Observations revealed that the students had great difficulties reading English words and text. However, the awareness training seemed to facilitate a compensatory strategy for reading texts in English as a foreign language.
Keywords: Dyslexia, university students, foreign language reading, compensatory strategies.

Literature Review
The process of reading and comprehending texts written in a native language (NL) or first language (L1) has several fundamental elements in common with the process of reading similar texts written in a foreign language (FL) or a second language (L2). However, the two individual processes also differ significantly in many respects. An abundance of research describes different factors influencing the development, performance, and comprehension processes relative to reading in a FL or L2 (Abersold & Field, 1997; Aldersen, 1984; Grabe, 1991; Scarcella & Oxford, 1992; Singhal, 2005). Of particular interest are such factors as the cognitive development and strategy awareness of the individual embarking upon reading texts in a L2 or FL, the reader’s language proficiency in the L1, and his or her potential to transfer successful reading skills from the native to the target language. Moreover, researchers have examined the reader’s language proficiency in the L2 or FL and the reader’s metacognitive knowledge and ability to understand and explicitly discuss the rules and grammatical features of the L1.

Several pedagogical implications and areas of instructional focus have been suggested in relation to the factors influencing L2 or FL reading (Abersold & Field, 1997, Singhal, 2005). In connection with the reader’s cognitive development and language proficiency in the L1, successful instructional applications include an increased focus on language and vocabulary acquisition as well as explicit assistance to the reader in applying his or her knowledge of decoding and letter-sound relationships in relation to new words. In connection with the reader’s language proficiency in the L2, pedagogical suggestions for instruction include an intense focus on language acquisition to expand vocabulary. In relation to metacognitive knowledge, instructional suggestions include explicit teaching of strategies for constructing meaning from texts.

The research and literature on teaching reading to L2 or FL learners and the suggested pedagogical applications are to a great extent sound and practical. However, most of the literature has not focused explicitly on individual differences in relation to FL or L2 learning and reading that cannot be remedied by means of traditional instruction (Lundberg, 2002, Granschow, Sparks & Schneider (1995). Certain groups of readers of L2 or FL literature have an inflexible cognitive system which prevents them from employing a multiplicity of diverse strategies in approaching written texts as well as a limited or deficient L1 proficiency which inhibits them from enhancing L2 or FL reading by means of transferring successful reading strategies from L1 to L2. Moreover, certain groups of L2 or FL readers do not have the level of L2 or FL proficiency necessary for the reading to progress and improve, nor the metacognitive knowledge needed to explicitly discuss linguistic issues. In other words, the research and literature on teaching reading to L2 or FL learners and the pedagogical
applications suggested in the literature are not targeted toward the individual learning differences of readers with persistent linguistic coding deficits and learning disabilities such as dyslexia.

The linguistic coding deficit hypothesis sets forth the theory that difficulties in relation to FL or L2 acquisition are caused by an inherent linguistic coding deficit affecting both oral and written L1 and FL/L2 learning (Downey, Snyder & Hill, 2000; Ganschow & Sparks, 1991; 1993a; 1993b; 1995; Sparks, Ganschow, & Pohlman, 1989). The theoretical assumption underlying the hypothesis is that individuals who experience difficulties with the linguistic system of their L1 will experience similar difficulties in relation to the linguistic system of their L2 or FL. In other words, there is a direct link between L1 and L2 or FL learning, and the ability or disability of an individual to obtain FL fluency is the L2 or FL equivalent of a L1 language acquisition capacity. The difficulties are not specific to the L1 or the L2 but to an underlying linguistic coding deficit or language learning difficulty which interferes with the acquisition of oral and written competencies in relation to not merely the L1 but the L2 or FL.

The specific linguistic coding deficit of dyslexics stems from an underlying phonological impairment in language processing which affects the perception, coding, and production of phonological representations (Goswami, 2000; Hatcher & Snowling, 2002; Metsala, 1997; Snowling, 2000; Stanowicz, 1994). Stable phonological representations are vital in successful reading acquisition in that the process requires successful mappings between graphemes and phonemes which enables the reader to decode written words. Strong phonological representations will serve as a catalyst in establishing mappings between orthography and phonology and furthermore provide a scaffold for multiletter, morphemic, and inconsistent orthography to phonology correspondences. A deficit at the level of phonological representations, however, will impede the ability to establish these sets of mappings between orthographical and phonological units in relation to both single letter and multiletter sequences and ultimately constrain the reading development and reading ability of an individual. This is the case for many dyslexics whose phonological representations and mappings between orthography and phonology are unstable, unreliable, and at times nonexistent.

Due to the unstable phonological representations and insufficient knowledge of the relationship and correspondence rules between orthographic and phonological segments, dyslexic readers are largely dependent on forming and recognizing visual representations of letter sequences instead of establishing grapheme–phoneme mappings (Ben-Dror, Pollatset & Scapati, 1991, Castle & Coltheart, 1993, Coltheart, 1981; Coltheart, Curtis, Atkins & Haller, 1993). Rather than reading words by means of converting the words’ graphemes to phonemes, dyslexics primarily read words by means of retrieving the phonological form appropriate to the visual or orthographic stimuli from the mental lexicon. Dyslexics, in other words, compensate for their phonological coding deficit by means of forming visual representations of chunks of letters. Research has shown that these visual representations rely on a type of morphological awareness as they often consist of the words’ morphological stems (Elbro & Ambak, 1996; Casalis, Colé, & Aopo, 2004).

This implicit ability of some dyslexics to employ visual recognition of words’ morphological stems as a compensatory strategy in reading allows a number of dyslexics to acquire a relatively appropriate speed of reading which enables them to obtain successful reading comprehension skills. However, the ability to employ visual recognition of words’ morphological stems as a compensatory strategy in reading usually falters when the dyslexic individual is faced with a text written in a language other than his or her L1. The morphological structure of words and the rules for word formation processes vary from one language to another rendering the dyslexic incapable of transferring the visual representations
of words' morphological stems that have been established as a compensatory reading strategy in relation to his or her L1 to the reading of L2 or FL texts. Moreover, the linguistic coding deficit or phonological impediments of the dyslexic applies to his or her L1 as well as his or her L2 or FL rendering him or her incapable of reading L2 or FL words by means of relying on grapheme-phoneme mappings. When approaching a text written in a language other than his or her L1, the dyslexic is in other words bereaved of the support of the compensatory reading strategy of visual recognition that has secured a relatively successful level of reading performance in his or her L1 and is forced to learn how to read anew by means of establishing new and stable visual representations of the words of the L2 or FL. This is an issue for a great number of dyslexic university students in Denmark.

Purpose of Study

The purpose of this study is to describe an exploratory pilot study in the form of a program in academic reading assistance that was established for dyslexic Danish university students at the Counseling and Support Center at the University of Aarhus, Denmark. The purpose of the program was to explore the nature of the dyslexic students’ difficulties in relation to reading academic texts in English. The need for the training program, the structure of the program, the participants, the instructional procedure, and the training materials will be described as well as the effects and limitations of the program as observed by the instructors and the students.

The Training Program

The Need for the Training Program

The majority of the course reading in the various departments at the university level in Denmark consists of academic books and articles written in English. English poses a challenge for a considerable number of Danish university students but particularly for the 1-2% of the students who have been diagnosed with dyslexia. Despite their phonological reading impediment, most of the dyslexic students who have fulfilled the requirements for admission to postsecondary education have developed a relatively successful level of reading performance in relation to the Danish language on account of their implicit ability to compensate for their phonologically based reading impairment by means of visual recognition. However, these visual representations of Danish words cannot be employed in the reading of academic texts in English, which impedes the students’ reading performance and consequently their comprehension of the academic English texts. In order for these students to acquire the reading competence necessary for successful comprehension of academic texts in English, it is necessary for them to establish a substantial number of visual representations of English words as a compensation for their deficient ability to decode the words.

Participants

The group of individuals who participated in the training consisted of twenty-seven dyslexic students who were receiving academic reading and writing assistance at the Counseling and Support Center at the University of Aarhus. The participants consisted of fourteen men and thirteen women between the ages of twenty-two and thirty-six. The participants were all enrolled in postsecondary education at the University of Aarhus. Of the twenty-seven students, eighteen were enrolled at the bachelor’s level and nine were enrolled at the master’s level. Various departments of study, and institutes were represented amongst the students: the Department of History and Area Studies, the Department of Aesthetic Studies, the School of Economics, the Department of Political Science, the Department of Psychology, the Department of Chemistry, and the Department of Theology.
All of the participants had been tested for dyslexia and identified as dyslexics at the Counseling and Support Center at the University of Aarhus or at another recognized Dyslexia Center in Denmark using comprehensive testing materials designed with the purpose of uncovering specific linguistic weaknesses of dyslexics in relation to reading, spelling, and writing.

**The Structure of the Program**

The program consisted of three interdependent courses titled English Morphology Awareness Training, English Syntax Awareness Training, and Academic English Vocabulary Workshop. The course on English Morphology Awareness Training was a prerequisite for English Syntax Awareness Training, and English Syntax Awareness Training was a prerequisite for the Academic English Vocabulary Workshop. Each of the three interdependent courses was held over a period of five weeks mid-semester. Two assistant professors specialized in dyslexia testing and academic reading and writing assistance were assigned to teach the courses. The students assigned to the courses met with the instructors for a period of two hours each week during which they received intensive instruction and guidance in English morphology and syntax awareness training as well as intensive instruction in building an academic English vocabulary.

**Instructional Procedure**

During each instructional period, the students received a half hour general instruction to morphological analysis and segmentation, lexical and phrasal composition, or vocabulary guidance, and the remainder of the time instruction was carried out on an individual basis. During the instruction, the students’ performances were continuously assessed and remedied by means of a dynamic interaction and discussion between the instructor and the individual students. Each student’s individual needs were assessed by means of a strategy where the instructors continuously asked questions as to how each student understood the teaching materials and the concepts of morphology, syntax, and vocabulary. Students’ questions were often answered with other questions to guide their understanding and to help the students in adopting a morphological, syntactical, and vocabulary strategy that would serve as a personal compensatory reading strategy.

The students were instructed to apply the strategies obtained during the two hour instructional period to the reading of the individual academic texts in English that they were studying during the week. The students were instructed to report back on their performance during the week so that successes or difficulties could be noted or remedied. The students reported back by means of meeting with the instructors during office hours or by contacting the instructors by phone or email.

**Training Materials**

The training materials for the program were comprised of specially designed and application specific handouts as well as individual exercises in morphological and syntactical segmentation of English words and sentences designed by the two professors instructing the program. The training materials included a number of written exercises designed impromptu by the instructors to remedy some of the specific and individual difficulties exhibited by the students in relation to morphological, syntactical analysis, and vocabulary as well as a translation exercise to assess the ability of the students to successfully translate English morphological and syntactical segments into correct and comprehensible Danish.

The individual handouts were designed in such a manner that the students were able to achieve an unequivocal understanding of English morphology, syntax, and vocabulary. All of the explanations were concise, specific, and supplied with several examples to support the students’ understanding and reading of English words. For example, one of the handouts for the class on English Morphology Awareness Training consisted of a systematic and meticulous illustration of examples of English derivational and inflectional affixes. The
affixes were deliberately segmented from the morphological stem and placed as an individual unit to the left of the page as a means of supporting the students in developing visual recognition skills in relation to English affixes and consequently assisting them in attaching meaning to the affixes while developing the ability to segment the affixes from the word and focus on the most prominent semantic unit of the English word: the morphological stem (see Table 1).

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Stem</th>
<th>Function</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Un-</td>
<td>Happy</td>
<td>Changes the meaning of a word</td>
<td>I am unhappy.</td>
</tr>
<tr>
<td>Im-</td>
<td>Polite</td>
<td>Changes the meaning of a word</td>
<td>He is impolite.</td>
</tr>
<tr>
<td>Re-</td>
<td>Do</td>
<td>Changes the meaning of a word</td>
<td>Let us redo the assignment.</td>
</tr>
<tr>
<td>En-</td>
<td>Close</td>
<td>Changes the meaning of a word</td>
<td>Please enclose the invoice.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Stem</th>
<th>Function</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ly</td>
<td>Bad</td>
<td>Changes an adjective to an adverb.</td>
<td>He behaves badly.</td>
</tr>
<tr>
<td>-en</td>
<td>Black</td>
<td>Changes an adjective to a verb.</td>
<td>They blacken their teeth.</td>
</tr>
<tr>
<td>-ify</td>
<td>Solid</td>
<td>Changes an adjective to a verb.</td>
<td>Please solidify the metal.</td>
</tr>
<tr>
<td>-ity</td>
<td>Stupid</td>
<td>Changes an adjective to a noun.</td>
<td>Stupidity in the making.</td>
</tr>
<tr>
<td>-able</td>
<td>Love</td>
<td>Changes a noun to an adjective.</td>
<td>She is lovable.</td>
</tr>
<tr>
<td>-ous</td>
<td>Grace</td>
<td>Changes a noun to an adjective.</td>
<td>He is gracious.</td>
</tr>
<tr>
<td>-ize</td>
<td>Terror</td>
<td>Changes a noun to a verb.</td>
<td>To terrorize the neighbors</td>
</tr>
<tr>
<td>-less</td>
<td>Cord</td>
<td>Changes a noun to an adjective.</td>
<td>Cordless laptop.</td>
</tr>
<tr>
<td>-al</td>
<td>Addition</td>
<td>Changes a noun to an adjective.</td>
<td>An additional employee</td>
</tr>
<tr>
<td>-ful</td>
<td>Joy</td>
<td>Changes a noun to an adjective.</td>
<td>It is a joyful evening.</td>
</tr>
<tr>
<td>-ive</td>
<td>Disrupt</td>
<td>Changes a verb to an adjective.</td>
<td>That is disruptive.</td>
</tr>
<tr>
<td>-er</td>
<td>Accuse</td>
<td>Changes a verb to a noun.</td>
<td>He is the accuser.</td>
</tr>
<tr>
<td>-ion</td>
<td>Invent</td>
<td>Changes a verb to a noun.</td>
<td>Great invention.</td>
</tr>
<tr>
<td>-ment</td>
<td>Govern</td>
<td>Changes a verb to a noun.</td>
<td>The Danish government.</td>
</tr>
<tr>
<td>-ing</td>
<td>Bowl</td>
<td>Changes a verb to a noun.</td>
<td>Let’s go bowling.</td>
</tr>
</tbody>
</table>

In addition to the instructional handouts with explanations and examples of English morphology, syntax, and vocabulary, the teaching materials consisted of lists of exercises in morphological and syntactical segmentation and identification. For example, one exercise for the course on English Syntax Awareness Training consisted of well-known exercises in identifying the phrasal category of underlined constituents adapted from Jannedy, Poletto and
Wledon’s *Language Files* (1994) to meet the specific needs and metalinguistic awareness of the dyslexic students attending the course (see Table 2).

Table 2  
Identify the phrasal category of the following constituents.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Phrasal Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our loud neighbors will be away this weekend.</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>Me and my friends play basketball every Saturday.</td>
<td>Noun phrase</td>
</tr>
<tr>
<td>Over the holidays I will be travelling to France.</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>She painted a portrait of her niece from Boston.</td>
<td>Noun phrase</td>
</tr>
<tr>
<td>The newborn babies cried.</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>The building across the street is Oxley Hall.</td>
<td>Noun phrase</td>
</tr>
<tr>
<td>I strongly refuse to be involved in this.</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>Drinking and driving should not be mixed.</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>The cat on the couch thinks that you are crazy.</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>He joined us silently but willingly.</td>
<td>Verb phrase</td>
</tr>
</tbody>
</table>

After successful completion of the exercises in morphological segmentation, identification of phrasal categories, and vocabulary building the students were presented with similar exercises that however, forced the students to apply the knowledge gained from the earlier exercises in relation to English words and sentences encountered in academic books and articles studied at the particular department of study. The students were encouraged to select an excerpt of written text from a scholarly book or article of choice and apply their knowledge of morphological segmentation, identification of phrasal categories, and vocabulary to the written excerpt. For example, an exercise from the course on Academic English Vocabulary Training encouraged the students to select 10 academic English words from an excerpt from one of their textbooks and identify their parts of speech, phrasal category, make a guess at the definition of the word, and look up the word in a dictionary (see Table 3).

Table 3  
Choose 10 English words from your textbook. Write the sentence in which the word appears, and complete the following exercises.

<table>
<thead>
<tr>
<th>Compute: ”We present a new method to compute the free energy of arbitrary solids”</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Part of speech Compute = verb</td>
</tr>
<tr>
<td>b) Phrasal Category “Method to compute the free energy of arbitrary solids “ is a noun phrase.</td>
</tr>
<tr>
<td>c) Guess Calculate</td>
</tr>
<tr>
<td>d) Replace the word with your guess “We present a new method to calculate the free energy of arbitrary solids”</td>
</tr>
<tr>
<td>Both compute og calculate er verbs.</td>
</tr>
<tr>
<td>e) Dictionary Definition Compute (vb): to determine or calculate by means of a computer</td>
</tr>
<tr>
<td>f) Danish translation Compute (vb): Beregne.</td>
</tr>
</tbody>
</table>

Finally, the teaching materials included translation exercises consisting of excerpts from academic English and Danish articles. The purpose of the translation exercises was to force the students to apply their knowledge of individual English morphemes, lexical and phrasal categories, and vocabulary in a given and defined textual context. The excerpts were
chosen specifically for their vast employment of various English derivational and inflectional morphemes, lexical and phrasal categories, and vocabulary that might pose semantic or syntactic difficulties for the students attending the seminar. The students were instructed to translate the excerpts.

**Observations: Effects and Limitations of the Program**

**Effects**

The training program appeared to have a facilitative effect on the students’ ability to recognize and understand English words when reading. As expected, the dyslexic students' visual recognition strategies in relation to English words and sentences initially appeared insufficient to sustain reading of academic English texts. The students’ reading appeared especially limited by their insufficient mappings between English orthography and phonology. As a result of these insufficient mappings, the students seemed unable to recognize individual parts of speech and phrasal categories when reading text. For example, the students would focus on the whole words "unidirectional" and "unspeakably," unable to identify the morphological stems "direct" and "speak." The students, in other words, did not appear to have established visual representations of English morphological stems which made them incapable of employing a morphological analysis strategy in relation to English words.

The handouts and exercises for the English Morphology Awareness Training, English Syntax Awareness Training, and the Academic English Vocabulary Workshop, however, seemed to have a facilitative effect on the students' ability to employ a visual recognition strategy in relation to English words. This was particularly the case for the handouts for the course on English Morphology Awareness Training. Several students reported that the handouts were instrumental in helping them establish visual representations of English affixes independently of the English words themselves, which in turn assisted them in segmenting the affixes from the word’s stem and in focusing on the semantic information contained in the stem. Seeing the derivational suffix "ity" independently of the morphological stem "stupid," for example, enabled the students to create a visual representation of the suffix as a separate morphological unit which assisted them in recognizing this particular suffix in other words such as "absurd-ity," "activ-ity," and "actual-ity," and furthermore enabled them to focus on the morphological and semantically transient stems of the words. The training, in other words, seemed to have a facilitative effect on the students’ ability to read English words.

The improvement of the students’ ability to recognize and employ inflectional and derivational morphology moreover seemed to have an effect on the students' syntactic awareness. By introducing the students to the visual appearance of individual morphological units and aiding them in segmenting and attaching meaning to individual phrasal categories, the students were forced to actively recognize, segment, and process individual morphological and phrasal units and categories. This seemed to facilitate the development of a morphological awareness that rendered the students capable of recognizing not only the form and function of singular words but the interconnection and interdependence of various words and semantic units at the syntactic level. The students seemed to become aware of how the derivational suffixes mark parts of speech which assisted them in noticing the interactions between the suffixed English words and in determining syntactic structure. This morphological and syntactical awareness aided the students in recognizing academic English words and in determining the meaning of vocabulary.

Overall, the pilot study in academic reading assistance seemed to be a valuable tool for the participants in terms of visually recognizing academic English words and sentence structure. At the end of the course, some of the students exhibited a heightened level of metalinguistic knowledge in that they were not only capable of applying a linguistic strategy...
to the reading of English words and sentences but also of discussing rules and exceptions of linguistic compositions with the instructor and co-learners. Despite these facilitative effects, however, the training also had its limitations in that students encountered a number of difficulties in relation to reading English text that could not be easily remedied.

**Limitations**

Despite, the seemingly facilitative effect of the awareness training on the students' ability to recognize academic English words and sentence structure, there were two prominent areas of difficulty that arose for the students in connection with the training. Firstly, the students encountered difficulties in applying the linguistic awareness gained from the instructional handouts and exercises in relation to certain academic English words in the scholarly textbooks read at their department or institute of study. This was particularly the case in connection with academic English loan words deriving from Greek or Latin sources such as “adenine,” “pyrrhotite,” and “schizoid.” Words of Latin and Greek origin are often composed of morphological affixes different from common English morphemes and this factor rendered the application of morphological segmentation of the words difficult for the students.

Secondly, the students encountered difficulties in relation to the establishment of visual representations of several academic English words that could not be developed entirely independently of phonological training. English morphological processing is interconnected with English phonology in relation to a significant number of words such as "clarify" and "ability." In connection with such words, it was difficult for the students to utilize the visual representations that they had established in connection with the seminar since the spelling and visual representation as well as the vowel quality of the words' morphological stems were altered with the addition of the suffixes which meant that the reading of the words required knowledge of phonological decoding as well as morphological segmentation.

Despite the limitations, however, the observations from the pilot study provide important implications for further research into the nature of dyslexic students’ foreign language reading.

**Implications for Further Research**

The observations from this pilot study in academic reading assistance for dyslexic university students provide new and important implications for further research into compensatory tools that can be employed by dyslexic students to improve their FL or L2 reading skills. Preliminary results from the three courses in English Morphology Awareness Training, English Syntax Awareness Training, and Academic English Vocabulary Workshop provide some indications in terms of alleviating difficulties among dyslexic university students in relation to FL reading. The training program seemed to prove valuable as an instructional proposal in that it appeared to improve the students’ awareness of the English language and their ability to regulate their reading strategies according to this awareness. However, the preliminary results of need to be more rigorously tested, and studies that further explore the specific relationship between dyslexia and FL reading skills need to be carried out. In connection with this training program, no direct comparison was made between the dyslexic students' performance level in Danish and English respectively or between the awareness levels of dyslexic university students in relation to control groups. In order to inspect these aspects further, tests that examine in detail the ability of dyslexics to read text in their L1 as well as their FL or L2 must be developed along with comparative studies examining the FL or L2 reading differences of dyslexics and control groups. Such initiatives could further form a basis for the development of instructional materials aimed at strengthening the foreign language reading ability of dyslexic students.
Reference List


Assessing the emotional reaction of adult learners in a simulation-based training

Pierre-Majorique Léger (HEC Montréal)*
Patrick Charland (UQAM)
Julien Perret (HEC Montréal)

Abstract

In the field of education, not many researchers have investigated the role of emotional reaction on learning. As part of an ongoing research project on neuroeducation, this communication reports preliminary results about the emotional reaction of adults in a simulation-based training. The electrodermal activity (EDA) of four subjects was tracked in a simulation aiming to assess the performance in an Enterprise Ressource Planning system (ERP) training. EDA is an index of autonomic nervous system activity measured by the potential difference between two areas of the skin. EDA has been widely used as an objective measure of emotional reaction, such as arousal. The subjects were all new trainees in a large Fortune 1000 organization. The ERP simulation game (ERPsim) was used to simulate a realistic usage context of an ERP system. End-users were placed in a situation where they had to make decisions and manage the operations of their virtual enterprises using a real-life ERP system (SAP). The four subjects were all part of the same team and competed against four other teams in the simulation. During the training, the subjects were exposed to various instructional approaches, ranging from traditional seminar to, video training, group problem solving and hands on business simulation. While results are still being analyzed, preliminary analysis suggests that the subjects’ emotional reaction is highly correlated with their financial and problem solving performance in the simulation. Also, results show that emotional reactions of most of the subjects follow a polynomial function (u shape), which suggest that the simulation based approach keep subject emotionally engaged until the end of the 12 hours training. The objective of this first phase was primarily to pretest the research protocol and identify the challenge related to scaling up this investigation to a larger group of participants. Our next phase is to monitor a larger number of learners and compare their emotional reaction to a control group of participants.

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Exploring Online Technologies in Teaching Psychology and Neuroscience at a Distance: Animations and Virtual Worlds

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The teaching of all levels of science can be a difficult task, but even more so when it is provided at a distance. While students may have access to quality course materials and instruction, it can remain challenging for learners to understand fundamental concepts. A large body of research has identified the significance of visualization, graphics, and digital animations in learning. Well-designed visual tools can help learners take in large amounts of information in relatively short time periods, and learners can construct a personal visualization of the subject matter. The use of online interactive tools has potential to encourage more active learning and increase learner motivation, acting to ultimately enhance learning outcomes.

In order to supplement student understanding of essential neuroscience concepts and methods, we have developed a set of interactive animated tutorials (NeuroAnimations), and the more recent Virtual Behavioural Neuroscience Laboratory (VBNL). The virtual world known as Second Life (SL), the most advanced virtual space, has attracted an increasingly large number of educators worldwide who are actively using SL to achieve a variety of educational objectives. SL provides an immersive environment in real time, allowing for interactions between both objects and avatars, creating a sense of reality that doesn’t exist in the traditional distance education setting. Preliminary evaluation indicates a high level of satisfaction with the NeuroAnimations and the VBNL learning environment.

Supported by: Mission Critical Research Grant, Athabasca University.
1. **Title of proposal**
   “Obsession with accountability and its impact on curriculum”

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3. **Paper**
   This paper is a research proposal to study the impact of ongoing attention and emphasis given to accountability. Existing literature on the topic is the main source of information.

   The objective of the proposal is to come up with meaningful, relevant questions related to accountability and its impact on curriculum. Primary area being explored is the impact of accountability on curriculum design and instructional strategies. Tentative analysis of its impact is done to lead to a more relevant, meaningful, and honest questions related to the topic.

   The possible impact of the national curriculum standards adopted by several states is also explored. Issues such as student achievement, teacher preparation programs, and classroom dynamics are discussed in relation to how it is affected by public’s perception of the issues on school accountability.

   Literature reviewed is not limited to research articles. Included in the review are government documents, newspaper articles, and state standards.
CULTURAL AWARENESS FOR RURAL EDUCATORS

Abstract

Cultural awareness is a necessity for today’s rural educators. This interactive forum workshop is designed to foster a greater awareness of the cultural differences prominent in rural areas and the challenges faced by rural educators. The intention is to foster the identification of various cultural differences, while enhancing the development of the critical skills necessary to overcome these differences in the classroom. This workshop will provide helpful tips and techniques on managing the cultural differences often experienced by rural educators. The workshop emphasis is the integration of cultural differences into rural educational curriculums to create a positive learning environment. The workshop encourages the active exchange of information among participants through a round robin style presentation with group exercises in the six topic areas.
Title: Louisiana Teachers’ Familiarity, Usefulness and Recommendation of Content Literacy Strategies

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Introduction

The Louisiana Department of Education (http://www.doe.state.la.us/) adopted William G. Brozo’s research-based content literacy strategies (Brozo, 2008) for use in the state’s K-12 classrooms in 2008. These strategies were infused in the state’s comprehensive curriculum, which provided specific English/Language Arts units that support the state’s standards. Teachers were encouraged to select activities and assessments from the curriculum that best suited their students’ needs, while implementing content literacy strategies that provided the foundation for teaching and learning.

Along with the state’s comprehensive curriculum, the department of education provided each school district with a copy of the recommended content literacy strategies (Brozo, 2008). This document contained the rationale for each strategy, its purpose, steps for implementation and original sources. Some descriptions included content-specific samples that could be used for classroom instruction.

Problem Statement

Research has shown that students, who have been equipped with literacy strategies, comprehend complex content specific texts. Many teachers are aware of content literacy strategies, but do not use them when teaching. On the one hand, teachers, who are familiar with these strategies but do not find them useful, will not recommend them to their colleagues. On the other hand, teachers, who are familiar with these strategies and find content literacy strategies useful, will recommend their use. The state department of education in Louisiana has included specific content literacy strategies into
its comprehensive curriculum (Louisiana Comprehensive Curriculum, 2008). Including these strategies in the state’s mandated curriculum, does not guarantee that teachers know what they are, use them or recommend their use.

After a thorough search of numerous databases and Louisiana’s Department of Education’s website, literature has not been published regarding the state’s K-12 public school teachers’ familiarity, use or recommendation of the research-based content literacy strategies contained in its comprehensive curriculum.

This study will investigate the degree to which Louisiana teachers are familiar with the research-based content literacy strategies, find them useful and recommend these content literacy strategies.

Content Literacy Strategy Perspectives

With the passage of the No Child Left Behind (NCLB) Act (2001) and recommendations from the National Reading Panel (2000), emphasis has been placed on literacy instruction connected to successful reading achievement. The five essentials of effective reading (National Reading Panel, 2000) – phonemic awareness, phonics, fluency, vocabulary and comprehension – ensure that teachers are covering all of the components of reading, which can be taught through strategic teaching. Strategic teaching allows numerous skills to be taught at one time in meaningful context (Kraglar, Walker, & Martin, 2005). More specifically, when literacy instruction implements vocabulary (Santoro, Chard, Howard, & Baker, 2008) and comprehension strategies (Kinniburgh & Shaw, 2009) that reinforce reading skills for students, students can easily identify the strategy that works best for them, when reading narrative and expository texts. Neufeld (2006) asserted that learning from expository text is an integral part of
learning subject-specific content; therefore, literacy instruction must be seen as a part of
the learning process. Two positive outcomes can be realized from effective literacy
instruction. Teachers can improve instruction and students can learn content at a more in-
depth level. Furthermore, students are provided with strategies to learn subject specific
content independently and can transfer these strategies to other content areas (Ambe,

Teachers and students become familiar with literacy strategies through purposeful
planning, implementation and reflection (Mason, Meadan, Hedin, & Corso, 2006).
Providing teachers opportunities to discuss, observe and use these strategies will promote
proactive decision making in planning lessons and content units and selecting appropriate
strategies. During these sessions teachers can identify their students’ literacy strengths
and weaknesses, examine content goals and objectives, and make appropriate
instructional decisions that support learning (Misulis, 2009).

The Purpose of the Study

This research study will focus on teachers’ implementation, familiarity,
usefulness and recommendation of the strategies to colleagues.

Specific Research Questions

The following research questions will guide this study:

Quantitative Questions

1. To what degree are Louisiana teachers familiar with the state’s recommended,
   research-based content literacy strategies?
2. To what degree do Louisiana’s teachers recommend the state’s recommended, research-based content literacy strategies?

3. To what degree do Louisiana’s teachers use the state’s recommended, research-based content literacy strategies?

4. Is there a relationship among teachers’ familiarity, recommendation, frequency of use, frequency of modification and literacy expertise?

5. Does the number of pre-service courses which included literacy strategies make a difference to first year teachers on familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies?

6. Does the length of teaching experience make a difference on familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies?

7. Does SES of the school make a difference on teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies?

8. Does school category level (Level 1, 2, 3, or 4) make a difference to first year teachers on familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies?

Qualitative Question

9. What types of modifications were made if teachers modified the literacy strategies?
Setting and Sample

According to the 2009 Louisiana DOE report there are 46,197 public school teachers and 1,471 public schools with 796 Elementary (54%), 219 Middle/Jr.High (15%), 301 Senior High (20%) and 155 Combination Schools (11%). At 5% margin of error, 95% confidence level and a conservative response distribution of 50%, we need a minimum random sample of 381 teachers. With an approximation of 30 teachers per school, at a minimum, we need to randomly sample 12.7 schools. However, 75 schools will be randomly selected and 5 teachers will be randomly selected per elementary, 18 per middle/Junior High, 13 per Senior High for a total of 600 teachers.

Data Collection

A three-part literacy survey, the Literacy Strategy Survey, will be used to measure implementation, familiarity, usefulness and recommendation of the content literacy strategies as well as teachers’ demographics. The Literacy Strategy Survey will serve as the only source of data collection. The survey will be entered electronically by each participant via SurveyMonkey.com (Lodico, Spaulding, Voegtle, 2010). Using SurveyMonkey.com will reduce interruptions to classroom teachers’ timetables and allow participants to respond to the survey at their leisure. Principals of the selected schools will be notified that their teachers will be sent email messages requesting their participation. Participants will be provided information regarding the project objectives and directions for completing the survey and the necessary URL to connect them to the SurveyMonkey site. The survey will include a statement on the first page stating that responding to these questions will equate to their consent and that the survey will be anonymous. Participants will be directed to read each prompt and respond using radio
buttons that corresponds with their selections. SurveyMonkey.com will collect and compute raw scores for each prompt. Data collection will begin in the fall of 2010, approval has been received by the IRB.

Instrumentation

A three-part Literacy Strategy Survey consisting of content literacy strategies from the Louisiana’s comprehensive curriculum (http://www.doe.state.la.us/), was designed by the researchers to collect teachers’ responses regarding their implementation of, familiarity with, usefulness of and recommendation of the content literacy strategies and demographics. This instrument was modified from a similar questionnaire (Howe, Grierson, & Richmond, 1997) that was used to determine whether 1st -3rd grade teachers were familiar with content area strategies, their frequency of use, and applicability in their respective grades. The Literacy Strategy Survey will be designed as an online survey using SurveyMonkey.com (Lodico, Spaulding, Voegtle, 2010).

Part 1 of the literacy strategies survey will provide teacher (grade level taught, years teaching experience, and graduate hours in reading – literacy expertise) and school (level of school – elementary, middle or high school, SES, race/ethnicity, & school category) demographics data. Part 2 of the survey will yield scores for teachers’ familiarity, usefulness and recommendation. The independent variables (preservice courses, length of teaching experience, SES, and school category level) will be considered in determining factors that might impact teachers’ implementation, familiarity, usefulness and recommendation of the recommended literacy strategies. Part 3 of the survey will determine the teachers’ usage of the strategies and whether they modified the strategies any way.
The survey was reviewed by a panel of reading experts for content validity. Changes to the survey were made upon their recommendations. Reliability will be calculated utilizing Cronbach’s Alpha.

Research Method

A quantitative method was chosen for this study because a 3-part quantitative survey, the Literacy Strategy Survey, will serve as the only data source for this study. Only the final question on how teachers have modified the strategies will be discussed qualitatively. The first three questions on the familiarity of Louisiana teachers with the strategies, the degree to which the teachers recommend the strategies, and the degree to which the teachers use the strategies will be analyzed using descriptive statistics. The hypotheses are listed below along with how each hypothesis will be analyzed.

H0: There is no significant relationship among teachers’ familiarity, recommendation, frequency of use, frequency of modification and literacy expertise.

H1: There is a significant relationship among teachers’ familiarity, recommendation, frequency of use and frequency of modification and literacy expertise.

The data will be analyzed utilizing a correlation matrix.

H0: There is no significant difference among the number of pre-service courses which included literacy strategies on first year teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

H2: There is a significant difference among the number of pre-service courses which included literacy strategies on first year teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.
The data will be analyzed utilizing ANOVA.

$H_0$: There is no significant difference among the lengths of teaching experience on teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

$H_1$: There is a significant difference among the lengths of teaching experience and teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

The data will be analyzed utilizing ANOVA.

$H_0$: There is no significant difference between the SES of the school on teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

$H_1$: There is a significant difference between the SES of the school on teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

The data will be analyzed utilizing ANOVA.

$H_0$: There is no significant difference among the school category levels (Level 1, 2, 3, or 4) on first year teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

$H_1$: There is a significant difference among the school category levels (Level 1, 2, 3, or 4) on first year teachers’ familiarity, recommendation, frequency of use and frequency of modification of the literacy strategies.

The data will be analyzed utilizing ANOVA.
References
Ambe, E. B. (2007). Inviting reluctant adolescent readers into the literacy club: Some comprehension strategies to tutor individuals or small groups of reluctant readers. *Journal of Adolescent and Adult Literacy, 50*(8), 832-839.


Appendix

Literacy Strategy Survey

Part I.
**Demographics Directions:** Please check the choices that apply to your situation.

<table>
<thead>
<tr>
<th>Teacher Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>I teach:</td>
</tr>
<tr>
<td><em>4th</em> <em>5th</em> <em>6th</em> <em>7th</em> <em>8th</em> <em>9th</em> <em>10th</em> <em>11th</em> <em>12th</em></td>
</tr>
<tr>
<td><em>Special Education</em></td>
</tr>
<tr>
<td><em>English/Language Arts</em></td>
</tr>
<tr>
<td><em>Science</em></td>
</tr>
<tr>
<td><em>Social Studies/History</em></td>
</tr>
<tr>
<td><em>Math</em></td>
</tr>
<tr>
<td>Years Teaching Experience: 0-1 2-5 6-10 11-15 16-20 20+</td>
</tr>
<tr>
<td>If this is your first year of teaching, did you learn any of the literacy strategies in your literacy courses? If yes, check which courses apply:</td>
</tr>
<tr>
<td><em>Introductory Reading/Literacy</em></td>
</tr>
<tr>
<td><em>Reading Methods</em></td>
</tr>
<tr>
<td><em>Language Arts Methods</em></td>
</tr>
<tr>
<td><em>Diagnostic Reading</em></td>
</tr>
<tr>
<td>Graduate hours in Reading/Literacy: 3hrs 6hrs 9hrs 12hrs 15hrs 18hrs 21hrs 24hrs 27hrs 30hrs 30+hrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of School:</td>
</tr>
<tr>
<td><em>Elementary</em></td>
</tr>
<tr>
<td><em>Middle School</em></td>
</tr>
<tr>
<td><em>High School</em></td>
</tr>
<tr>
<td>Percentage of Free/Reduced Lunch</td>
</tr>
<tr>
<td><em>0-25%</em></td>
</tr>
<tr>
<td><em>26-50%</em></td>
</tr>
<tr>
<td><em>51-75%</em></td>
</tr>
<tr>
<td><em>76-100%</em></td>
</tr>
<tr>
<td>Percentage of Ethnicity/Race</td>
</tr>
<tr>
<td><em>African American</em></td>
</tr>
<tr>
<td><em>European American</em></td>
</tr>
<tr>
<td><em>Latino American</em></td>
</tr>
<tr>
<td><em>Native American</em></td>
</tr>
<tr>
<td>School Category</td>
</tr>
<tr>
<td><em>Level 1</em></td>
</tr>
<tr>
<td><em>Level 2</em></td>
</tr>
<tr>
<td><em>Level 3</em></td>
</tr>
<tr>
<td><em>Level 4</em></td>
</tr>
<tr>
<td><em>Level 5</em></td>
</tr>
</tbody>
</table>
**Part II: Directions:** This survey is designed to inform us of your familiarity, usefulness and recommendation of the literacy strategies recommended by the Louisiana Department of Education. Please rate how strongly you agree or disagree with your familiarity, usefulness and recommendation of each strategy.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Not Familiar</th>
<th>Somewhat Familiar</th>
<th>Very Familiar</th>
<th>Not Useful</th>
<th>Somewhat Useful</th>
<th>Useful</th>
<th>Very Useful</th>
<th>Not Recommended</th>
<th>Somewhat Recommended</th>
<th>Recommended</th>
<th>Highly Recommended</th>
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<tr>
<td>Brainstorming</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Directed Reading Thinking Activity</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>GISTing</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Graphic Organizers</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>2</td>
<td>3</td>
</tr>
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<td>Learning Log</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>Opinionnaire Guide</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
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<td>Anticipation Guide</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Professor Know-It-All</td>
<td>1</td>
<td>2</td>
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<td>Process Guide</td>
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<td>3</td>
<td>4</td>
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<td>Questioning the Author (Q&amp;A)</td>
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<td>2</td>
<td>3</td>
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<td>2</td>
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<td>RAFT Writing</td>
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<td>3</td>
<td>4</td>
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<td>2</td>
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<td>3</td>
</tr>
<tr>
<td>Reciprocal Teaching</td>
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<td>3</td>
<td>4</td>
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<tr>
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<td>3</td>
<td>4</td>
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<td>2</td>
<td>3</td>
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<td>SQPL - Student Questions for Purposeful Learning</td>
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<td>3</td>
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<td>Story Chains</td>
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<td>3</td>
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<tr>
<td>Vocabulary Cards</td>
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<td>Word Grid</td>
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<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Part III. Directions: For each strategy indicate by checking one of the following: Never Used, Used as Directed, or Used with Modification. If it was modified, describe how it was modified.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Never Used</th>
<th>Used Monthly</th>
<th>Used Weekly</th>
<th>Used Daily</th>
<th>Used as Directed</th>
<th>Used with Modification</th>
<th>How modified?</th>
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</thead>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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Alaska Statewide Mentor Project
Proposal for International Conference on Education
Honolulu, Hawaii, January 4-7, 2011
http://hiceducation.org/

Title:
Metamorphosis of a Mentor Project: Adapting to fit the needs of Diverse Populations through Technology and Cultural Introspection

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Paper:
The Alaska Statewide Mentor Project (ASMP) serves early career teachers in diverse locations across the state, from rural and remote villages to the largest cities, and from Alaska Native communities to the large districts composed of students from over 80 different language regions of the world. While several rural locations may be small, spread out communities on the road system, most of the rural sites are remote and only accessible by small aircraft or boat. Most students in the Alaska Native communities are predominantly from a single cultural background, displaying a variety of language phases from novice monolingual to fully bilingual and fully English as the first language. Urban teachers struggle with large class sizes and diverse classrooms, while rural teachers often struggle with multiage classrooms where possibly only one student forms a grade level. Mismatches between the culture of the teacher and that of the students are commonplace.

Starting with the mentoring model developed by the New Teacher Center, supported by a partnership between the University of Alaska and the Department of Education & Early Development, ASMP trained mentors in 2004 to begin mentoring early career teachers (ECTs)—defined as educators in their first or second year in the teaching profession. From the beginning, modifications were necessary to properly serve Alaska’s ECTs; the California model asked mentors to meet face to face with new teachers about one hour each week. In Alaska, where most sites require mentors to fly to ECTs’ schools, they work together face to face once per month for about half a day. Mentors maintain weekly contact with their ECTs through distance-delivery methods that work best for the mentor and teacher. This typically includes email, Skype audio or chat, instant messaging, and sometimes telephone or video conferencing.
Although logistical considerations were the primary modifications at the start of the project, the true metamorphosis has occurred by using technology to conduct rich and meaningful mentor and teacher forums. Our evolution continued as ASMP integrated a research team to evaluate and guide the program, as well as to further research teacher retention and student achievement. Implementation of ongoing mentor professional development sessions on cultural values as revealed through an introspective process is the newest modification.

Friday Forums are bi-weekly distance-delivered professional development for mentors. Practice with data collection, problem solving, and risk-free role-playing compose the core of the curriculum. ECT Expansion Forums provide ECTs the opportunity to network with teachers in similar situations. These forums provide fundamental support in strategies to create an effective classroom environment and engaging instruction for students, among other areas related to professional teaching standards.

The research team focused heavily on guiding program changes at the beginning of the project gathering data through focus groups with mentors and online surveys of mentors, ECTs and site administrators. Once we were able to implement the ASMP mentoring model with fidelity, research turned to investigating the goals of improving teacher retention and increasing student achievement. Studies have provided promising results and suggestions for continued refinements and new research. Through action research of veteran mentors, data serving as feedback for principals were gathered and analyzed. ASMP collaborates with other education groups throughout the state especially in regards to results from the online surveys conducted yearly with ECTs, mentors, and site administrators.

The most recent adaptation focuses on the mentor professional development in cultural values and working in Alaska’s diverse communities. Philosophically, this ongoing session is intended to support mentors and ECTs in developing quality educational strategies by establishing authentic relationships that promote learning by self assessing one’s values, attitudes and beliefs that come into play when working with students and adults from diverse cultural or value settings. The goal contains three parts. (1) Mentors will identify and acknowledge our own values, beliefs, and attitudes that contribute to our personal worldview. (2) Mentors will support ECTs’ reflection and articulation of their personal values, attitudes, beliefs and professional practices regarding their use of strategies to recognize, respect and incorporate student diversity as an integral part of instructional content planning and delivery. (3) Mentors will support ECTs in making learning relevant for all students through instruction that supports students in connecting curriculum content knowledge with their culture, life experiences, and interests.

This session reports on the seven-year history of the project, with a focus on the adapted components of mentor training and research explorations. Implications for teaching in rural or remote locations, indigenous education and the use of technology will be shared.
IS THERE A CONNECTION BETWEEN PRINCIPAL VISIBILITY AND STUDENT ACHIEVEMENT?

Topic Area: Leadership, Achievement
Presentation Format: Paper Session

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Abstract: A survey was distributed to teachers in 25 different high schools across New York State. The data consists of 161 useable responses from teachers who participated in the study. The results show that 27.9% were from high-need, low-achieving schools, 31.9% were from high-need, high-achieving schools, 22% from low-need, low-achieving schools and 18.0% from low-need, high-achieving schools. A One-Way ANOVA was performed to evaluate the differences among the four school categories (high- and low-need, and high- and low-achievement schools) and teachers’ perceptions of school principal visibility. The results indicate a significant difference regarding the perceptions of school principal visibility among the groups. The findings indicate that high achievement (in both high-need and low-need schools) is associated with the visibility of the school principal. Post Hoc analysis showed significant differences within high-need schools and level of achievement. The researchers concluded that the more interaction a school principal has, the higher student achievement will be. The researchers further discussed the importance of the impact of principal visibility on student achievement.
Introduction

Purpose of the Study

The purpose of the study was to examine what contributes to high- and low-achievement schools and determine what leadership practices contribute to increased achievement. This is especially important in schools that are high- and low-need in terms of resources. Effective leadership skills and continual improvement can contribute to achievement in schools. This paper seeks to explore whether the visibility of the school principal differs among high-need, low-need, high-achievement, and low-achievement schools. The study builds upon the prior research of Fulton (2009) who examined teachers’ perceptions of principals’ instructional management behaviors.

Theoretical Framework

There has been much literature written on what influences student achievement. The following research was reviewed pertaining to school success, (high-achievement, low-achievement), visibility, and principal leadership within schools.

Johnson (1985) wrote of a study conducted in a Connecticut elementary school, to determine if there was a relationship between the effect of the school administrator’s visibility on the staff and student body. The researcher found that the principal’s effectiveness as an administrator was enhanced by maintaining high visibility, communicating clearly and frequently with others, supporting his/her staff, and developing positive personal contact with individual students. In addition, Andrews and Soder (1987) identified an effective principal as one performing within four high levels, namely: resource provider, instructional resource, communicator and visible presence in the school.

Gibbs (1989) observed that effective principals share the following three actions: 1) communicate and monitor reasonable expectations to the staff; 2) conduct frequent, substantive classroom observations; and 3) actively participate in the instructional program. Within these commonalities observed by Gibbs, there are at least nine attributes relating to the principal’s ability to lead an effective school. For the purposes of this study in assessing visibility, the researchers will focus on three attributes that address this topic including: creating high visibility and accessibility, making frequent classroom visits and being adept at parent/community relations.

Gougeon, Hutton and McPherson’s study (1990) determined that teachers who had frequent interaction with the principal viewed this frequency as positive power on the part of the principal. Their study further stated that the more visible the principal was in a school, the higher his/her perceived level of communication was. This contributed to effective principal behavior, namely, frequent use authority and positive power, and less frequent use of negative power. Visibility of the principal also infers accessibility of the principal. Chance (1989) notes that “A successful administrator should arrive at least 40 minutes early, stay an hour late, and maintain high visibility in the cafeteria, teacher’s lounge and school hallways.” Too often school leaders get caught-up in paperwork and operations behind the desk. Whitaker (1997) agrees that often principals fail to realize that important school business is found in the classrooms, hallways, playgrounds, and cafeterias, and not in the school office.
Hallinger & Heck’s (1998) review of research from 1980-1995 explored the relationship between principal leadership and student achievement. They wrote that, “The principal’s role in shaping the school’s direction through vision, mission and goals came through in these studies as a primary avenue of influence.” They continue that “The general pattern of results drawn from this review supports the belief that principals exercise a measurable, though indirect effect on school effectiveness and student achievement.” They also mention that the state of this research is still evolving and recommended future research into the paths through which the effects of school outcomes are achieved, specifically within and between school analyses.

The findings of a study conducted on a junior high school campus in the Midwest that evaluated the visibility of the principal as an influence on behavior of students, revealed that the increased level of visibility resulted in decreased student disciplinary referrals (Keesor, 2005). Ruder’s research (2007) determined that the visibility of the principal is important to students experiencing a problem or issue. Visibility lent itself to students feeling that they had someone in charge who could be of help to them in time of difficulty. Ruder wrote of the principal’s role: “Being less visible erodes a school’s climate and may have students wondering if the school really has a principal”. One of the key ingredients to the success of urban schools as cited by Viadero (2010) is that principals should have an attitude that embraces the students, teachers, staff and parents, tying the school to the community.

Visibility is clearly an element of effective school instructional leadership behaviors as noted in the literature.

Data Gathering and Methodology

For the purposes of this study, the data collected by Fulton (2009) was used. His study investigated the principal instructional leadership behaviors on Hallinger’s (1987) Principal Instructional Management Rating Scale (PIMRS) as related to school need, school achievement, years of experience as a teacher, and years working with the current principal. The survey instrument included a 5-point Likert scale with responses that ranged from 5-“Almost Always”, 4- “Frequently”, 3- “Sometimes” 2 -“Seldom” and 1- “Almost Never”. A total of 2,200 surveys were distributed to high school teachers across New York State in 25 different schools. The surveys asked teacher respondents to describe their principal’s instructional leadership behaviors. Teachers from high- and low-achieving, and high- and low-need high schools in New York State participated in the original study. See Appendix A in Fulton (2009) for survey questions. The data considered useable for this study includes 161 of the surveys administered to teachers.

High schools were first categorized utilizing New York State’s similar school categories. In Fulton’s study, data were collected from the New York State Education Department (NYSED) for all 1,063 public high schools in New York State. Each school was categorized by its need resource capacity (high, moderate and low-need), and three-year mastery percentage average.

The New York State Education Department categorizes each high school using a code called Need/Resource Capacity (N/RC) Code. High schools are assigned an N/RC category based on their N/RC Index. The Need/Resource Capacity is defined as the index that measures a district’s ability to meet the needs of its students with local resources. It is calculated by dividing a district’s estimated poverty percentage by its Combined Wealth Ratio in New York State (New York State Education Department, 2005). The index is a measure of a district’s
ability to meet the needs of its students with local resources, and is calculated by dividing the district’s estimated poverty percentage by its Combined Wealth Ratio.

Student Mastery is defined as the designation given to students by New York State to signify whether student performance demonstrates a thorough understanding of the content expected in the subject and grade level. Mastery was calculated over three years using the percentage of students who scored 85 points or above out of 100 on the New York State Math A-Regents examination. Schools were categorized as either high- or low-performing. Starting from the highest mastery average and counting down, schools were considered to be high-achieving. Each high school was placed in ascending order numerically from the lowest three-year mastery average to the highest to categorize schools as low achieving.

Data Analysis

The researchers selected items from the original instrument that appeared to be related to the construct of visibility and formed a new group. A Factor Analysis was performed on the survey questions chosen by the researchers in this study, which confirmed that the items group together. Reliability of principal visibility was determined at 89.2% on the survey questions pertaining to principal visibility. The results of the Factor Analysis are in Table 1.

Table 1- Survey Questions Pertaining to Visibility

<table>
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<tr>
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<th>Survey Questions Pertaining to Visibility</th>
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<tbody>
<tr>
<td>1</td>
<td>Take time to talk informally with students and teachers during recess and breaks</td>
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<tr>
<td>2</td>
<td>Visit classrooms to discuss school issues with teachers and students</td>
</tr>
<tr>
<td>3</td>
<td>Attend/participate in extra- and co-curricular activities</td>
</tr>
<tr>
<td>4</td>
<td>Cover classes for teachers until a late or substitute teacher arrives</td>
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<tr>
<td>5</td>
<td>Tutor students or provide direct instruction to classes</td>
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<tr>
<td>6</td>
<td>Lead or attend teacher in-service activities concerned with instruction</td>
</tr>
<tr>
<td>7</td>
<td>Set aside time at faculty meetings for teachers to share ideas or information from in-service activities</td>
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<tr>
<td>8</td>
<td>Recognize students who do superior work with formal rewards such as an honor roll or mention in the principal's newsletter</td>
</tr>
<tr>
<td>9</td>
<td>Use assemblies to honor students for academic accomplishments or for behavior or citizenship</td>
</tr>
<tr>
<td>10</td>
<td>Recognize superior student achievement</td>
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</table>

Teacher Form 2.0 © Hallinger as appeared in Fulton (2009), pages 105-107

Findings

The descriptive statistics are listed in Table 2. The results were then analyzed using a One-Way ANOVA to evaluate the differences among the four school categories (high- and low-need, and high- and low-achievement schools) and teachers’ perceptions of school principal visibility. Analysis of the data revealed that 7.6% of the variance in achievement is accounted for in the Visibility variable (Table 4).

A one-way analysis of variance was conducted to evaluate the mean difference in the comparison between visibility within the four groups. The independent variable of school category contained four groups: High-Need (HN), Low-Need (LN), High-Achievement (HA), and Low-Achievement (LA).
The ANOVA was significant, $F = \frac{(3,160)}{} = 4.31$; $p<.01$. The strength of the relationship between the comparison of visibility of the principal and achievement as assessed by $n^2$, was .076 indicating a large effect (See Table 3).

Follow up using a Post Hoc Test was conducted to evaluate pair-wise differences among the means. The results listed in Table 4 indicate that there was a significant difference in the means between the groups that had high-need with low-achievement, and the groups that had high-need with high-achievement. The groups that were HNLA ($M=22.63$, $SD=7.500$) had less achievement when the principal was not visible, than those HNHA ($M=28.50$, $SD=9.06$).

Table 2 – Descriptive Statistics

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<th>School Category</th>
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<td>1 HNLA</td>
<td>22.63</td>
<td>7.50</td>
<td>46</td>
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<tr>
<td>2 HNHA</td>
<td>28.50</td>
<td>9.06</td>
<td>52</td>
</tr>
<tr>
<td>3 LNLA</td>
<td>27.19</td>
<td>8.22</td>
<td>36</td>
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<tr>
<td>4 LNHA</td>
<td>25.52</td>
<td>8.58</td>
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<tr>
<td>Total</td>
<td>26.03</td>
<td>8.63</td>
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A One-Way ANOVA was performed. The F Test was significant at the .05 level. The results are in Table 3.

Table 3 - ANOVA

One way ANOVA….(N HNLA=46, N HNHA=52, N LNLA=36, N LNHA=27)

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<th>F</th>
<th>Sig.</th>
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<td>Corrected Total</td>
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* $r^2$ Squared = .076 (Adjusted $r^2$ squared = .058)
A Post Hoc Analysis was run to explore the differences between HNLA and HNHA. The results are in Table 4. With low-need schools, there was no difference. However, there is a strong difference in visibility between high-need schools and achievement. The Mean difference in the high-need, low-achievement schools is due to higher visibility on behalf of the school principal. The Post Hoc analysis shows a significant difference between high-need schools and level of achievement.

Table 4 – Post Hoc Analysis

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<th>(I) school category</th>
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<th>M_J</th>
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<th>Std. Error</th>
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<td>28.50</td>
<td>9.06</td>
<td>-5.87*</td>
<td>1.69</td>
<td>.01</td>
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<tr>
<td>3 LNLA</td>
<td>4 LNHA</td>
<td>25.519</td>
<td>8.58</td>
<td>-2.88</td>
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<tr>
<td>2 HNHA</td>
<td>3 LNLA</td>
<td>27.19</td>
<td>8.22</td>
<td>1.31</td>
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<td>.92</td>
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<tr>
<td>4 LNHA</td>
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<td>2.98</td>
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<tr>
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<td>8.58</td>
<td>1.68</td>
<td>2.13</td>
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Table 4 indicates that when the principal is visible, the high-need, high-achievement ($M = 28.50, SD = 9.06$), schools score higher on achievement than in high-need, low-achievement schools ($M = 22.63, SD = 7.50$) schools as indicated in Table 2.

Implications

Educational Importance of the Study

This study examined high school principal visibility within high-and low-need, and high-and low-achieving schools (school category) to gain a clearer understanding of what contributes to a high-achieving school in terms of the visibility of the principal. The results show that when the leader is visible, achievement is higher. The findings in this study can be used to review current leadership practices in both high-need and low-need schools. Effective leadership is especially required to meet the challenges of current economic times when all resources are becoming limited.

Effective instructional leadership behaviors on behalf of the principal can improve achievement where money cannot. In order to guide schools through turbulent economic times, instructional leaders must “do more with less.” Being visible, and maintaining high levels of interaction, can improve achievement even in schools with a smaller amount of resources. This coincides with the review of the literature that maintaining high visibility and accessibility contributes to school achievement. Recommendations for future studies include examining the other effective behaviors are mentioned in Fulton (2009). The implications of these findings may be that plans for leadership training should include behaviors that increase principal visibility, and thereby school achievement. Furthermore, an examination of principal visibility
can be examined in schools with low socio-economic status to improve their achievement without requiring expensive additional resources.
REFERENCES


Fulton, Theodore T. (2009). High School Principal Instructional Leadership Behavior in High- and Low-Need and High- and Low- Achievement Schools. ProQuest LLC; (UMI No. 3367945)


Title:

Real World Geneseo (RWG) Program Increases Cultural Competency in College Students

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ABSTRACT

In this workshop, we share the methods, thematic outcomes, and materials to of our RWG collaborative project. The RWG experience was designed over the course of two years by Student Affairs and Academic Affairs faculty to help improve the levels of cultural competency of our students at our Predominately White College (PWI). Our interactive presentation will focus on the successful implementation and evaluation of two cohorts of college students that participated in the RWG. RWG is a four-phase, 2 credit experiential course targeted to sophomore and junior students. Phase one is a retreat, a 4 day intensive living experience where participants engage in challenging discussions involving topics of power, privilege, race, gender and religion. The experience bears some resemblance to the pop culture Music television program “Real World”, popular with our current generation of students. Phases 2 and 3 occur concurrently. Phase 2 deliberately connects students’ newly acquired cultural knowledge and skill sets to a targeted academic course(s). Phase 3 is the learning community that guides and supports the cohort in the connecting course as well as explores additional topics in ableism, xenophobia, and student as change agent. Phase 4 is actualization of the RWG experience in the form of a service learning experience. In a 250 standardized item analysis of pre and post assessments of RWG participants, 100% of majority and minority students improved their levels of cultural competency. This project was supported by grants in 2009 and 2010 from the New York State Provost’s Office for Diversity and Educational Equity and Bringing Theory to Practice.
Using “TASKSTREAM” for Success:  
Passing the Performance Assessment for California Teachers  
For Candidates in Secondary Education  

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In 1998 the California legislature passed SB 2042. SB 2042 legislated sweeping reform in teacher education, including a requirement that every teacher credential candidate pass a state-approved high-stakes exit exam (Hafner & Maxie, 2006; Sandy, 2006). All institutions that credential teachers in the state of California were given two options; follow an assessment model developed by the CCTC, California Commission on Teacher Credentials along with ETS, Educational Testing Services, or a model created through the leadership of Stanford University and a consortium of both public and
private California Universities. This model was called the Performance Assessment for California Teachers (PACT: www.pacttpa.org) (Sylvester, Summers & Williams, 2006).

The PACT is currently alive and well in the Department of Secondary Education at San Francisco State University. Since the assessment became high stakes in July 2008, the Department of Secondary Education has helped usher over 275 single subject credential candidates’ through the PACT process. We have had a ninety plus percent success rate in the number of candidates passing the assessment upon their first submission. This success however, did not come easy and is the result of years of collaboration and cooperation among secondary education faculty and content specialists from multiple departments across campus. This paper will describe our journey and identify the duties associated with the PACT with the impact on the individuals involved in our teacher preparation program. In addition, our selection of the web-based instructional resource TaskStream and the timely support supplied by Taskstream personnel will be highlighted as a crucial aspect in the success of full implementation of PACT and our candidates being able to create high standard PACT teaching events. The user friendliness of this system and, specifically, the troubleshooting and navigational support given to our TASKSTREAM Manager was just superb!

To begin, we must give credit to the already established collaborative culture that existed within the Department of Secondary in working with our content specialist colleagues housed in departments all across campus. Even before the full implementation of SB 2042, we enjoyed a professional and collegial relationship working with what we call our ‘C & I faculty’ (Curriculum and Instruction). These faculty are pedagogical content experts responsible for
providing our single subject credential candidates two semester long methods courses. The two courses scaffold the skills and dispositions required for a credential candidate to be able to create and enact curriculum that makes specific content accessible to all their present and future students. The C&I and SED faculty were continually collaborating on determining the appropriate credential courses that would provide the content and support for the TPE’s (Teacher Performance Expectations) as required by SB 2042 (Hafner & Maxie, 2006). This constant collaboration was supported by multiple meetings, both formal and informal. Two C&I faculty, Math and Science, housed in the Department of Secondary Education provided the needed leadership in bringing all C&I faculty from around the campus together for joint program development and alignment.

Prior to the statewide implementation of the PACT, and after determining how the TPEs would be embedded programmatically, the combined faculty worked to develop an in-house assessment system. This process demanded joint decision-making and agreement in the development and use of common rubrics for embedded signature assignments across all courses and content areas. And yes, the signature assignments were agreed upon only after many, many meetings, discussion and compromise! In 2005 SED and C&I Faculty agreed to a single capstone assignment with a uniform rubric for assessment. This capstone assessment, the Candidate Assessment Portfolio (CAP) was built from the embedded signature assignments completed by a candidate throughout all coursework. Each single subject credential candidate submitted to the Department Chair a three-ring notebook that contained all his or her signature assignments and artifacts associated with identified competencies for various TPEs. These notebooks were stored in a locked room and
could be accessed only through a sign in procedure with the Chair’s Administrative Assistant. This CAP assessment and storage/retrieval system lasted for only three years. It became obvious from the first year that a digital system is desperately needed. We created our own digital portfolio assessment system and called it “i-CAP” (Internet Based Candidate Assessment Portfolio). We were very pleased with this as our summative assessment process/product only to find that the PACT would be required by law for any candidates entering a credential program after July 2008. Out went the “i-CAP”. We had to start all over again and re-engineer our assessment system to support the PACT, with the added challenge to have a system/product that granted access to a statewide consortium of trained scorers!

Room Containing CAPs
The PACT Era

PACT (Performance Assessment for California Teachers) is a consortium of teacher preparation programs at 30 universities, 1 district internship program, and 1 charter school network. These institutions have joined together to develop and implement an authentic teacher performance assessment. Successful completion of a CCTC approved teaching performance assessment will be required by all credential candidates in order to earn a California Preliminary Multiple Subject or Single Subject Teaching Credential.

The teaching performance assessment, in our case the PACT, consists of a Teaching Event and Embedded Signature Assessments (ESAs). Multiple Subject (elementary) candidates complete three additional Teaching Event tasks so that they are assessed in each of the core content areas (literacy, mathematics, history-social science, and science) taught in elementary schools. The Teaching Event measures the Teaching Performance Expectations (TPEs), which are teaching standards for California student teachers. The customized ESAs, which measure selected Teaching Performance Expectations, are developed by each program.

Candidates in the single subject credential program at San Francisco State University complete the teaching event during their spring semester in the credential program. A submission date in early April is set and posted on the Department web page. Candidates are also given this deadline date by their lead PACT instructor/SED PACT coordinator. All single subject candidates submit their completed teaching events, which include video and artifacts – such as student work samples - through uploading all components of his or her
completed teaching event to the TASKSTREAM web portal. This web portal and process will be explained in a later section of this paper.

**Making it work!**

A set of Department policy statements had to be agreed upon by the faculty early on in our PACT journey. Several of these policies are below:

*All tenured/tenure track faculty will be actively involved in the support of all single subject credential candidates in completing the requirements for the PACT.*

*All tenured/tenure track faculty that hold a credential will be trained as a PACT scorer.*

*All lecturers teaching credential courses will be actively involved in the support of all single subject credential candidates in completing the requirements for the PACT.*

*All lecturers that hold a credential will be trained as a PACT scorer.*

*All University Supervisors will be actively involved in the support of all single subject credential candidates in completing the requirements for the PACT.*

*All University supervisors that hold a credential will be trained as a PACT scorer.*

Every faculty member in the Department of Secondary Education holds a single subject teaching credential. All have been a public school teacher at some point in their professional career. Our faculty members’ actual classroom experience certainly helped in their understanding and implementation of the PACT and how to best support future teachers to reflect deeply on their own practice through the teaching event. Being credentialed also enabled each faculty member to be trained as a PACT scorer. The Department Chair, who is
also a faculty member in the Department, holds a teaching credential in History/Social Science and is trained as a scorer. Our Director of Field Services is also a trained PACT scorer. Everyone in the Department has a role to play in the PACT. Our goal was to create an inclusive community encompassing the PACT and our candidate’s success. Even our administrative assistant to the Chair had a role to play. He took care of all the room scheduling for scorer training, meals, parking vouchers, and honorariums - and he processed all necessary paperwork for these various items. The bottom line was that we needed to be there for our candidates. Since the PACT was “law” we needed to make sure that our candidates were prepared to do their best when the time came for them to complete the teaching event and submit it for scoring.

The single subject credential program at San Francisco State University is a two-semester program starting in the fall semester. Our application deadline for fall admittance is in February. Our candidates go through a comprehensive admission process including a small group interview. The admission process concludes with a new candidate orientation held in May and candidates placed with master teachers/school sites by the end of June. Most candidates are ready to begin both their student teaching and University course work in August when both the public schools start up and fall semester at the University begins. Our candidates are concurrently engaged in credential courses and student teaching during both semesters. Our credential program melds theory and practice. Candidates stay with their assigned master teacher until the end of the public school calendar, usually sometime in late June. It is important to note that although the University semester ends in mid May, candidates are still student teaching until sometime in June. If a candidate does not pass
the PACT in their first attempt, active student teaching until the end of June can prove extremely valuable if remediation is required.

Single subject credential candidates are enrolled in one of six cohort classes (SED 751). Each of these cohort classes is lead by a PACT leader/faculty member. Candidates stay with this cohort of candidates and the same PACT leader/faculty member for both semesters - the duration on the credential program. This PACT leader becomes the point person for the candidates regarding any problems/questions they may have regarding the PACT. A faculty member in the Department also serves as the PACT coordinator. This individual works with all instructional faculty in making sure, from a curricular point of view, that all courses are providing both the content and support each candidate needs. All PACT questions/concerns are channeled to the PACT Coordinator. Since the PACT Coordinator is also a PACT Leader/SED 751 instructor, he is on the front lines with his colleagues in working with the candidates with the PACT.

Currently, over 165 candidates are enrolled in our 2010-2011 single subject credential program.

The Department Chair serves in the role as TASKSTREAM Program Manager.

Given the large number of faculty and credential candidates in our program we needed a PACT/Teaching Event submission process that would allow for the following key requirements:

1. Digital access to the teaching event
2. Storing of the teaching event
3. Manipulation of the teaching events for scoring
4. Retrieval of the teaching events at any time
5. Management of scorers
6. Data manipulation for report generation
7. Communications with candidate during the scoring process
8. Data security/confidentiality

Since we already had a digital assessment system (i-CAP) the above requirements were easily identifiable. Our PACT Coordinator and Department Chair researched a number of digital assessment portfolio providers. Presentations were given and free access to various potential service providers were obtained. One such provider was TASKSTREAM (www.taskstream.com). The PACT Coordinator and Department Chair were impressed with a number of the TASKSTREAM features. One of most importance was it “friendly” user ability for candidates and scorers. The fact that it was also being used by a number of other high education institutions was of value for potential exchange of scoring services. Our Chair contacted TASKSTREAM and a red carpet dialogue was started. Free accounts were established as well as training. Our Department Chair took on the role of TASKSTREAM Program Manager and was the contact person for all and any communications regarding TASKSTREAM.

Our 165 single subject credential candidates represent all academic subjects, English, social science, math, science, and the following special subjects referred to as physical education, world languages, art, and music. The Department of Secondary Education has three independent programs that enroll candidates in these credential areas: A program for regular candidates, an Intern program, and an off campus program called
BATC Bay Area Teacher Center. It was important that the TASKSTREAM system recognized these different programs and allowed candidates to identify themselves with the appropriate program they were enrolled in. This would allow for data analysis specific to each program in addition to aggregate data. Working with a client services support person from TASKSTREAM, we created our TASKSTREAM program infrastructure to allow the candidate to enroll themselves in any one of the following programs below:

* Art Teaching Event – BATC
* Art Teaching Event - Intern
* Art Teaching Event - Regular
* DEMO -PACT Teaching Event - History/Social Science
* English-Language Arts Teaching Event - BATC
* English-Language Arts Teaching Event - Intern
* English-Language Arts Teaching Event - Regular
* History/Social Science Teaching Event - BATC
* History/Social Science Teaching Event - Intern
* History/Social Science Teaching Event - Regular
* Home Economics Teaching Event - Intern
* Mathematics Teaching Event - BATC
* Mathematics Teaching Event - Intern
* Mathematics Teaching Event - Regular
* Music Teaching Event - BATC
* Music Teaching Event - Intern
* Music Teaching Event - Regular
* Physical Education Teaching Event - BATC
* Physical Education Teaching Event - Intern
* Physical Education Teaching Event - Regular
* Science Teaching Event - BATC
* Science Teaching Event - Intern
* Science Teaching Event - Regular
* World Languages Teaching Event - BATC
* World Languages Teaching Event - Intern
* World Languages Teaching Event – Regular

Once the TASKSTREAM infrastructure was in place TASKSTREAM provided detailed information sheet regarding how to enroll in TASKSTREAM and how to register under one of the above credential program areas. Our Department Chair went to every credential cohort class and conducted an orientation to TASKSTREAM and provided each candidate with the information they would need to both enroll and register appropriately. This TASKSTREAM orientation was not meant to be comprehensive. It provided the initiation into the system and each candidate was encouraged to explore the system and become familiar with its components and the PACT sections. Each of the PACT Leaders would incorporate PACT/TASKSTREAM activities into their course activities. Candidates paid a user fee for having access to the TASKSTREAM portal and the section specifically designed for the PACT.

During the fall semester candidates were guided by their PACT leaders through the PACT standards and what would be expected of them in providing evidence of having achieved the various standards. Technical aspects such as uploading artifacts from their teaching, i.e., lesson plans, student work, grades test, etc…. as well as video clips of their actual student teaching. Trips to our computer labs were scheduled and technical support provided. With the April deadline date in front of them, we all worked together to both meet this deadline and for successfully passing the assessment.
In utilizing the TASKSTREAM system candidates would respond to on-line prompts and provide appropriate artifacts/video clips and either prior to the deadline or on the deadline date they would hit the “submit” button and their PACT/Teaching Event would be logged in to the TASKSTREAM system. An automatic message, “You have successfully submitted your Teaching Event” would be sent to the candidate. As candidates submitted their teaching events only our Department Chair/TASKSTREAM program manager would have access to their work and know the candidate name associated with each teaching event. As teaching events were submitted, they would be registered under each appropriate program area.

Each of our academic/special subject content areas has a lead scorer. This individual is responsible for determining the scorer for each teaching event in their content/special subject area. Each scorer would not know the name of the candidate associated with the teaching event they were responsible for scoring. However, should they know the individual by chance when they review the video clips, they would inform their lead scorer and an exchange would be made for them to score a different teaching event. The list of scorers and the name of the candidate to be assigned to that scorer is given to the TASKSTREAM program manager. The TASKSTREAM Program Manager then sends an email to the scorer with just an identification number for each teaching event they will be responsible for scoring. Scorers are given two weeks to score and to submit the score back to the TASKSTREAM Program Manager. The score is not given to the candidate. If during the scoring process any scorer experiences any irregularity they contact the TASKSTREAM Program Manager who consults with the PACT Coordinator in determining how to resolve or
accommodate the irregularity. Some examples of such irregularity’s are:

- *Video clips not working*
- *Files not opening*
- *Documents mentioned yet not present*

For consistency and keeping track of the various irregularities the TASKSTREAM Program Manager is the individual who contacts the candidate - not the scorer. This is also to maintain the confidentiality of the scorer. Should a teaching event need to be double scored the TASKSTREAM Program Manager coordinates this process with the Lead Scorer. The score from this review is also reported back to the TASKSTREAM Program Manager. The TASKSTREAM system makes all this possible. Everything from submitting the teaching event, scoring, documentation of the evaluation, communication to lead scorers, scorers, and candidates, reporting evaluation results, and the ability to manipulate and analyze the data is all through the TASKSTREAM system. Candidates also have access to the TASKSTREAM MENTOR 24-7. They just email TASKSTREAM MENTOR with their problem/concern and someone from TASKSTREAM gets back to them within 24 hours.

Although scorers are given two weeks to score the teaching events assigned to them, because of the need to double and triple score, four weeks is the norm for getting a final score. Final scores---including pass/fail and a numeric score for each of the twelve elements of the teaching event being scored, including comments from the scorer if provided, is sent to all candidates on the same day/time. Any teaching events still under review are noted and a email to the candidate indicating that their teaching event is still under review is sent. It’s important that final scores are available far in advance of
the end of the academic year and the end of the public school year. Early returning of scores will allow candidates who did not pass the time they may need in order to re-submit their teaching event entirely or the section/part identified as failing, while the semester is still in progress and the public schools still in session. This becomes especially important should the candidate need to submit new video clips of their teaching. Candidates who need to re-submit a teaching event or have remediation are assigned a PACT mentor.

This individual works with the candidate and coordinates the re-submission and scoring of the new work with the TASKSTREAM Program Manager.

We could never accommodate or manager the large number of teaching events that are submitted and need scoring if it weren’t for the TASKSTREAM system. TASKSTREAM has made the process easy and non-threatening for all users, regardless of their role in the process. As the TASKSTREAM Program Manager, whenever I needed assistance it was just a phone call or email away. TASKSTREAM Client Services have been their when needed. Quick turnaround in problem solving and in making any adjustments in the overall TASKSTREAM system to accommodate any unique needs on our part.

The TASKSTREAM system provides the TASKSTREAM Program Manager with the ability to produce various reports based upon the data created by candidates in their programs. You will recall earlier in this paper a listing of the various programs candidates can be associated with. Reports can be generated for each of the different programs as well as reports reflecting aggregate data. These reports
can be generated by program and/or by academic/special subject area. Having this ability allows for various program administrators the ability to review their program specifically and make decisions for program improvement. We can also look at this data by academic/special subject area therefore, allowing us to see what areas in particular need improvement.

Each LEAD Scorer is given a set of data sheets with analysis of their academic/special subject area. The LEAD Scorer uses this data/information as a form of professional development for their scorers. All LEAD scorers come together with the PACT Coordinator and TASKSTREAM Program Manager to review data and to consider any program changes/modifications that may be needed.

SUCCESS!

The success of our PACT program is owed to many individuals. Especially our candidates, who for two semesters craft and build a PACT teaching event that will be evaluated and determine if they have met the competencies required of them by the California Commission on Teacher Credentialing. The faculty for all that they do in guiding the candidates in their credential courses. Our PACT Coordinator, who provided the necessary overall curriculum leadership and the navigation of the daily PACT operations. And finally, the TASKSTREAM Program Manager who performed the critical role of coordinating the submission/scoring, retrieval, and data management of all teaching events being scored.
Without the services provided by TASKSTREAM, we would not have been able to implement and manage the PACT process and document the degree of success we have achieved.

References


Links between Parent and Teacher Styles and Student Outcomes: 
Communicative Competence, Academic Engagement and Achievement

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Although teachers and parents are often urged to work cooperatively to best support children’s success in school, much has yet to be discovered about specific processes and practices for this partnership to best promote children’s ability to think creatively, systematically, and deeply about complex issues. The focus of our study, therefore, was to examine the manner in which qualitative variations in parenting and teaching styles (authoritative, authoritarian, permissive) are associated with variations in academic, social, and linguistic outcomes of 5th grade children, a pivotal transitional year. Specifically, we examined the effects of parents’ and teachers’ authority style on children’s linguistic competence, behavioral competence at school, creative problem-solving in science, interest level in science and overall achievement in the 5th grade.

Approximately 50 children from 5 classrooms were individually interviewed about their parents’ and teachers’ level of control, expectations, and nurturance. Children were also interviewed about their interest in science. Pairs of children then worked together on a tower-building problem-solving task to examine their communication and cooperation with each other. Data about children’s behavior and academic performance were collected from surveys filled out by their teachers.

Preliminary analysis of the results show children from authoritative households tend to maintain control of the materials and task in general during the paired problem-solving task. Children from authoritarian households tend to follow the lead of their partner during the task. We are currently analyzing children’s communication patterns during the paired problem solving task as well as the influence of teachers’ authority style on behavioral, academic, and linguistic competence. Results of this study will lead to a new perspective to inform educators and their efforts to develop children’s academic abilities, creative thinking, and communicative competence. With this study’s focus on how parent authority style interacts with various instructional methods, educators and parents will be better equipped in developing ways to partner together for their children’s success.
APPREHENSION AND MOTIVATION AMONG DUAL LANGUAGE PEERS IN A SPANISH-ENGLISH AFTER-SCHOOL PROGRAM

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Abstract

This study explores how English Learners and Spanish Learners perceived their self-regulated interpersonal language exchange and their perceptions about their learning process. And while there is considerable research about adult language learning connections between motivation, self-efficacy as well as ability and confidence, more research in the area of second language learning can reveal how these factors contribute to language learning motivation in younger learners. Findings from transcription and analysis of 12 English and Spanish sessions reveal how students go through three specific stages—Language Apprehension, Language Initiation, and Language Acquisition—which reflect their confidence in their ability to speak and be understood by their peers.

Key words: Dual language, motivation, confidence, anxiety, self-efficacy
Newcomers often find themselves isolated linguistically and culturally from mainstream peers. Some of this isolation can come from the school environment as well. When newcomers are placed in a mainstream classroom, they have an inability to respond to others who do not speak their native language. So, they continue to be an outsider until they achieve the basic ability to communicate and feel like they belong. As a result, they may lose their desire to learn. Integrative group orientation can provide the motivation to learn. Establishing positive classroom cultures and classroom norms only contributes to language learning and inclusion (Dörnyei & Maldarez, 1997). While this could apply to explicit or purposeful ways of teaching and learning language in classroom settings through dialogues or other forms of practice, it is more relevant in terms of language practice that naturally emerges through social interaction within speech communities (Dörnyei and Maldarez, 1997; Dörnyei & Scott, 1997; Hymes, 1974b).

Dual immersion programs are excellent vehicles for promoting and inspiring language learning and acquisition; however, access is limited due to the availability of such programs. According to the Directory of Two-Way Bilingual Immersion Programs in the United States, as of February 22, 2005, there were 312 programs nationwide that utilized English and the minority language 50% of the time and were content-driven. These types of programs are generally limited to the elementary grades (Howard & Sugarman, 2001). In addition, Gandara (2000) notes that in an environment where anti-bilingual initiatives pass, such as California Proposition 227, there has been a reluctance to implement dual language or native-language maintenance programs (Gandara, et. al., 2000).

Moreover, language learning has often been considered a dull process by many who have learned a second language such as Spanish in high school which generally has a grammar-based
focus. Administrators could help create speech opportunities via speech communities which may be socially motivating to English Learners who have the opportunity to interact with mainstream peers in the language as “resources” versus liabilities (Teaver, 2005).

**Theoretical Framework**

The study of motivation in language learning has focused primarily on college student experiences. Even so, this prior research provides a basis for understanding key factors that motivate learning in younger language students. There are several explanations of motivation. Dörnyei (2000) notes that:

> [...] most researchers would agree that motivation theories in general attempt to explain three interrelated aspects of human behaviour: the choice of a particular action, persistence with it, and effort expended on it. That is motivation is responsible for why people decide to do something, how long they are willing to sustain the activity, and how hard they are going to pursue it. (p. 520)

Other researchers have also noted preference, persistence, and effort in terms of the problems that need to be solved, as well as the length of time students are willing to personally invest are factors in how motivated students become in achieving their goal (Maehr and Meyer 1997). Motivation of this type is often linked to purpose and a desire to gain knowledge. Additionally, researchers also note that volition as well as choice in controlling contextual situations can lead to learning ownership which only adds to a student’s sense of self-efficacy or the belief in their ability to learn (Liem, Lau, Nie, 2008; Pintrich, 2004; Schunk, 1990).

Eccles and Wigfield (2002) have captured most of these ideas in one model. In brief, they note student’s motivation and self-efficacy to learn is based on (1) cultural milieu in which the learning situation occurs, (2) student perception of the socializer’s beliefs and expectations
about behavior and academic success, (3) student goals within the program and their expectation of success; and (4) whether student goals are proximal, specific, and challenging, (7) student affective reactions and memories, as well as (8) the “subjective task value” for students.

Beyond the notion of the social environments or milieu, expectations of success, effort, and time on task (Eccles & Wigfield, 2002; Dörnyei, 2000) students become motivated when they are committed to self-regulating their learning process and can initiate strategies to achieve their goals. Crucial research by Zimmerman (1989) reveals “Self-regulated learning strategies are actions and processes directed at acquiring information or skills that involve agency, purpose, and instrumentally perceptions by learners” (p. 330). Self-regulated learners initiate actions, reflect on their situations, monitor their progress, and determine how well they perform within the context of their environment. Much of their self-efficacy is based on how they perceive their ability.

Their ability to perform is linked to their sense of self-efficacy and can often be linked to their confidence, or lack of confidence which can sometimes expressed as anxiety or apprehension. Confidence in one’s ability or self-efficacy has also been described as a salient sense of self (Csizer & Dörnyei, 2005) or ability attribution (Liem, Lau, & Nie, 2008) or confidence in their language achievement (Clement, 1980). In other words, having a high confidence in their ability to learn a language makes a difference in their performance. Dörnyei and Csizer found that greater amounts of language contact promoted increased self-confidence in language ability as well as motivation to learn the target language.

Is anxiety the inverse of confidence or the sense of a salient self? While confidence appears to be a factor in motivation, anxiety might also be as well. Additional research findings reveal how anxiety can impede learning. Gardner, Masgoret, Tennant, and Mihic (2004) utilize
the term “state anxiety” to explain a state anxiety emerges in particularly distressful situations. Krashen (1983) brought up the issue anxiety at a time when researchers began to look at language beyond behaviorism and rote learning. Language became less a study of grammar and grammar correction and more of a focus on communicative competence and authentic language practice. Krashen theorized language students would perform much better if placed in low-anxiety environment. Students have an “affective filter” which learning language as they feel distressed about their learning and can almost shut down. Keeping this in mind, teachers need to create a positive and inviting environment with comprehensible input to promote and motivate language learners. Making language more comprehensible for students with less focus on correction, places more importance on the practice of language without the reprimanding effects of performance measure. This type of situation is less distressing, students can calm down, the affective filter is lowered, and now they can begin to absorb knowledge.

While Krashen and Terrell (1983) made inroads in the affective ways of learning and Cummins (1984) spoke about the importance of basic interpersonal communication oral language skills, few had attempted to measure the more affective aspects of language learning. Fundamental research by Horwitz (1986) provides a basis for validating what Krashen and those in the sociological and psychological sciences fields have theorized about anxiety and its effects on learning. After in depth review of a number of text anxiety and communication apprehension measurements and gaining data from counselors who worked with apprehensive language learners, Horwitz found that foreign language anxiety was related to the ability to learn and gain proficiency in a second language.

Younger students involved in this case study experienced language apprehension in ways that were similar to the Horwitz (1986) study. Horwitz is an essential read for understanding how
anxiety, motivation, and what the participants in this study noted as *confidence*. It is within this context that the idea of confidence in a younger students’ ability to learn a language stemmed from a reduction in the anxiety. Thus, the following study reveals what English and Spanish learner peers affectively and cognitively experienced as they taught, learned, and communicated language with one another an alternative dual language program.

**The Setting**

The program took place in a math classroom from 1:30 to 3:00 pm on early-out Wednesdays and was supervised by the math teacher who did not intervene during language practice. Three dyads of English Learners and Spanish Learners met one and one-half hours every Wednesday for a period of two months. Students spent 15 minutes setting up, 60 minutes practicing language (language practice alternated between English and Spanish—30 minutes for each language), and 10-15 minutes for journal writing and closure in a math classroom directly from the researcher’s mainstream Spanish class. This format allowed Spanish Learners to leave their mainstream class once a week to practice language with the English Learners and still receive credit for the mainstream Spanish class.

**The Study**

The overarching research question driving this study is *how do these self-directed dual language learners perceive their language interaction?* Thus, this study focuses on how newcomers (identified as English Learners with less than two years experience living in the United States) and first-year Spanish language students (with at least six months in a Spanish course), identified by pseudonyms, interact and perceive their dual language situation. Of thirty-three students, five volunteered, and another, Helen, was asked to participate after initially
withdrawing her application. She agreed to participate. Thus, the English Learner-Spanish Learner dyads consisted of Sam and Leticia, Sylvia and Maru, and Helen and Teresa.

The following criteria allowed for analysis of language interaction between purposefully sampled newcomers (English Learners) and their mainstream counterparts (Spanish Learners)—the phenomenon under study. English Learners were selected if they (1) were Spanish-speaking, (2) had not lived in the United States longer than three years, (3) did not exceed intermediate scores on the California English Language Development Test (CELDT) or the Bilingual Syntax Measure (BSM), (4) had at least an 80% attendance rate (as their presence was needed in order to complete the study), and (5) volunteered in order to participate in the study. Spanish Learners were selected if they had taken at least six months of first-year Spanish, had at least an 80% attendance rate, and volunteered to participate in the study.

*Modes of Inquiry*

This case study explored how six middle school students between the ages of 12 and 14 who desire to learn language from their peers interacted and perceived their participation in this dual language program. The research is based on Patton’s (2002) framework for qualitative case study and, in this case, two months of fieldwork is used to describe a single alternative dual language program and the interaction of three dyads of language learners. Using “multiple methods” triangulation, a variety of data was collected from journal entries, interviews, taped peer interaction, and researcher field notes that corroborated emerging stages and corresponding themes (Patton, 2002, p. 248).

The participants wrote weekly *journal responses* based on “guided” questions and statements such as, (1) *Tell about what happened when you tried to communicate with your*
language partners today; (2) How did you feel about your communication today?; (4) What kinds of strategies do you and your partners use to help each other learn English or Spanish?

All journal responses and reflections were typewritten and organized chronologically on a spreadsheet to garner an idea of the types of corresponding themes that emerged between all data pieces as noted below. Interview questions were based in part on the journal questions that were developed to provide richer information about their language practice. Responses to the questions were transcribed verbatim. Patterns and insights emerged using cross-case analysis as the researcher “grouped together answers from different people to common questions,” (Patton, 2002, p. 440). These interviews focused on student experiences during their language sessions. Participant responses were then organized and categorized according to similar answers as well as patterns based on verbatim quotes.

While interviews provided in depth information about the participants and their perceptions, the video- and audiotapes and their transcription provided opportunities for the researcher to enter the participants’ world. Each interactive session was taped from beginning to end. At the end of the program the tapes were transcribed verbatim. Verbatim quotes tie information from various interviews and student journaling sources that serve to enhance interpretive validity of this case study (Johnson, 1997).

Findings

What emerges for this combined data is a theoretical model that is faithful to the program under study and represents the stages that unfolded as well as the challenges participants faced. Based on data from taped observations of their social interaction, journals, and interviews, three stages became apparent: Language Apprehension, Language Initiation, and Language Acquisition.
These stages will be discussed within the context language practice that was identified as one of three major themes that emerged during the students’ language interaction. It consists of two subthemes: structured language practice and conversations. Structured language practice refers to student-led academic language practice with specified boundaries. The boundaries were based on structured games to help students practice vocabulary (e.g., hangman and concentration). Structured language practice in the form of participant-initiated language arts games and assessments provided boundaries for the language learners and helped reduce their anxiety about learning language with peers they did not know and did not yet trust. Their creation of structured language practice in terms of games such as hangman and concentration allowed them to learn within a particular context without creating high cognitive demand. It is this type of language practice that predominated during Language Initiation. Structured language practice tended to precede conversational practice.

Conversations or conversational practice refers to authentic language communication without structure or a fixed purpose that lasts for at least 10 exchanges between partners. It is conversation for the sake of conversation. This type of interaction was more open-ended and cognitively demanding as students had to search for words and could not rely on game-play to restrict and create boundaries for their language practice. Conversational practice meant taking risks with language that is relatively new to the participants and tends to increase participant anxiety. However, this type of practice also sheds light on student language application and their perception of their own language acquisition. As they mentioned in their journals and interviews, when they became more comfortable and familiar with their language partners and they became more confident communicating in the second language, they became less apprehensive and began to engage in conversations. Conversations for most of the students
began in the latter periods of Language Apprehension, but became more evident during Language Acquisition.

The following data from videotaped observations of student interaction, journals, and interviews provides a clearer picture of three language stages as well as insight into students’ determination to scaffold their own learning through structured language practice in the form of game-play and assessments, before could generally engage in conversations of 10 exchanges or more. What emerges from this combined data is a theoretical model that is faithful to the alternative dual language program under study and represents the stages that unfolded as well as the challenges the participants faced when learning one another’s language.

Table 1. Theoretical Model: Alternative Dual Language Model (ADLM)

<table>
<thead>
<tr>
<th>Language Apprehension →</th>
<th>Language Initiation →</th>
<th>Language Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants question their • confidence, • language ability, • teaching ability, • strategies they use. Participants are frustrated.</td>
<td>Participants begin to • problem solve, • initiate language strategies, • increase their confidence, but still maintain some language apprehension, • engage in some conversations Participants are less</td>
<td>Participants • continue to problem-solve, initiate strategies, • engage in more conversations, • humor become highly evident, • confidence and comfort level also evident, • perceive language acquisition</td>
</tr>
</tbody>
</table>
Language Apprehension

When participants went through the Language Apprehension stage, they experienced a lack of confidence in themselves, their language learning and teaching ability. They were frustrated by their inability to communicate in the target language. Students who expressed their excitement about participating in the alternative dual language program became hushed as soon as the cameras rolled. Students who had been only given an orientation about appropriate behavior and the ability to use any resources they liked had all come with little to support their language interaction. So, they sat and stared at one another. Long pauses of silence ensued between feeble attempts to communicate. All students wrote or talked about their lack of “confidence” in their language learning or teaching ability. Confidence as noted in The American Heritage Dictionary (2000) is defined as “firm belief in one’s powers, abilities or capacities.” These students were not confident yet, but were apprehensive. At this stage students did not utilize structured language practice, and their attempts at conversational practice were pretty much futile.
Helen and Sylvia write of their inability to speak and feelings of awkwardness. Helen writes of her first encounter, “A few times we would just sit there and wait for the other person to talk. I can’t imagine what 30 minutes will be like when I was at a loss for words in just 15.” Sylvia concurs, “I forgot a lot of things I knew [from Spanish class]…I guess it was kind of hard for me because I’m more used to writing in Spanish instead of speaking it.”

Despite references to misunderstanding, apprehension, and lack of confidence, all students shared a sense of optimism: “Leticia was very understanding and tried her best to communicate…I know after a while, we will be more comfortable with Spanish,” writes Sam.

So, at this stage students realize their folly: the lack of resources such as textbooks and dictionaries, and no strategies to speak of to engage in any type of language communication left them feeling apprehensive and uncomfortable. Realizing they would have the encounter the following week, students returned with more resolve and solutions for their awkward language communication.

**Language Initiation**

Once the cameras were set up, peers were looking at their alternative dual language partners with some anxious expressions. Dörnyei and Maldarez (1997) state:

They must deal with people they hardly know. They are uncertain about what membership in the group will involve, and whether they will be able to cope with the tasks. They observe each other and the leader suspiciously, trying to find their place in the new hierarchy. They are typically on guard, carefully monitoring their behaviour to avoid any embarrassing lapses of social poise. (P. 68)

Students were uncomfortable with the pauses and lapses of silence that translated into language awkwardness and a sense of inadequacy during Language Apprehension. In order to
avoid the cognitive demand, the sound of silence, and the lingering embarrassment of not being able to communicate, which they so greatly desired, they began to initiate assessments and game-play.

This type of structured language practice allowed for pauses and wait time to answer questions verbally or in writing. Students avoided the apprehension and anxiety of having to come up with language immediately. They could think about the language and respond when they could. As they began to play games, little bits of their personalities manifested as well, and they could laugh and joke a bit with the card games, pretend they were cheating and have a good laugh. Students were no longer focusing on their anxiety or their inability to communicate. It was the fun that game play brought forth that allowed them to move to cognitively more demanding tasks such as authentic conversational practice.

All students share their increasing confidence with one another and their optimism for positive language progress and outcomes. Helen notes that they are more relaxed and less stressed. She explains, “We are a little more confident in talking. We also know what to expect.” Teresa echoes her increased confidence and perceives some language progress as well during this stage, “I felt very comfortable because we talked about fun things. I think I’ve improved a little.”

Whether there was a question about the language program or what they did, all students reported that structured language practice in the form of game-play dominated most of their language interaction during the time they worked in pairs. For instance, at the outset of the program Leticia notes that she and Sam played games 70% of the time and talked 25% of the time (although this does not add up to 100). For them, playing was useful since they were not always able to understand one another. In the middle, she says they lowered their game play to
60% and increased conversations by 40%. Leticia also recounts her experiences and how structured language practice became a kind of “stepping stone” from learning how to say things to engaging in conversation:

Well, in the beginning when I entered, I didn’t know much English. Well, in the end we all played cards, talked, and played. It was different each time we met. Hangman, spelling, and the cards were how we learned to say things. (Leticia, interview)

With the lack of vocabulary, language conversation can be riddled with misunderstandings. It became easier for students to use games and other strategies (such as visuals) to learn vocabulary especially when full-blown exchanges seemed to be outside of what Vygotsky (1988) would term students’ “zone of proximal development.”

They cognitively understood their dilemma and thus resorted to structured language practice. If they could not communicate fluently, then they would communicate by other means. In doing so, they, unexpectedly, scaffolded their learning experience with their partners through structured language practice.

**Language Acquisition**

Because of the steps taken by students to problem solve or initiate language, it was as if they had forgotten about their anxiety. Confidence was a word that kept emerging from their journals, and in their interviews. Students noted their increased confidence in their language ability in their journals and interviews. Confidence then became a way that they measured their ability to understand their peer when speaking in the target language. According to journal notes, interviews, analysis of tapes, and field notes, the dyads initially experienced low levels of confidence during the first stage. However, once students felt successful during their structured
language play during the Language Initiation stage, they began to make conversational attempts and their confidence increased. This increase in confidence continued throughout the Language Acquisition Stage as well.

Table 1. Major participant theme comparisons supported by interviews, journals, and/or analysis of tapes during Language

<table>
<thead>
<tr>
<th></th>
<th>Confidence Type</th>
<th>Language Practice Type</th>
<th>Frustrations and Misunderstandings</th>
<th>Strategies to Increase Comprehension</th>
<th>Perceived Learning/Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
<td>Increasing</td>
<td>Structured Language Practice/Conversations</td>
<td>J, I – Some off task behavior, realize they need to slow down</td>
<td>J, I, AT</td>
<td>J, I</td>
</tr>
<tr>
<td>Leticia</td>
<td>Increasing—</td>
<td>SLP/Conversations</td>
<td>I, AT</td>
<td>J, I, AT</td>
<td>J, I</td>
</tr>
<tr>
<td>Sylvia</td>
<td>Increasing—</td>
<td>SLP</td>
<td>I</td>
<td>J, I, AT</td>
<td>J, I</td>
</tr>
<tr>
<td></td>
<td>J, I</td>
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<td></td>
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</tr>
<tr>
<td>Maru</td>
<td>Increasing—</td>
<td>SLP</td>
<td>J, I</td>
<td>J, I, AT</td>
<td>None reported</td>
</tr>
<tr>
<td></td>
<td>J, I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helen</td>
<td>Increasing—</td>
<td>SLP</td>
<td>J, I, AT – off-task behaviour, need to slow down</td>
<td>J, I, AT</td>
<td>J, I</td>
</tr>
<tr>
<td></td>
<td>J, I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teresa</td>
<td>Increasing—</td>
<td>SLP</td>
<td>J, I, AT</td>
<td>J, I, AT</td>
<td>J, I</td>
</tr>
<tr>
<td></td>
<td>J, I</td>
<td></td>
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</tbody>
</table>

1. Confidence (Increasing) – participants more comfortable, more confident
2. Language Practice – Structured Language Practice (games, tests, etc.), or (b)
   Conversations (10 exchanges or more)
3. Frustrations and Misunderstandings – not being able to communicate, off-task behaviour
4. Strategies – to thwart misunderstandings by using visuals, code-switching, translation or other scaffolds
5. Perceived Learning/Acquisition – participants believe they have learned language or understand better than before
6. Key:  J = Journals, I = Interviews, AT = Analysis of Tapes
7. *SLP - Structured Language Practice (although some attempts at conversations made, generally less than 10 exchanges occurred)

As their confidence in their language ability increased during language practice when they could play games and engage in quizzes. They could focus on language practice and were not as intimidated to talk. Sam and Leticia engaged in conversations of 10 exchanges or more earlier than the others and actually reached the stage of language earlier than the other two dyads. Therefore, having the ability to postpone language practice through structured language practice was a relief for students who were not ready for conversations. During this stage they appeared on tape to be less concerned or anxious about their practice.

Interviews during this stage revealed some students became metacognitive about language practice and conversational ability. Sam noted how conversational practice is important since an expert language peer can help another immediately when one makes a mistake, but more importantly, as a teacher promoting conversational practice with your peer, “you have to learn how to adjust your language for your student.” According to Sam, in order to make language more accessible, you need to use games and adjust the level of your words: “You
think, ‘Oh, you can’t just talk to them you know, because they can’t understand and they can’t just make up another game.’ It’s hard. You just have to like adjust the words, right here to the—” [Sam is interrupted by a student during the interview] but continues to without skipping a beat:

Like in Spanish you can use the words you already know, even though the grammar is not correct, you know they’ll understand it. You know because like you say ‘dog hungry.’ Well you know it’s not right but they understand it. You can let them do easier stuff. It’s just hard to pull it back [the language you normally would speak] because you want to be like, ah! Just understand!

Sam not only talks about slowing the conversation rate, lowering the level of words within the zone of proximal development for the language partner, but also lowering the topic level as well. “Do things that you think they’ll understand…You know what words they can start learning and after we do kind of repetitious stuff, they’re learning it over and over and over.”

Thus, while structured language practice as well repetition was an important aspect of language learning and advancing language, other factors determined whether students engaged in conversations. For instance, students became highly engaged when conversations centered on familiar topics related to school, friends in school, and their families. At one point toward the end of the program, Leticia, Teresa (whose partner was absent that week), and Sam engaged in a fast-moving conversation. And, although Leticia changed the topic abruptly and even changed the context, Sam was able to keep up with their conversation which includes episodes of code-switching. Sam said he finished the mile in eight minutes and 30 seconds, but jests with Leticia about her time: 15 minutes and 30 seconds.
L: Corrida jarabe. [Runs like syrup.]

S: Teresa, clase [class] de Evans?

L: Uh huh. (Leticia answers.)

S: No!

L: Yes!

S: Estas muy mal que no? [You are very bad, aren’t you? (For not running fast he insinuates.)]

L: Que no, que no. (Leticia mocks him.)

S: Oh, third period.

L: Uh huh.

S: Oh.

L: Forty, numero [number (as in the numbered spot she stands on in P.E.)].

S: Si todos [yes everyone], ah.

L: Si se entiende, verdad? [“Yes, he understands, right?” she says to Teresa.] Y con el ingles, pero nos entiende [and us with the English, but he understands (she says in a surprised voice).]

While this is not a fluent conversation by any means, this is the type of language that emerged between the speakers during the short period of time they were placed together and code-switching supported that communication. Thus, this example brings forth the idea of engagement and application of language despite very low language competency levels. Students do begin to acquire language via comprehension as Leticia noted in this conversation, or in terms of the vocabulary and verbal language that increased between dyads. Furthermore, students began to gain a sense of that salient self
and rise to the occasion because of their self-confidence (Csizer & Dörnyei, 2005).
Thus, while students noted their own perception of language acquisition, comprehension,
and believed that they were better able to apply what they learned as cited in journals and
interviews, the videotapes also revealed language advancement and acquisition in terms
of increased comprehension as with the case of Leticia and Sam.

Discussion

The alternative dual language program provided students with an opportunity to be self-
driven and, at times, to become metacognitive about their learning situations. Students appeared
excited about the program and maintained their motivation which was based primarily on
volition—participants elected to be in this program to learn language; positive direction at the
initial outset of the program—high expectations, program norms, a sense of cooperation and
support; and, self-regulated learning experiences which led to ownership of the classroom which
fostered integrative respect and acknowledgment.

In terms of volition, “Those students who do seek [inter-ethnic] contact have a priori
more favourable attitudes towards that group and towards learning its language than those
students who do not” (Clement, Gardner, & Smythe, 1977, p. 212). Helen did not initially want
to participate but agreed to prior to the beginning of the program. And, while she appeared
initially motivated to participate, her enthusiasm waned while other group members maintained
their desire to participate in the program. Thus, volition, being able to elect or choose to
participate in a program appears to be important in understanding students’ ongoing motivation.

Bandura (1997) notes that in order to break down social mores and accepted or condoned
discrimination, certain barriers have to be removed. In the alternative dual language program,
peer languages were given equal status. All participants engaged in language interaction once a
week on Wednesdays for two months. Language sessions alternated between Spanish and English each week. The entire language session lasted approximately 90 minutes—15 minutes for set-up, 60 minutes of alternating language interaction, and 10 minutes at the end of the session to complete journal entries. So, while the language practice benefitted both the English learners and Spanish learners, the English learners had been perceived on equal footing in this scenario.

Dörnyei and Maldarez (1997) note the importance of reinforcing positive direction and explicit expectations that help make a program successful. Students were given specific reinforcement about the positive nature of the discourse as well as behavioural expectations. While the teachers noted how fun and engaging the program was they also framed the program in such a way that students would understand their roles as self-directed teachers who would be responsible for helping their peers gain knowledge.

The researcher was recognized as the facilitator. Therefore, students came up with their norms, materials, for teaching collaboratively, and personalizing their physical environment so that they had “ownership of the classroom.” Peers were given the opportunity to reflect and resolve initial language problems and were expected to come up with positive solutions via group collaboration. Students brainstormed various strategies such as language games and quizzes. And while each dyad was separate, there was a sense of group order in which all of them would collaborate or help the other out in terms of ideas, setting up cameras, and sharing resources. This set the tone and the social structure that prevailed throughout this case study which Dörnyei notes as “intermember relations and group norms" (Dörnyei & Maldarez, 1997).

This inclusive and cooperative speech community allowed English Learners to be valued for their cultural and linguistic capital (McCollum, 1999). The alternative dual language
program gave them the opportunity to become teachers, tutors, or guides for mainstream students who wanted to learn Spanish. There was language exchange, and definitive high regard for English Learner peers who were recognized as visible and expert members of the group of alternative dual language participants (Clement, Gardner, Smythe, 1980; Clement, Gardner, Smythe, 1977).

Thus, this study revealed that socially, culturally, and linguistically different middle school peers who come together in a dual language setting have opportunities to overcome the reproductive hierarchy established in society. They identified and valued the members of their community as their friends (Clement & Kruidenier, 1983). Students became curious about one another and during their authentic language interaction develop seeds of friendship, and, at the same time, develop pride in their knowledge of their native languages.

**Implications for Teaching**

The research presented in this study touches on the idea of communication anxiety and how it can impede language learning growth, “[…] some people are anxious about language learning independent of processing deficit and that such anxiety reactions can interfere with language learning” (Horwitz, 2000, p. 256).

This study also reveals how increasing confidence in language learning appears to be linked to ability and decreased apprehension or worry. Students who positively perceive their learning process lower their affective filters and are ready to receive and retain more information from their language partners. While students in this study continued to have language difficulties and deficits, they were undaunted by them in their belief that they would overcome these obstacles and improve.
Language teachers need to provide students with ways of learning language that lower this anxiety and at the same time provide students with opportunities to authentically communicate. Whether we are teaching language-based tasks, or providing dual immersion opportunities for students, we must take measures to ensure that language learners “feel” good about language learning. In other words, we need to help develop their confidence in their ability to learn. In this scenario, language learning peers were placed together to learn language. They were to learn autonomously with little or no intervention from teacher/researcher. In taking on this responsibility, they discovered ways that would help them take the focus off their inability to understand and began language initiation techniques in terms of activities such as games and quizzes. Additionally, their anxiety became lower as they developed friendships with their peers and realized that it was a safe environment. While the language learning was autonomous, the teacher/researcher did provide rules that would set a positive tone for the language learners (e.g., no put downs, working to help one another learn language).

A change needs to occur in language teaching in which we are utilizing our resources such as our English Learners who may have a background in various languages to support the teaching and learning of foreign languages at all grade levels. Secondly, English Learners need to be equally provided with opportunities to practice language. An alternative dual language program emerges as one solution for providing a low anxiety environment which furthers authentic language practice and increases communicative competence.
Apprehension and Motivation Among Dual Language Peers

References:


Gandara, P., Maxwell-Jolly, J., Garcia, E., Asato, J., Gutierrez, K., Stritikus, T., et al. (2000). The Initial Impact of Proposition 227 on the Instruction of English Learners. UC Linguistic Minority Research Institute, Education Policy Center, University of California, Davis. Published on the World Wide Web:

http://lmri.ucsb.edu/resdiss/2/pdf_files/prop227effects.pdf


Emotional Intelligence and The Servant Leader: A Literature Review

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Abstract

An emerging construct of leadership, known as servant leadership, has begun to appear with greater frequency within the body of leadership literature. Robert Greenleaf (2003) describes the servant leader as one that possesses a natural desire to serve and the ability to create positive change in a transformational manner. Although there has been a considerable amount of research presented in support of servant leadership over the past four decades, many consider this approach to be unrealistic and lacking in empirical validity.

The following paper explores the main facets of servant leadership and emotional intelligence. This is followed by an examination of the existing literature regarding the possible connection between servant leadership and emotional intelligence. While there is a substantial amount of research pertaining to the relationship between emotional intelligence and various forms of leadership, such as transformational leadership, the review of the literature revealed a minimal amount of research regarding the relationship between servant leadership and emotional intelligence.
Servant Leadership

“Anyone wanting to be a leader among you must be your servant.” – Jesus of Nazareth

Following two decades of imprisonment, Nelson Mandela was released from prison and addressed the South African people: “I come to you as your humble servant” (Mandela, 1991). Three years later, in 1994, he became the country’s first democratically elected president. During Mandela’s twenty-seven years in prison, he worked tirelessly and under miserable conditions, to help create a democratic South Africa (Brown & Hort, 2006). His legacy is often described as one of great sacrifice, a man possessing a magnanimous spirit who readily forgave the injustices against black South Africans (Brown & Hort, 2006). The story of Mandela’s life continues to be shared throughout the world; while scholars, practitioners, and students alike reflect on his leadership style and years of service.

The purpose of this literature review is to examine the body of research that exists regarding the idea of a leader as first and foremost a servant. The literature pertaining to the possible connection between servant leadership and emotional intelligence will also be explored. According to Riggio and Orr (2004), the term “leadership” is most often associated with one who strives to obtain power or influence. The idea of servant leadership, however, provides an alternative view of leadership in which the leader focuses solely on the follower and refrains from a concern for the attainment of authority (Greenleaf, 1977). Greenleaf (2004) describes the servant leader as one who is driven by a sense of duty, purpose, and deeply held values; which ultimately stems from an overall awareness and knowledge of the self. However, despite the growing body of literature regarding servant leadership, many remain skeptical about the validity and staying power of this paradigm (Bowie, 2000).
Servant Leadership

A relatively new approach to leadership, referred to as servant leadership, continues to gain attention and popularity (Block, 1993). While the term is somewhat contemporary, the various practices of servant leadership have existed for hundreds of years in almost every culture (Nyabadza, 2003). Following his reading of Journey to the East, Robert Greenleaf (1970) formally presented the servant leadership model. The inspiration was derived from a character in the book, named Leo, who began the journey as a servant only later to emerge as a noble leader. Many years later, Greenleaf (1977) proposed an alternative way of viewing leadership based on his belief that the United States was undergoing a leadership crisis:

The servant-leader is servant first. It begins with the natural feeling that one wants to serve, and serve first. The conscious choice brings one to aspire to lead. That person is sharply different from one who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions. For such it will be a later choice to serve--after leadership is established (p. 13).

One of the main tenets behind Greenleaf’s servant leadership is that a leader should refrain from preoccupation with holding formal authority. Based on this notion, the leader is not superior to the follower; rather, the two work in unison toward a common purpose. Leaders serve as models, provide enrichment, and simultaneously offer support and development for their followers. The constant focus of the leader on the cultivation of others allows the follower to become more independent and knowledgeable (Greenleaf, 1970, 1977). Servant leaders work with a sense of altruism by always putting the needs of others first and demonstrating a high aptitude for empathy (Greenleaf, 1977). Walker (2003) explains that most leadership theories are behavioral in nature; however, servant leadership is based on a leader’s values and principles.
Despite the continued interest in servant leadership, however, the model has been criticized for promoting a perceived passive nature, seeming idealistic, and an inapplicability of the theory to multiple environments. Additionally, servant leadership has been characterized as tenuous, unsophisticated, and impractical (Bowie, 2000). According to Stone et al. (2004), servant leadership is merely an element of transformational leadership, as opposed to being a separate leadership method. This point is contrasted by those who claim the two theories are distinct and that servant leadership places greater emphasis on the emotional well-being of followers, while the primary focus of transformational leadership remains on organizational goals (Graham, 1991; Smith et al., 2004).

**Characteristics of Servant Leadership**

Barbuto and Wheeler (2006) contend that the characteristics displayed by the servant leader include: wisdom, altruism, humility, development of others, promotion of autonomy in others, emotional restoration, delegation of power, the desire to serve, and stewardship. Numerous researchers have stated that two of the most significant characteristics of a leader are empowerment and service (Greenleaf, 1977; Bennis & Nanus, 1985; De Pree, 1989; Kouzes & Posner, 1993; Block, 1993). Several others also include service or serving others as a crucial aspect of leadership (Farling, Stone, & Winston, 1999; Russell & Stone, 2002). Laub (1999) identifies six defining characteristics of servant leadership: (1) the servant leader values people and develops others, (2) the servant leader models behavior, (3) the servant leader builds communities and relationships, (4) the servant leader displays authenticity, integrity, and accountability, (5) the servant leader demonstrates leadership and clarifies goals, and (6) the servant leader shares leadership responsibilities and delegates effectively.
Spears (2004) emphasizes that servant leaders have a holistic approach to work, share decision-making responsibilities with their followers, enhance feelings of community, and most importantly, promote helping others. In Servant Leadership, Spears (2004) notes, “servant leadership is a long-term, transformational approach to life and work-in essence, a way of being-that has the potential for creating positive change throughout our society” (p. 8). Taking into account Greenleaf’s view of servant leadership, Spears (2004) devised what he believed to be the ten essential characteristics of the servant leader:

1. **Listening** - Though leaders are often identified by and valued for their decision-making and communication skills, they must also give special attention to listening in order to understand others. Active listening enables the leader to articulate and execute the will of the group effectively.

2. **Empathy** - Possessing an enhanced ability to relate to others, the empathic leader intuitively senses and perceives what others are thinking and feeling. People have an innate need to be accepted and the servant leader strives to bestow appreciation on others based on their individual talents.

3. **Healing** - Servant leaders contribute significantly to the development and revitalization of organizations. They understand and empathize with life’s adversities, acknowledge their potential to help others heal, and communicate to others that they are not alone.

4. **Awareness** - The self-aware leader fully acknowledges his or her strengths and weaknesses. Acute self-awareness enables the leader to possess a thorough awareness of others. Awareness allows one to comprehend complex ethical issues and to examine situations with a more complete view.
5. **Persuasion** - A reliance on persuasion as opposed to coercion is a major hallmark of the servant leader. The goal is to achieve consensus when making decisions that affect the group. The servant leader avoids the use of formal authority.

6. **Conceptualization** - Servant leaders are able to view the grand scheme of things. While they do not ignore the importance of everyday activities, servant leaders take a conceptualizing perspective and perceive interrelationships among the pieces.

7. **Foresight** - Leaders defined by this quality are insightful, proactive, and anticipative. The servant leader often possesses the ability to instinctively anticipate the probable outcomes of decisions through careful observation of the past, and assessment of present realities.

8. **Stewardship** - At the very core, servant leadership is defined by serving the needs of others for the benefit of society. In a similar manner, stewardship represents the careful management of something entrusted to the one’s care. Servant leaders take responsibility for their organizations; however, Greenleaf believes that both leader and staff are responsible for sound stewardship.

9. **Commitment to the growth of people** - Dedicated to the continual growth and development of people: professionally, personally, and spiritually. Servant leaders possess a nurturing spirit and believe that all human beings hold a great capacity for learning.

10. **Building community** - The increasing influence of technology on society and institutions creates the need for community building. Servant leaders aim to identify methods for building and creating communities among individuals. They recognize that developing organizational cultures based on shared concerns is critical.
Overall, the characteristics and behaviors of servant leaders are largely defined by a concern for others without self-interest (Laub, 1999; Johnson, 2001). Johnson (2001) asserts that the strengths of the servant leadership paradigm lie in the altruistic features, awareness of the self, and simplistic nature of the theory.

Servant Leadership Applied

Based on the characteristics mentioned above, Spears (2004) explains that servant leaders see the value of every individual within an organization and seek to create a sense of community. The emphasis on community derives from Greenleaf’s belief that this environment allows one to gain individual strength, experience feelings of appreciation, and develop trust in others. In order to generate this type of atmosphere, servant leaders focus on the growth of employees and strive to eradicate inequalities that are present in the organization (Graham, 1991). Working within the organizational setting, the servant leader gradually bestows more authority onto others and in turn accepts less formal control and power. Furthermore, numerous organizations have incorporated the idea of leader as servant into their culture, philosophy, or mission statement (Greenleaf, 2003; Spears, 2004). This includes, but is not limited to businesses, universities, non-profits, churches, and health care companies (Greenleaf, 2003).

Measurement of Servant Leadership

There has been a significant effort to define and measure servant leadership over the past two decades (Graham, 1991; Akuchie, 1993; Spears, 1995; Farling, Stone, & Winston, 1999; Bass, 2000; Polleys, 2002; Sendjaya & Sarros, 2002; Barbuto & Wheeler, 2006; Avolio, Walumbwa, & Weber, 2009). During this time, numerous researchers have attempted to create a framework for the servant leadership paradigm: Graham (1991) developed a generalized framework for servant leadership; Akuchie (1993) studied the biblical origins, Farling, Stone,
and Winston (1999) introduced a hierarchical framework, Bass (2000) compared servant leadership to transformational leadership, Sendjaya and Sarros (2002) reviewed the philosophical aspects of servant leadership, Polleys (2002) differentiated servant leadership from other models, Joseph & Winston (2005) examined the connection between organizational trust and servant leadership, and Washington et al. (2006) explored the values of the servant leader. The body of research is vast; however, the amount of empirical research pertaining to servant leadership is limited, and scholars continue to search for a uniform framework (Barbuto & Wheeler, 2006).

Servant leadership remains broadly defined and several assessments of the model currently exist (Avolio, Walumbwa, and Weber, 2009). In an attempt to further operationalize servant leadership, for example, Russell and Stone (2002) divided servant leadership into two groups or types of leaders, defined as accompany and functional attributes. Accompany attributes are labeled as listening skills, communication skills, credibility, competency, support for others, and the ability to guide or teach. Functional attributes include honesty, dependability, empowering others, trustworthiness, dedication to service, appreciation of others, setting the example, and a visionary perspective. Due to the fact that the servant leadership paradigm continues to possess such wide-ranging definitions, empirical validation remains a challenge. The body of conceptual research continues to grow; however, researchers have been unable to agree on one paradigm for accurately measuring servant leadership (Barbuto & Wheeler, 2006).

**Servant leadership questionnaire (SLQ).** One attempt to validly measure servant leadership, the Servant Leadership Questionnaire (SLQ), was developed by Barbuto and Wheeler in a 2006 study. Based on their findings, Barbuto and Wheeler (2006) contend that these five characteristics are empirically distinctive: wisdom, persuasive mapping, organizational stewardship, emotional healing, and altruistic calling. This assessment tool includes a 23-item
questionnaire, based on five characteristics that were drawn from 11 possible servant leadership attributes. The study revealed that servant leadership was correlated highly with organizational effectiveness and leader-member exchange characteristics as opposed to transformational leadership attributes. This result is in alignment with Burns (1978) assertion that servant leaders focus on serving their followers, while transformational leaders place greater emphasis on organizational outcomes.

**Servant Leadership Inventory (SLI).** The Servant Leadership Inventory (SLI), developed by Longbotham (2007), was designed to evaluate the seven qualities of a servant leader based on Patterson’s (2003) model: humility, altruism, vision, trust, agapao love, service, and empowerment. Longbotham created the SLI as a substitute for the Servant Leadership Assessment Instrument (SLAI) due to the inventory’s limitations (Rennaker, 2008).

**Servant leadership behaviour scale (SLBS).** Utilizing the body of literature, Sendjaya, Sarros, and Santora (2008) designed the Servant Leadership Behaviour Scale (SLBS) as a means to operationalize and measure servant leadership. The thirty-five-item questionnaire consists of six observable behaviors: transforming influence, transcendental spirituality, responsible morality, covenantal relationship, authentic self, and voluntary subordination (Sendjaya, Sarros, and Santora 2008). While the researchers recommend further empirical studies that measure servant leadership, they believe that the strength of the SLBS assessment tool lies in the methodological approach, sound measures, ease of use, and the validity. According to the authors, “The SLBS may represent a significant contribution to the servant leadership literature, filling a void that has long been subject to anecdotal evidence” (Sendjaya, Sarros, & Santora, 2008, p. 418).
Human factor model (HF). Based on their review of the literature, Page and Wong (2000) developed an instrument designed to measure servant leadership based on four spheres of leadership: relationship, personality, task, and process. The conceptual framework of Page and Wong’s instrument is based on Adjibolosoo’s (1995) Human Factor Model (HF). The Human Factor model was intended to study the effects of organizational behavior on economic development. Page and Wong’s (2000) tool has been criticized due to the lack of scale reliability tests and factor analysis; however, the instrument demonstrates potential for training leaders (Dennis & Winston, 2003). For example, educators may choose to use this tool for establishing the subject matter of leadership curriculum. Further research with this model is recommended utilizing both empirical and qualitative data (Dennis & Winston, 2003).

Servant organizational leadership assessment (SOLA). The Servant Organizational Leadership (SOLA) instrument provides an assessment of servant leadership behaviors that are demonstrated by leaders within an organization (Laub, 1999). Considering that servant leadership is a “shared” form of leadership, the tool is neither limited to nor intended for upper management, and may be administered to any member of a group. The instrument measures perceptions of servant leadership based on Laub’s (1999) six characteristics: providing leadership, sharing leadership, displaying authenticity, building communities, developing people, and valuing people. The overarching goal of the SOLA was to create a channel for increased communication as well as to provide an environment of learning within the organization (Laub, 1999).

The Constructs of Servant Leadership

Based on Patterson’s (2003) theory, Dennis & Bocarnea (2005) conducted a study designed to create an instrument that measures the constructs that come together to represent the
concept of servant leadership. Patterson’s theory of servant leadership defines the leader’s behaviors in the form of constructs: altruistic, trusting, empowering, serving, visionary, humble, and acting with agapao love (2003). This theory was born from Patterson’s idea that current leadership theories fail to account for the values displayed by leaders, such as altruism. Dennis and Bocarnea (2005) assert that Patterson’s theory provides a “platform for more specific research by defining the values on which servant leadership is based-values that she refers to as the component “constructs” of servant leadership” (p. 601). While the instrument measures five of the seven servant leadership factors, the tool fails to accurately measure service and altruism, and therefore requires further research in order to confirm construct validity (Dennis and Bocarnea, 2005).

**Empirical Validity of Servant Leadership**

The lack and unreliability of empirical support for servant leadership continues to be a topic addressed by researchers (Washington, Sutton, & Field, 2006), while several others continue to gather support for the field (Sendjaya & Sarros, 2002; Dennis & Winston, 2003; Russell & Stone, 2002), and there is no consensus that any one model accurately describes the servant leadership construct. Bass (2000) believes that the immense philosophical basis for servant leadership provides the opportunity for continued research. In order for the theory of servant leadership to be legitimate, however, it must describe specific behaviors of these leaders (Sendjaya & Sarros, 2002). Washington, Sutton, and Feild (2006) emphasize that empirical validation is deficient, particularly with regard to the roles of specific characteristics in servant leadership. This is a problem to be remedied as the leader’s characteristics have a direct impact on followers and organizational performance (Russell, 2001).
Recommendations for Servant Leadership Research

Two central themes are found across the various definitions of servant leadership. The first being the focus on the leader-follower connection, and the second theme is the focus of the leader on the follower’s needs. Greenleaf (1970) proposed that followers might eventually become servants themselves as they become freer, healthier, wiser, and more autonomous. Similarly, Sendjaya, Sarros, and Santora (2008) propose that the altruistic nature of servant leadership may be a factor in the follower’s positive outlook. Based on these notions, Barbuto and Wheeler (2006) contend that research opportunities exist for determining the degree to which servant leadership increases emotional well-being, autonomy, and organizational astuteness. Additional areas for opportunity would be studies that address the possible connection between servant leadership and organizational effectiveness, positive organizational outcomes, or employee engagement (Barbuto & Wheeler, 2006).

Organizations that are in need of a “selfless” leader may benefit from the ability to empirically identify a leader that is authentic and altruistic (Sternberg, 2003). The altruistic behavior of the servant leader is thought to benefit the follower, and operating in a cyclical manner, the follower then becomes the contributor to servant leadership. To this end, further study recommendations have been made for the Servant Leadership Behaviour Scale (SLBS) by examining the relationship between Organizational Citizenship Behaviour (OCB) and servant leadership characteristics (Sendjaya, Sarros, & Santora, 2008). The concept of OCB is defined in the following way:

Scholars argue that when servant leaders exemplify such behaviours as articulating a shared vision with which followers can identify, setting a personal example, appealing to commonly shared values, demonstrating concern for the
welfare of their followers, and engaging in moral dialogue, they are likely to engender followers’ affect and trust in the leader. As a result, followers will be encouraged to engage in discretionary behaviors directed towards other individuals and, to a lesser extent, towards the organization (Sendjaya, Sarros, & Santora, 2008, p. 419).

While this area remains unexplored, Pekerti et al. (2007) proposed that the participation of a follower in OCB would have a positive influence on the leader’s self-image.

Barbuto and Wheeler (2006) believe that the precursors to servant leadership offer empirical opportunities. These include mental capabilities such as motivational factors, openness to experience, and emotional intelligence. Additional antecedents may also include situational variables, such as childhood experiences, education, or previous contact with servant leaders (Barbuto and Wheeler, 2006). While evaluating mental capabilities proves to be extremely complicated (Anastasi & Urbina, 1997), Sendjaya, Sarros, & Santora (2008) maintain that further studies measuring the psychometrics of servant leadership will contribute to validation of the paradigm.

**Emotional Intelligence**

What is emotional intelligence? The idea began to emerge in the early twentieth century and was referred to as “social intelligence.” According to Thorndike (1936), social intelligence refers to one’s ability to engage socially and understand others. Many decades later, Howard Gardner developed the theory of multiple intelligences, which is comprised of both intra- and interpersonal intelligence. The term “emotional intelligence” (EI), created by Peter Salovey and John Mayer, was not formally introduced until 1990. The theory of emotional intelligence is based on the notion that certain individuals possess the ability to effectively regulate their
emotions as well the feelings of others. Emotionally intelligent people are defined by Mayer, Salovey, & Caruso (2008) as “individuals that have a greater capacity than others to carry out sophisticated information processing about emotions and emotion-relevant stimuli, and to use this information as a guide to thinking and behavior” (p. 503).

Five years after Salovey’s and Mayer’s introduction of the term emotional intelligence, Goleman (1995) published the book called Emotional Intelligence, and contributed to the increasing body of research regarding the social facets of intelligence (Gardner, 1983; De Sousa, 1987; Salovey & Mayer, 1990). Goleman identified emotional intelligence as a crucial component of successful relationships, both personally and professionally. The book gained widespread attention and served as a catalyst for the utilization and incorporation of emotional intelligence principles into professional environments (e.g., Goleman, 1998).

In recent years, there has been a considerable outpouring of literature regarding the topic of emotional intelligence (Matthews, Zeidner, & Roberts, 2002). As a result, some theorists have publicly made clear the differences between the earlier and later models of emotional intelligence (Mayer, Salovey, & Caruso, 2008). Overall, the disparities between the three main models of emotional intelligence are significant with regard to theory and the defining characteristics. Mayer and Salovey developed the first model of emotional intelligence in 1997, known as the four-branch model.

The four-branch model of Mayer and Salovey (1997) addresses the interplay and complexity of emotion, reason, and intelligence. This model focuses on intelligence as a primary factor with emotional intelligence as a secondary factor. Emotional competencies are the cornerstone of Goleman’s (1998) competency model, which defines emotional intelligence as a combination of abilities that contribute to leadership performance. Finally, the Bar-On model
(1997) defines emotional intelligence as the understanding of oneself and others, in addition to
the ability to adapt to and manage environmental demands.

Mayer, Salovey, and Caruso (2008) refer to the Bar-On Model and Goleman’s
Competency Model as “mixed models” due to the inclusion of emotion-related attributes with
unrelated qualities. The Salovey and Mayer Model, on the other hand, is referred to as an ability
based model, which views emotional intelligence as an actual form of intelligence (Downey, et
al., 2006).

**The Mayer and Salovey Model**

Mayer and Salovey believe that emotional intelligence consists of a set of abilities that
allow one to enhance intelligence through a process of reasoning with emotions. The model
purports that emotional intelligence can be validly tested and utilized (Cobb, 2000). The ability
to perceive an emotion accurately is viewed as a basic lower level skill; while the ability to
manage emotions effectively is described as a high level skill. These skills provide the
framework for the four-branch model hierarchy and “include the abilities to: (a) perceive
emotions in oneself and others accurately, (b) use emotions to facilitate thinking, (c) understand
emotions, emotional language, and the signals conveyed by emotions, and (d) manage emotions
so as to attain specific goals” (Mayer, Salovey, & Caruso, 2008, p. 506). A formal assessment
tool, known as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), was designed
to measure the four-branch model (1997).

**The MSCEIT Instrument**

The purpose behind the MSCEIT assessment tool was to develop a test that measures
emotional intelligence in a similar fashion to those used to evaluate psychometric intelligence
Eight tasks are separated into four categories that are designed to identify intellectual abilities: perceiving, facilitating, understanding, and managing emotions (Salovey, 1997). Mayer, Salovey, and Caruso (2008) assert that the ability-based approach is the most accurate way to measure emotional intelligence because assessing mental abilities entails asking pertinent questions and evaluating the answers based on a standard of correctness. The Mayer and Salovey Model emphasizes the emotion-process framework, while mixed model approaches, such as the Bar-On and Goleman Models of emotional intelligence add several attributes (e.g. trustworthiness, empathy, and innovation) to the ability model (Goleman, 1998).

**The Bar-On Model**

The Bar-On Emotional Quotient Inventory (EQ-i) was developed in 1997 by Reuven Bar-On, a clinical psychologist, and was the first instrument on the market. The term Emotional Quotient (EQ) was originated in his 1985 doctoral dissertation as a means to describe social functioning and emotional intelligence. Viewing his model as an overall measure of psychological well being, Bar-On (1997) asserts that the emotionally intelligent individual can articulate feelings, manage daily challenges, and relate to others. Specifically, "emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate to them, and cope with daily demands" (Bar-On, R., 2005, p. 3). Bar-On’s model of emotional intelligence consists of five components, both interpersonal and intrapersonal, that include numerous competencies and skills (2000). The model also highlights the areas of functioning and assessment in the (EQ-i).
The Bar-On assessment tool has been criticized for being a self-report measure and for the broad definition and mixing of mental and non-mental abilities, “although the model included emotion-related qualities such as emotional self-awareness and empathy, into the mix were added many additional qualities, including reality testing, assertiveness, self-regard, and self actualization” (Mayer et al., 2000, p. 506). Caruso et al. (2002) also asserts that the model lacks discriminant validity due to the significant correlation with personality. However, Bar-On (2005) defends the construct validity of the model, evidencing numerous studies that demonstrate the domain overlap of emotional intelligence with the EQ-i assessment tool (2005).

**The Goleman Model**

Goleman (2000) views IQ as a static measure, remaining relatively unchanged throughout life, while he conceptualizes emotional intelligence as something that can be developed at any age with practice. Goleman’s model of emotional intelligence was originally based on the Salovey and Mayer (1990) Model; however, Goleman’s model places less emphasis on standard intelligence quotient. Goleman (1995) asserts that emotional intelligence is equally important and significantly more influential than standard IQ. In other words, emotional intelligence is a necessary component of an individual’s high performing intellect (Goleman, 1995).

In 1997, Goleman and Richard Boyatis designed a self-report measure known as the Emotional Competency Inventory (ECI). The assessment tool was intended to articulate one’s capacity for a given number of competencies. The construct for Goleman’s Model was originally divided up among five categories, which included empathy, and was later minimized to four clusters or fundamental capabilities: self-awareness, self-management, social awareness, and social skill (2000).
While Mayer, Salovey, and Caruso disagree with the mixed model approach of combining social competencies with emotional intelligence abilities, Goleman’s interpretation has achieved widespread popularity and spawned several new approaches on the topic (Caruso et al., 2002). The assertion made by Goleman (1995, 1998) that emotional intelligence can be helpful in all aspects of life is one of the main reasons for the tremendous amount of interest surrounding the topic. Goleman describes emotional intelligence as the effective management of both self and relationships (2000, p. 80). Goleman maintains that emotional intelligence is equally beneficial when utilized in home and school settings; however, the majority of applications and literary outpouring have been directed toward the workplace and organizational effectiveness (Goleman, 1998; Cherniss, 2001; Cartwright & Pappas, 2007; Blank, 2008; Druskat & Wolff, 2001).

**Emotional Intelligence and Organizational Effectiveness**

A significant increase has also been witnessed in the amount of research regarding the importance of emotional intelligence within the workplace (Goleman, 1998). Emotional intelligence has been identified by Goleman (1998) as an integral component of organizational success, a desirable quality in leaders, and a fundamental part of organizational management and effectiveness. In order to survive the complex business environment, Goleman (1998) believes that emotionally competent organizations will have a competitive edge in the workplace. He asserts that, “the emphasis on flexibility, teams, and a strong customer orientation, is a crucial set of emotional competencies that is becoming increasingly essential for excellence in every job and in every part of the world” (p. 29). According to Druskat, Sala, and Mount (2006), research indicates that Goleman’s ECI competencies can be learned and translated into organizational success.
Despite this increasing amount of literature relating emotional intelligence to organizational effectiveness, there is a significant amount of disagreement on this matter. Research has begun to explore the effects of emotional intelligence on organizational performance; however, further studies are required to determine the effectiveness of emotional intelligence on organizational performance (Druskat, Sala, & Mount, 2006; Lindebaum, 2009). Overall, there has been an increase in focus on emotional and social skills within the organizational setting, resulting from current research in positive organizational behavior (Luthans, 2002).

**Servant Leadership and Emotional Intelligence**

The connection between emotional intelligence and servant leadership remains to be validated in the literature; however other theories of leadership-charismatic and transformational-are indeed influenced by a leader’s level of emotional intelligence (Waddell, 2009). Furthermore, the emotionally intelligent leader seems to be the channel for organizational effectiveness, communicating vision and building successful relationships with employees (Ashkanasy & Dasborough, 2002). Spencer (2007) asserts that emotional intelligence is an essential component of servant leadership, particularly with regard to one’s ability to demonstrate empowerment. Parolini (2005) posited that based on the servant leader’s focus on the needs of the follower, a relationship would be found between servant leadership and emotional intelligence. However, a minimal amount of research exists regarding the connection between servant leadership and emotional intelligence (Winston & Hartsfield, 2004; Parolini, 2005; Spencer, 2007; Irwin, 2007; Van Staden, 2007; Vidic, 2007; & Waddell, 2009).

Despite the small body of evidence, positive relationships have been identified. A positive correlation between servant leadership and emotional intelligence has been identified by Winston
and Hartsfield (2004), Vidic (2007), and Van Staden (2007). Winston and Hartfield’s study found a connection between the two variables; however, “there appears to be relative application of emotional intelligence to the servant leadership concept, although it is not clear if emotional intelligence is specifically tied to servant leadership or just leadership in general” (2004, p. 5). Overall, additional research is needed in order to confirm the initial findings.

Conclusion

The body of research continues to grow for both servant leadership and emotional intelligence. While both paradigms are labeled as contemporary, spanning only the past four decades, the review of the literature revealed that significant efforts have been made to measure and define these constructs. While emotional intelligence has been definitively linked to other forms of leadership, further research is recommended to confirm the relationship between servant leadership and emotional intelligence. Additional research is also needed to identify the possible effects that the two paradigms have on organizational effectiveness.
References


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Mathematics and the Gender Divide

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Proposal Submitted for the Hawaii International Conference On Education
Literature Review

Although much of the data used to demonstrate gender differences in mathematical ability may be confounded by failing to control for such important variables as the difference in the number and type of mathematics courses taken by males and females and the higher dropout rate for males, research finds that when these two variables are controlled, males surpass females in demonstrated mathematical ability at around grade seven (Conlin, 2003; Kenshaft, 1990; Maple & Stage, 1991). Furthermore, the size of the discrepancy increases each year thereafter.

Choosing not to study mathematics beyond the minimum high school requirements is a path that many girls choose (Clewell, Anderson, & Thorp, 1992). There has been a trend of successful female student-leaders who have led to the term “the new gender gap” (Conlin, 2003). This has misled many to believe that the mathematics gender gap has been eliminated. However, the percentage of women entering college and master’s programs has continued to rise, except for in the fields of engineering and computer science. Male participation in mathematics after high school is far greater than females’ (Simon, 2000). Furthermore, females are less likely to think they are proficient in mathematics and are more likely than males to experience math anxiety (DeHaven & Wiest, 2003). This factor of attitude towards mathematics and self-image is significant when one considers that girls are making the decision not to proceed in mathematics during the adolescent stage of development when many females of their decisions are based on feelings (Gilbert, 2001).

According to Kenshaft (1990), there are three possible reasons for the lack of gender equity in mathematics. These reasons include societal customs, educational
Mathematics and the Gender 3

customs, and family customs. There are many misconceptions and beliefs that exist in society that may contribute to the inequity. The first is an impression that mathematics is “unfeminine” (Clewell et al., 1992; Kenshaft, 1990). Some girls fall into society’s view that mathematics is a male domain and females do not belong. Society suggests that males will do better in mathematics (Kenshaft, 1990). The second custom in society is the opinion that mathematics is difficult (Clewell et al., 1992). Some girls may accept this view and decide that the amount of effort necessary to do well in mathematics is not worthwhile. Many students do not perceive mathematics as useful in their future careers (Wiest, 2001). There is certainly a shortage of female role models in mathematics and this has an impact on course-taking patterns (Kenshaft, 1990). A final societal custom is that females are socialized early to be more affective and more service-oriented and less analytical and quantitative in their career interests (Clewell et al., 1992).

The American education system is constantly developing and updating to fit the latest research trends. Some customs have developed silently and have allowed inequities to enter mathematics classrooms (Kenshaft, 1990). Learning styles have been a large area of research over the past decade, which have drawn attention to the inequities in mathematics classrooms. It has been suggested that females tend to enhance objective knowledge by using intuition and self-understanding to give such knowledge personal relevance, whereas the male model establishes “truth” by objective, dispassionate methods (Clewell et al., 1992). If this is the case, then the traditional methods of teaching mathematics are beneficial to the male students and contributing to the inequity. These traditional methods include drill and practice where conceptual understanding is not greatly valued (Ladson-Billings, 1997; Simon, 2000). Another area of education that
contributes to the inequity is the career center. Many counselors fail to make female students aware of the vast range of occupations in which mathematics is either necessary or very useful (Clewell et al., 1992). Counselors often do not encourage female students to enroll in advanced mathematics courses believing that the classes will be too difficult for the female students or that the classes will be unnecessary for their future. A final educational custom within the mathematics classroom is the amount of praise, interaction, and higher-order questioning teachers give to students. According to research, male students receive more praise, have more interaction with teachers, and are asked more higher-order questions in mathematics classes than female students. Also, favorable comments towards females tend to be about neatness and favorable comments towards males tend to be about ability (Kenshaft, 1990).

The impact of family is similar to the impact of society on gender equity in mathematics, but the family has a much more personal effect on girls’ attitudes and decisions (Simon, 2000). Parents tend to view mathematics as less important for their daughters than for their sons (Clewell et al., 1992). In general, sons receive more encouragement, support, mathematical games, and mechanical inquisitiveness from their families (Kenshaft, 1990). These factors can lead to boys being more assertive, innovative, and investigative. Female play tends to be more stationary with little interest in understanding the physical world or building special concepts. In many families, the father is regarded as better at mathematics (Conlin, 2003).
Research Objectives

The proposed research has a three fold aim. First, the proposed research will investigate the attitudes towards mathematics of male and female youths and the background experiences of female adults who have mathematics related careers such as engineers and scientists. Second, the proposed research will foster recommendations that can encourage female students to take more mathematics classes and increase female involvement in mathematics related activities. Finally, the proposed research will expand the literature on gender and mathematics.

Proposed Methodology

The proposed research will be a qualitative research plan involving a focus group of no more than 10 male students (high school and college) between the ages of 15 and 25 who have an interest in mathematics, 10 female students (high school and college) between the ages of 15 and 25 who have an interest in mathematics, 10 female students (high school and college) who have a dislike or no interest in mathematics, and 10 adult females who have a mathematics related career. Each group of participants will participate in a focus group which will ask questions related to the participants’ attitudes, past experiences, and present involvement with mathematics.

Expected Outcomes

According to past research, it is expected that the female students who dislike or have no interest in mathematics will express the belief that mathematics is a male oriented subject, that it is too hard, and they will have a higher rate of math anxiety than their male counterparts. The females who have mathematics related careers will express
that they always had an interest in mathematics and never had any anxiety towards the subject and that they learned mathematics in a nurturing environment.
References


attitudes and efforts to help toward maintaining a group of Korean-American heritage language. This investigation focuses on the importance and the challenges they face. The Korean language loss occurs in the home and the influence familial relationships and socialization in university students struggle with in maintaining and developing heritage language and their cultural identity. Solutions.
Peer Collaboration and Online Environment Key to Stimulating Learning, Motivation and Student Performance in Higher Education

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Human Physiology is a branch of science dealing with the physical mechanisms and the biochemical functioning of intricate living systems. It also integrates other branches of biological sciences (biophysics, biochemistry etc.), laboratory experimentation as well as medical applications. Thus, it has been a conceptually challenging subject for many students at the post-secondary level of education [1]. The Human Physiology online course (online PSL course) offered by the Department of Physiology at the University of Toronto (www.physiology.utoronto.ca) was developed to provide this course material, from knowledge to application, in a more flexible, accessible and self-directed framework for students. The course is entirely online, with 51 didactic video lectures, virtual laboratory experiments and several sources of online course support (virtual tutorials, lecturer accessibility via email and a discussion board available 24/7 to students).

This study aimed to assess the correlation between student performance and collaboration as well as online support (student sample from six completed sessions of the course, N=255). Initial research looked at the statistical correlation between student grades and online activity (number of posts on the discussion board). Then a student survey was issued to provide us data on the students’ sense of community, level of support received and the impact on their personal performance in the course.

The student population of the online PSL course was found to be extremely diverse as well as motivated and career oriented. The course had students who are pre-healthcare (e.g. nursing, physiotherapy etc.), pre-graduate school students, teachers, and mature students looking for career advancement. Thus, many of the students in the course were seeking strong achievement and performance in the course. However, there were also many challenges for some of the online students. Some have had no prior science background, some had language difficulties (international students), some were working to support a family and some even faced challenges with the online technology. Early investigation of the learning tools and online teaching features of the course showed that students of the online PSL course have found it helpful to discuss and learn the subject with their classroom peers collaboratively to overcome many of the aforementioned challenges. Students also demonstrated the significant impact on their grades due to support from their peers, lecture instructors and teaching assistants (TAs). However, initial results of the study do not show a direct correlation between student activity and performance due to differences in student learning styles. From extensive student surveying, it was discovered that some students with lower participation levels still benefited from the peer collaboration as they would read other student comments on the discussion board to facilitate their learning and resolve difficult concepts, resulting in high grades. However,
some students who also had lower online activity but poor scores often could have benefited from greater participation to learn from other student discussions. Some students who had high levels of activity and strong resulting grades had benefitted from the collaboration via discussion, clarification from peers or helping other students to improve their own understanding and retention. Finally, some students who had high levels of activity but still performed poorly often demonstrated a complete lack of understanding of course material.
Report on Issue Related to Teaching:  
Cultural Competence and P. A. Students: Learning to Care For and About Gay Patients  
Andrew Case, MS, RPA-C  
Clinical Assistant Professor  

The training of medical practitioners has historically focused on technical knowledge and skills instead of focusing on cultural competency, ignoring human elements such as treating the whole patient and understanding the role of socio cultural factors such as race, class, gender, religion and sexuality in patient treatment (Feldman & Christensen, 2008). In my work as a medical practitioner in hospitals and medical offices, I have encountered many instances of either insufficient cultural knowledge or cultural insensitivity displayed by doctors nurses, PAs, and hospital staff. Such occurrences can negatively impact patient treatment and undermine the relationship between patient and practitioner (Dogra & Karnik, 2004).

Currently, I work as a professor in a Physician Assistant (P.A.) department at a small private college in Buffalo NY, teaching, among other things, a behavioral medicine class. This role as a teacher-practitioner has afforded me the opportunity to work with P.A. students and helping them develop an understanding of the role socio cultural factors play in patient behavior and patient care. This presentation will address the portion of my behavioral medicine class where I focus on sexuality and the care for homosexual patients. Research shows that medical practitioners either lack or ignore information on the particular needs of gay patients (Bonvicini & Perlin, 2003). These oversights occur for a number of reasons ranging from inexperience to discrimination and can result in serious consequences for gay patients, including avoiding seeking medical care (Harrison, 1996).
In this presentation I will detail my philosophical and pedagogical approaches to helping my P.A. students understand the needs of gay patients. I will discuss my students’ reactions to this work and reflect on my effectiveness in addressing this serious issue as I work to best meet the needs of my students and their future patients.

References


Immigrant parents' perspectives of school transition for children with developmental disabilities.

The cultural and linguistic backgrounds of families impact their understanding and perspective on disability. In addition, cultural and linguistic differences between home and school affect the amount and type of communication between the school and family systems. The transition from preschool to kindergarten represents one such context to study the experiences of immigrant families of children with disabilities. Moreover, children come from a variety of different programs (inclusive and special needs) and their transition from these programs can affect their school adaptation. The proposed study will included interviews from immigrant parents whose children have been identified as having developmental disabilities. They will describe their perceptions and experiences of school transition, their understanding of their children’s difficulties, what resources they have access to through their preschool setting (special needs or inclusive) and how the transition to kindergarten is experienced by them and their children. The parents will be interviewed at three time periods: (a) at the end of the preschool year as they are making the transition to kindergarten, (b) after the first report card (November) and (c) at end of the kindergarten year. The interviews will be designed to uncover families’ communication with agencies and the transition practices that are in place in the school setting (Rous, Myers & Stricklin, 2009). For this presentation, transition practices and activities will be focused on preparatory activities such as, program visitation, instructional activities and the use of community resources. Parental perception of the quality of care and the impact of the disability on their lives (parental stress) will also be assessed (King, Kertoy, King, Law, Rosenbaum & Hurley, 2003). The Adaptive
Behavior Assessment System-Second Edition (ABAS-II) (Harrison & Oakland, 2003) will be used to measure the children’s developmental skills including communication, daily living, socialization, and motor skills and the severity of the child’s needs will impact on the family (Stein & Jessop, 2003). Results will be interpreted from a socio-cultural perspective.
1. Title of Submission: Adaptation Pedagogy for English Learners and Special Needs Students: What, Why, and How?

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6. Abstract:

To develop adaptation pedagogy as a consistent intentional teaching strategy among preservice and inservice teachers, teacher educators need to consciously connect and ground it to relevant theory and best practice in the areas of teacher efficacy, teacher learning, teaching for social justice, working with diverse learners, and language, literacy, and academic language development and even brain-compatibility. It must reflect the dynamic interaction among the learner, the teacher, and the classroom context and place reliance on the role of teacher reflection in making instructional decisions.

Adaptation pedagogy is not just a process of knowing and making relevant and appropriate plans for English language and special needs learners to make subject matter comprehensible, engage and support students in learning, and create effective environments for learning. The teacher engaged in adaptation pedagogy is not only knowledgeable of subject matter content and aware of the social, economic, linguistic, and cultural factors that affect learning; he/she also recognizes the need for students to acquire a deeper understanding of the instructional material in order to make it relevant to their lives. As teachers make instructional adaptation to provide English language and special needs learners access to academic curriculum and instruction, they are serving as advocates for equity, positive behavior, caring connections, resiliency, students’ background knowledge, and effective learning for its diverse students. Subsequently, through careful attention to the needs of these diverse students and how to engage them productively in a complex academic learning environment, English language learners and
students with special needs become connected participants to the classroom culture and active
users and consumers of the curriculum.

This presentation will demonstrate how adaptations can be planned before the
presentation of the lesson, during the lesson, and after the completion of the lesson. Effective
adaptation strategies for English language and special needs learners in this presentation are in
three categories: classroom organization adaptation, instructional presentation adaptation, and
activating student motivation and response adaptation (Lalas & Solomon, 2007). The presenters
will attempt to show that making adaptation is not just a mechanical process of listing and
matching adaptation activities with certain student weaknesses but a conscious decision-making
process that involves a deep understanding of the societal factors that influence academic
achievement and the dynamic interplay among the teacher, the student, and the classroom
context in the learning process. It involves figuring out what the students can and cannot do and
their level of comfort in recognizing their individuality, working with others, problem-solving,
demonstrating knowledge, and reflecting on their own learning. It is indeed a pedagogy –
adaptation pedagogy – because it drives teachers’ commitment to their students and their
learning, respect and care for their well being, advocacy for their future, and support for their
academic challenges.

Reference

and special needs students: Practicing educational justice in the mainstream classroom.
Dubuque, IA: Kendall/Hunt Publishing Company.
1. **Title of the submission:** (Submission 1760, have not yet heard if it has been accepted) Functional Movement: A Comparison of the Effects of Yoga Versus Core Stability Training

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6. **Abstract and/or full paper.**

   **Research in Progress: Dissertation**
   Travis Esslinger

   **Functional Movement: A Comparison of the Effects of Yoga Versus Core Stability Training**

   Each year $61.2$ billion dollars are lost due to common pain conditions in the US workforce (Stewart, Ricci, Chee, Morganstein, & Lipton, 2003). In order to combat such issues the Functional Movement Screen created by Gray Cook has been utilized to investigate the cause of such conditions. The purpose of this tool is to identify functional asymmetry in movement patterns in order to improve muscular function, performance, and prevention of injury. The screen is a test comprised of seven fundamental movement patterns that require a balance of mobility and stability (Cook & Burton, 2002). Once imbalances are identified, specific corrective exercises are prescribed to help the individual. Participation in yoga and core-stability training has been shown to promote many health related fitness aspects.
(Cowan, 2009), however, little is known as to whether yoga can be used as a corrective measure for functional movement specifically, also, if it is a better choice in increasing functional movement than core-stability training.

**Purpose**

The purpose of this study is to assess the functional movement of individuals who participate in yoga versus individuals who participate in a core stability-training program to determine whether yoga participation results in greater functional movement.

**Methods**

One section of a weight-training course and intro to yoga course will be utilized to conduct the study. The intentions of the study are to determine if FMS scores increase with specific activities. The yoga course will be carried out as normal, but students in the weight-training class will be intervened by four specific core-stability exercises. A pre-test/post-test design will be utilized to evaluate the functional movement of each participant. All participants will be measured using the FMS and individually instructed on how to perform the Deep Squat®, Hurdle Step®, In-Line Lunge®, Shoulder Mobility®, Active Straight Leg Raise®, Trunk Stability Push-Up®, and Rotary Stability®. Testing will be completed after the 2nd and 6th week of class.

**Benefits/Knowledge Gained**

The functional Movement Screen attempts to pinpoint weak links in movement patterns and alleviate them. The goal therefore is to coordinate exercise programming to correct the weak areas found during screening. When this is accomplished the individual will have greater movement and efficiency, which will lead to improved performance and a decrease in injury potential.

It is theorized that Yoga may assist in increasing functional movement and improve overall efficiency in movement. Therefore, suggesting that Yoga could supplement or even replace the corrective measures suggested by the Functional Movement Screen.
Development of a Tool for Producing Foreign Language Contents with Audio Synchronized Text Highlights

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Abstract

With more and more elementary schools in Japan facing the problem of figuring out how to introduce foreign language education to their pupils without the help of a designated language teacher on campus, there is an immediate need for tools to help teachers create digital contents for foreign language learning that can be easily shared across many classrooms. Although the majority of current elementary school teachers are not trained for foreign language teaching, many of them have limited access to a foreign language teaching assistant who could help them create recordings of a native speaker’s pronunciation of words and story-reading. In this work, we propose a system that would allow users to combine the story-reading text of a story with a separately prepared audio reading recording into a single digital page and automatically add text highlights synchronized with the audio to help develop young children’s foreign language listening skills using multimedia technology on computers.

Introduction

As opportunities for working in a global environment increase, the first exposure of foreign language education in Japan’s compulsory school system has started to move up from the junior high school classrooms into the upper grades of primary school. In some schools, preparations have already progressed to start pushing foreign language studies into the curriculums of even lower primary school grades. Especially for younger children, the ideal environment for developing listening and speaking skills for a foreign language would include
access to a native speaker of the language on a regular basis, but this is not feasible in Japan.
A variety of computer based materials have been developed on the market to fill the void and
assist Japanese teachers suddenly thrust into the position of introducing foreign languages to
their students, but assembling for-a-fee tools for a classroom is also not feasible. Many public
schools have limited access to a foreign language teaching assistant who visits schools in
rotation a few times a year, but this results in only a very limited number of lessons per year
with a native speaker. Since large classes, which meet with the foreign language teaching
assistant for sometimes less than an hour per visit, can hardly allow each student time to
practice speaking and listening closely with the instructor, we propose in this work a system
for helping teachers to create their own digital contents which can combine story text with the
voice recordings of a native speaker to produce a type of read-along book or “kamishibai” (large
flipcards for storytelling popular with children in Japan) presentation for computers (Fig. 1).

Figure 1. Overview of text highlighting content generation system.

The development tools selected for this work are based on the Silverlight Framework and
Visual Web Developer Express 2010 tools from Microsoft. The resulting digital contents can
be viewed one page at a time using a mouse click operation easily handled by elementary
school children.
Synchronization of Text and Audio

The general approach for synchronizing the text highlighting feature with the audio contents is to analyze the audio data at a binary level to find blank quiet spots in the reading (Fig. 2). Words and phrases that are pronounced in a run-on style cannot be distinguished word for word with this method, but the initial experiments using audio recordings of various lengths and speeds indicate that a sufficient number of blanks can be detected in a typical story reading sentence and the progression speed of the highlighter bar can be adjusted using software to fit the beginning and end of each sentence.

Figure 2. Text highlight generator automatically searches for blank quiet times in story reading sentences for controlling the progress of the text marker bar.

Although specialized tools currently exist to produce text highlighting materials, the level of expertise needed to use them is usually quite high. The goal of our system is to develop a simple interface that can be easily used by elementary school teachers with just a few file selection operations.

System Design and Evaluation

To produce the read-along “kamishibai” style flipcard digital book, teachers will prepare the story text, audio reading file, and an optional image file for each page. On a simple PC window menu shown in Fig. 3, teachers can browse through the local hard disk to specify the files they wish to use.
Figure 3. File selection window for specifying the audio reading file, story text file, and optional image file to be used in producing a read-along “kamishibai” style digital page.

Pressing the [RUN] button will activate a program for analyzing the audio reading file for blank quiet times as described above and automatically determine how to synchronize the progression of a text highlighter bar to be displayed in the story text area (see example in Fig. 4) to match the speed of the audio reading and help children read along when the audio is played.

Figure 4. Sample output of audio synchronized text highlighting digital story page.
By collaborating with teachers at local elementary schools, we will use the prototype described above to verify the usability of the proposed system. In particular, we want to check the amount of time required for a beginner user to produce a short read-along digital “kamishibai” piece and the portability of the contents to various types of computers and digital players. The prototype version of the audio and text synchronization program is designed to process short audio files of about five seconds (one sentence) each and will be tested with a variety of audio reading samples including male and female voices, different accents, and reading speeds.

References


Attitudes of Career and Technical Educators toward Diversity in the Classroom

Cecelia Thompson and Dale E. Thompson
University of Arkansas

Career and Technical Education teachers need to relate to many cultures to better understand the growing diversity of school populations. “By 2010, 40 percent of learners in classrooms will be children of color, while the teaching population will remain about 85 percent white and female” (Hill-Jackson, Sewell & Waters, 2007).

Basic Skills, like reading and writing, are not the world’s greatest problems. “They result from people in the world—from different cultures, races, religions and actions—being unable to get along and to work together to solve the world’s intractable problems” (Banks, 2004, p. 291). Our children should develop multicultural literacy and be able to view knowledge from diverse perspectives.

Research indicates that heterogeneous groups perform well when diverse backgrounds and perspectives are appreciated. Creativity and problem solving improves. Minority viewpoints stimulate creative solutions (Canas & Sondak, 2008).

Teachers need to recognize and celebrate classroom diversity and teach for acceptance. “If teachers pretend not to see students’ racial and ethnic differences, they really do not see the students at all and are limited in their ability to meet their educational needs” (Ladson-Billings, 1994, p. 33).

Culturally-relevant teachers see themselves as part of the community and strive to give something back to the community. They make connections between the community and national identity. They believe all students can succeed and see teaching as helping students discover the knowledge they bring to the classroom. (Ladson-Billings, 1994)

Gross (1993) recommends that educators

- recognize any biases they may have absorbed
- treat students as individuals, respect students for who they are
- rectify language that may exclude or demean groups
- be sensitive to terminology that refers to specific ethnic or cultural groups
- determine the classroom cultural climate
- be informed about the culture of groups other than their own
- have confidence in the ability of students, don’t protect groups of students
- select materials that are free of stereotypes
- design a inclusive curriculum
- recognize that students may not be familiar with cultural references
- use diverse people as guest resources
- give assignments and assessments that allow students to draw on their diverse backgrounds and special interests.
In family and consumer sciences classes there are many opportunities to address diversity in the curriculum.

In child development and parenting classes, teachers can discuss how cultural beliefs and values influence almost every aspect of child rearing. How parents talk to children, touch them, dress them, and conduct routines vary according to culture. It is important to teach “there are many equally valid ways to raise healthy children who thrive in the world. Professional knowledge and experience are important, but we must never forget how much we can learn from the families we work with.” (Gonzalez-Mena & Pulido-Toblassen, 1999)

Purpose of the Study

The purpose of this study was to compare attitudes toward diversity of career and technical educators and education students living and attending schools in communities with different levels of multiculturalism.

The Diversity Awareness Profile (DAP) by Karen Stinson (2007) was administered to career and technical educators and students in Hawaii, Virginia and Hawaii. This self-assessment instrument is designed to help adults develop a view of their behaviors as they interact with peers and colleagues at school and work as well as participate in the community. The instrument measures primary, secondary and organizational dimensions of interaction with diverse individuals. The instrument was first published in 1991 and revised in 2007.

The primary dimension of the DAP includes age, gender, mental/physical ability, race, ethnicity and sexual orientation. The secondary dimension includes religion, education, thinking style, working style, marital/dependent status, geographic location, language, values, class, military status and appearance. The organization dimensions includes role in company, function, level, location, tenure, credentials, previous job, work experience, business unit and industry specialization.

Scores from the instrument fall into a diversity awareness spectrum that includes naïve, perpetuator, avoider, change agent and fighter. The spectrum helps participants assess how free of bias, prejudice and discrimination their behavior is.

Naïve people do not realize they exhibit biased behavior. They accept stereotypical statements as fact and do not comprehend biased behavior. The author of the Diversity Awareness Profile did not indicate a score for this category, because she believes naïve offenders don’t realize the impact of their behavior.

Perpetuators are indicated as a score of 24 to 47. A perpetrator is aware of their biases and offensive behavior. They continue with derogatory comments and actions even though they are aware of hurting others.

Avoiders are indicated by a score of 48 to 71. Avoiders are aware of their biases, but they try to say nothing when others are inappropriate. This is perceived as acceptance of bias.
Change Agents scores range from 72 to 83. They are aware of biases and realize the harm of acting on those biases. They try to help others understand and avoid bias.

Fighters score between 84 and 96. People in this category are willing to confront others they perceive as offenders. They may have a reputation for challenging others to the point that people may discount what they say and avoid them.

After administration of the questionnaire, the participants discussed possible learning experiences that would help others gain insight into their attitudes and behaviors toward others.

Results of the Study

<table>
<thead>
<tr>
<th>Summary of Arkansas Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Students—Arkansas</td>
</tr>
<tr>
<td>n=8</td>
</tr>
<tr>
<td>M 77.25</td>
</tr>
<tr>
<td>Highest Score 94</td>
</tr>
<tr>
<td>Lowest score 64</td>
</tr>
<tr>
<td>Avoiders 1</td>
</tr>
<tr>
<td>Change Agents 5</td>
</tr>
<tr>
<td>Fighters 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Students—Arkansas</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=23</td>
</tr>
<tr>
<td>M 77.9</td>
</tr>
<tr>
<td>Highest score 89</td>
</tr>
<tr>
<td>Lowest score 60</td>
</tr>
<tr>
<td>Avoiders 8</td>
</tr>
<tr>
<td>Change Agents 4</td>
</tr>
<tr>
<td>Fighters 11</td>
</tr>
</tbody>
</table>

The majority of undergraduate students who participated in the study indicated that they were change agents as they interacted with others who were different from themselves. Almost half of the graduate students in this sample identified themselves as fighters. They were willing to be confrontational in situation where others were exhibiting bias. However, almost a third of the graduate students rated their actions as avoiders and chose to be silent in uncomfortable situations where others were expressing or acting on their biases. The mean scores for both undergraduate and graduate students fell in the category of change agent.
Table 2

*Summary of Career and Technical Education Teachers*

Career and Technical Education Teachers—Hawaii
n=9
M 83.3
Highest score 93
Lowest score 54
Avoiders 2
Change Agents 0
Fighters 7

Career and Technical Education Teachers—Virginia
n=4
M 86.25
Highest score 90
Lowest score 79
Avoiders 0
Change Agents 1
Fighters 3

The scores of Career and Technical Education Teachers were significantly higher than those of undergraduate and graduate students. The mean scores of both groups of teachers fell in the category of fighter. Both groups of teachers were employed in schools with diverse student populations.

**Discussion**

None of the participants scored in the categories of naïve or perpetuator. Since all of the participants were at least juniors in college or teachers with at least one college degree, they appeared to be aware of indicators of bias and tolerant of diversity. Other studies have shown negative correlation between formal education and prejudice. (Wagner & Zick, 1995; Guthrie, King, & Palmer, n.d.; Cothern, 2009)

It appears that undergraduate and graduate students score significantly lower than teachers on the DAP, an instrument designed to self-assess if a person’s behavior is free of bias. This may be the result of life-experiences and age. Both have been identified as affecting tolerance (Cothern, 2009). However, in this study it is more likely the result of the teachers working with a diverse student population.
Recommendations for Teacher Education

It is important to provide teacher education students with opportunities to examine their attitudes about diversity in the university classroom and as they participate in student teaching. The participants in this study identified the follow activities as appropriate for learning about diversity.

How diverse is my community?

A community will reflect the diversity of the people who live there. There will be small grocery stores and restaurants that provide foods preferred by a particular ethnic group. There will be churches with services in native languages. There will be agencies that serve specific groups within the community. Identify businesses and agencies that cater to specific groups within the community by searching the local Chamber of Commerce website, telephone directory, and asking the public school students about their favorite place to shop and eat. Students can work in groups of two and then compare their list with other students. As a class, describe the community resources that serve diverse populations.

Evaluating Classroom Materials

As a class group, evaluate one example of teaching materials used in a classroom. Examine the materials to determine if it incorporates a broad perspective of age, race, gender, and ethnicity. Determine if there are stereotypes depicted in the materials. Find examples of how diversity is addressed. Develop a rubric for evaluating other curriculum materials.

People are Like Lemons (or Apples or Potatoes)

The purpose of this activity is to discover that people are often similar on the inside. Give a lemon (or apple or potato) to each student. All them time to examine the lemon carefully. After a few minutes, collect the lemons. Ask the students to find their lemon in the pile. Most will recognize their lemons at once.

Next, ask students to describe how they recognized their lemon. They will describe the size, shape, color and surface features. Collect the lemons again. Peel the lemons. Ask the students to identify their lemon. This will lead to a discussion about how the lemons look alike on the inside.

(adapted from Stern-LaRosa, 2001)

Masculine and Feminine Speaking Styles

Men and women communicate in different ways. Rate yourself on a scale with often, sometimes and never for each of the following ways of communicating. Mix up the masculine and feminine items. Follow this activity with a discussion of how confusion can result from masculine versus feminine styles of communication.
The following statements describe masculine-style talk.
I talk to assert my ideas.
I don't like to discuss personal information.
I don't mind competitive discussions.
I like to give advice or explain how to solve a problem.
I don't mind interrupting others to make my point.
I believe each person is on his or her own, responsible for being heard.
I try to outshine others.
I show my confidence by being assertive.
I think talking should convey information and accomplish goals.

The following statements describe feminine-style talk.
I use talk to build rapport with others.
I like to share information about myself and learn about others.
I like to talk with others on an equal footing.
I like to show understanding and empathy when I talk to others.
I like others to know that I understand their feelings.
I ask questions so others will elaborate.
I like to show interest in others’ ideas.
I want people to know that I care about what they say.
I believe that details and interesting side comments increase my connection with others.

(adapted from Canas & Sondak, 2008)

References


Title: Combating Intertextual Muddling and Plagiarism in Open Learning

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Combating Intertextual Muddling and Plagiarism in Open Learning
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The advances of technology, the ease of access to print and the increase in multimodal communication has led to hetroglossic and intertextual scripts in academic dialogue. Caryle et al (2006) attribute to Bakhtin his views that “the representation of multiple voices is an elemental necessity of authentic prose” and that, all texts and discourses partake excerpts from different-languages and resonate with “many-voices”. Heteroglossia and polyphony, in Bakhtin’s views, are the basic conditions that are unavoidable in any text (Bakhtin, 1982).

In the plethora of research and academic dialogue, acknowledging intellectual ownership emerge as a concern resulting from abundant intertextuality in academic dialogue (Irwin, 2004; Griffig, 2006). Academic panels, researchers and professional discourse communities confirmed the need to reinstate codes of good academic practice, specifically in relation to intertextuality and academic discourse.

Plagiarism has become epidemic at both ends of academia; at lower university levels as well as post doctorate research. Several factors contributed to the spread of the malpractice: academic conditions and restraints governing promotion and demotion in tenure linked to publishing, time restriction and the prescribed tasks that need to be completed, the existing academic and professional load from the world of work, discrepancy in different cultural perception in relation to intertextuality and plagiarism and finally, insufficient awareness campaigns on the subject at different academic levels.
The Arab Open University – Lebanon is one of the academic bodies that identified problems in intertextuality and pioneered a project to solve them. Conducting an intensive awareness campaign on what constitutes plagiarism and ways of avoiding it constituted the initial phase of the project. Multimodal methods were used to draw attention to the seriousness of the malpractice and its ethical and academic repercussions.

At the second phase, interactive software was developed that included tutorials on problems in intertextuality, plagiarism and proper quoting and citation methods. The tutorials were followed by training and testing interactive exercises with feedback that reaffirm concepts of good and malpractices.

At the third phase come sets of measures and penalties that conform to levels of identified problems in intertextuality and the intentional flouting of the codes of good practice in academic discourse amounting to serious plagiarism.

The project fulfills three dimensions in academic attempt to combat plagiarism: raising awareness, training and testing to establish comprehension of the concept and penalties. It is hoped that compatible research on the issues raised can benefit from the Arab Open University- Lebanon project and that attentions is drawn to the seriousness of the problem so that institutions can join efforts and adopt consistent measures to combat it.
Introduction
Problems of intertextuality and plagiarism have been identified as serious by academics and institutions all over the world. Caryle et al (2006) affirm Bakhtin’s views that “the representation of multiple voices is an elemental necessity of authentic prose” and that, all texts and discourses partake excerpts from different-languages and resonate with “many-voices”.

Access to online material is increasing concerns that web pages are making plagiarism easier to accomplish in the absence of academic integrity and student commitment to honour codes as they aim at passing averages (Lincoln, 2002, Mc Cabe et al, 2002, Gilgoff, 2001, Scanlon, 2003, Richardson, 2004). The advances of technology, the ease of access to print and the increase in multimodal communication have led to a plethora of hetroglossic and intertextual scripts in academic dialogue.

Heteroglossia and polyphony, in Bakhtin’s views, are the basic conditions that are unavoidable in any text (Bakhtin, 1982). In research and academic dialogue, acknowledging intellectual ownership emerges as a concern resulting from abundant intertextuality (Irwin, 2004; Griffig, 2006). Academic panels, researchers and professional discourse communities confirmed the need to reinstate codes of good academic practice, specifically in relation to intertextuality and academic discourse.

Plagiarism is underlined as epidemic at both ends of academia; at lower university levels as well as post doctorate research. Several factors contributed to the spread of the malpractice: academic conditions related to restraints governing promotion and demotion in tenure linked to publishing, time restriction and the prescribed tasks that need to be completed, the existing academic and professional load from the world of work, discrepancy in different cultural perception in relation to
intertextuality and plagiarism, and finally, insufficient awareness campaigns on the subject at different academic levels.

Since the early millennium, campaigns have targeted the problem of plagiarism with heavy penalties recommended and imposed, amounting to expulsion from the academic institution. Societies and cultures, however, differ in their perception of plagiarism and the seriousness of unreferenced but integrated academic property. Resorting to plagiarism detection software to identify and tag cases of plagiarism is costing universities money and time and transforming faculty to detectives instead of educators. In addition to problems associated with the application of detection software, revolutionary programmes warn of the possibility of innocent students getting tagged (John Barrie – creator of *Turn It In* in Green, 2000).

Awareness campaigns on what constitutes plagiarism, how prevalent it is and its impact on images of dishonesty, integrity and honour for students are advocated amidst rising numbers of alleged incidents among some of the best universities including Harvard and Yale (Hickman, 1998). Boston University filed law suits against eight term paper companies for corrupt practices including selling plagiarized work (Hickman, 1998). Education Digest (2001) flags out the problem of internet plagiarism, the abundance of websites selling term paper of the ensuing legal quandary. Newsweek (2001) presents statistics on the growth in academic dishonesty in the light of 122 student plagiarism investigation at the University of Virginia. Academic institutions responded by purchasing plagiarism detection programmes and incurring heavy penalties on caught cases. While traditional universities are sounding the alarm the problem in open and distance learning is even worse.
The problem in open and distance learning
Open and distance learning rely on cyber communication and facilities of uploading and downloading material. As such, interaction involves more electronic dealing and is more prone to scenarios involving intertextuality and plagiarism. Richardson (2004) argues that the problem of academic dishonesty including plagiarism, has not been sufficiently addressed. Gilgoff (2001) associates the impact of the internet on the willingness of students to commit plagiarism. The Chronicle of Higher Education charts tabular increase in the number of alleged plagiarism and cheating cases at Amherst College in Massachusetts in what is becoming an academic problem of epidemic proportion.

Educationists called for deterring measures that include raising awareness on the gravity of plagiarism as a crime of theft of academic property. Students’ honour codes were devised to emphasize integrity in students in higher education and establish codes of conduct in research and academic writing.

The case study
The Arab Open University is an academic institution operating in seven Arab countries through the Open Learning system. Minimal face to face tutorials are imposed, following the rules and regulations of Arab ministries of higher education. The AOU adopts courses and materials from the United Kingdom Open University. Recent statistics (2008) identify student body to exceed 35,000 enrolled at its seven branches. Students’ work is monitored by British external examiners at the end to every semester.

In the initial period of operation, 2002 – 2007, concerns were associated with ways of maintaining standards in the English language of expression in the works of students in specific regions. Moreover, external examiners highlighted the importance of an electronic learning management
system in open education to display tutorial outline, support notes, discussion forums, information and guidance online and facilitate uploading assignments and downloading feedback. Foundation courses were introduced and IT support was given to students to facilitate their use of the electronic learning management system. Tutorial outline, course information, resource sites, uploading facilities, were included in the system.

The following period of operation (2007-todate) featured growing concerns with plagiarism. In one report of an external examiner (Lee, 2009) the problem was associated with the weak expression of students who have fewer academic writing skills (section B, item 2). The examiner comments, “there is a tendency to lift material… from Wikipedia and other sources” (Lee, 2009).

Another examiner related the problem to poor or altogether absent referencing. Unacknowledged sources alarm tutors to take measures and constitute another aspect of plagiarism. Bygrave (2009) observed that weaker students relied on outside sources, sometimes repeating sections word-for-word without referencing and without putting the material into useful argumentation.

Quotations without referencing and the absence of in-text documentation and end of text list of references were highlighted (Bygrave, 2009). The report also included cases where assignments have been “assembled” from web-sources and caught when electronically submitted through plagiarism detection software, where they were given a mark of zero (Bygrave, 2009).

The Arab Open University – Lebanon is one of the academic bodies that identified problems in intertextuality and pioneered a project to solve them. Conducting an intensive awareness campaign on what constitutes plagiarism and ways of avoiding it constituted the initial phase of the project. Multimodal methods were used to draw attention to the seriousness of the malpractice and its ethical and academic repercussions.
At the second phase, interactive software was developed that included tutorials on problems in intertextuality, plagiarism and proper quoting and citation methods. The tutorials were followed by training and testing interactive exercises with feedback that reaffirm concepts of good and malpractices.

At the third phase come sets of measures and penalties that conform to levels of identified problems in intertextuality and the intentional flouting of the codes of good practice in academic discourse amounting to serious plagiarism.

Intertextuality and Plagiarism

Plagiarism in the case study has been identified at multiple stages of intertextuality with:

1- Wholesale lifting of material

2- Copy/paste from Web sources

3- Absence of in-text documentation

4- Unreferenced quotes

5- Absence of end of text list of references

Later assessment and student interviews helped group the above into two categories:

A- Inadvertent plagiarism

B- Plagiarism
Bakhtin’s *heteroglossia*, when “each discourse is crisscrossed by several other discourses” need to be systematized and to follow set ground rules. For unintended cases of polyphony in intertextuality, awareness campaigns of instruction on plagiarism and measures to avoid it were instated. At the other end, penalties compatible with recurrences of incidents or level banding of courses were introduced.

A tutorial explaining what constitutes plagiarism (see appendix A) was posted on the electronic university management system and channeled to all course platforms in such a way that all students would have to notice it when first activating their electronic accounts. Measures were taken to ensure that students would not be able to navigate to any site until they acknowledge understanding the tutorial and express their readiness to sit a plagiarism identifying test (see appendix B). The plagiarism test was made available on the electronic university management system from the start of the semester. No penalties were introduced for failing the test unless the student was apprehended of plagiarism.

The test comprised of a number of exercises where students are asked to identify a reproduced text from an original source, whether plagiarized or not. When replying, students receive electronic feedback on whether their answers are correct or not and explanations of the errors in their answers. Students with correct answers are able to move to the following level. Students with incorrect answers receive feedback explaining why their answers are wrong, with the overall aim of reaffirming the correct principles and practices at the testing level, after the initial introductory tutorial. Navigation to the following level is only permitted after the student confirms that they have read the feedback. The test will reorganize exercises differently at every approach so that students do not retain the order of exercises and feedback when repeating.
At the end of the test a failure notice would be displayed in cases of inability to recognize plagiarism, asking the student to study again the plagiarism tutorial and re-sit the test. A note of congratulation is displayed for the student who has correct scores on all answers, hence demonstrating understanding of the malpractice of plagiarism and knows how to avoid it.

In cases of successfully passing the test, students were asked to send a confirmation to the registry and the Exams Department declaring that they have fully understood plagiarism and know ways to avoid it, and that the student understands that the university has a strict policy on plagiarism and implements penalties amounting to failing the course in cases where plagiarism is detected.

**Disciplinary Measures**

The Centre of Excellence for Quality Assurance at AOU-Lebanon and the sub-committee of staff tutors compiled a set of disciplinary measures for implementation after conducting awareness campaigns and introducing students to examples of plagiarism.

For new students at level one courses, incidents involving plagiarism are dealt with at Faculty level through grade deduction and electronic tracking of the student record. Automated message is sent to the offender explaining the offence, the penalty incurred in terms of grade deduction and warning the student of future tracking. Once apprehended of an act of plagiarism, passing the plagiarism test becomes mandatory before the student can access his account.

For offences at level two courses or recurrence of a previously warned case, referrals to the disciplinary committee take place where the offender is called and officially warned. Documents related to the disciplinary committee warning are signed by the student and copies are kept in the student file at the Registry. The student’s records are updated with the new offense and the
plagiarized work is allocated zero. Passing the plagiarism test is made mandatory before the student is able to access his electronic account.

Plagiarism at level 3 courses or recurrence of plagiarism after warning from the disciplinary committee results in a series of measures compatible with the referred case and ranging minimally from allocating zero on the course, to allocating zero on the course in addition to academic probation, or in more severe cases expulsion from the university.

Applicability and results
Figures obtained from the University Management System (UMS) for the first semester of Fall 2008 - 2009 and the second semester of Spring 2008 - 2009 and following the piloted study revealed a drop in the cases of plagiarism in the two major programmes of Information and Telecommunication and Business administration, which in total embrace 90% of AOU – Lebanon student body.

The results point to the limited success of the project in controlling the level of plagiarism.
Figure 1
Cases of plagiarism in relation to programme of study

Statistics obtained from AOU – data base administrator
Fall 2008 – 2009
Cases of plagiarism in relation to programme of study

Statistics obtained from AOU – data base administrator
Spring 2009

In Fall 2008, caught cases of plagiarism were
The overall figures dropped in Spring from 20% to 11% in ITC and from 4.5% to 3.4% in Business studies. The figures, however, indicate higher cases in ITC than in the Business studies in both semesters, pointing out to a relation between ITC and ease of access to plagiarism.

Conclusion

Advances in technology and sciences have brought the globe into computer screens through the web, making accessible an unlimited wealth of knowledge with untamed methods of using it. Intertextuality and polyphony are features of every discourse bearing witness to such advances. The problem is how to tame such a process and lay down rules for academic paraphrasing, quoting
and referencing in intertextual discourse, to associate its use with more credentials rather than making it a source of blame.

The project fulfills three dimensions in academic attempt to combat plagiarism: raising awareness, training and testing to establish comprehension of the concept and penalties. It is hoped that compatible research on the issues raised can benefit from the Arab Open University- Lebanon project and that attentions is drawn to the seriousness of the problem so that institutions can join efforts and adopt consistent measures to combat it. Punishment and deterrent measures can be influential in decreasing attempts at plagiarism however awareness campaigns can bring a belief in principles of honesty and integrity and can bring about commitment to honorable codes of practice among students in higher education.
References

Appendix A  
Tutorial on Plagiarism

What is Plagiarism?

Plagiarism is when you use someone else’s ideas in your writing without acknowledging your source. Plagiarism has many forms:

- Copying in part or full from anyone, including friends, classmates, and internet sources.
- Copying word-for-word without using quotation marks and not citing the source.
- Paraphrasing by replacing few words or rearranging sentences and not citing the source.

How Can You Avoid Plagiarism

- **When quoting word-for-word**
  
  Quoting: Quoting means copying parts of the text for the purpose of presenting the author’s actual words. Quoting should be used inside quotation marks, followed by citation of its source. Failure to provide citation will be interpreted as plagiarism, even if the source is in your bibliography.
  
  To avoid plagiarism use quotation marks “ ” to frame the quoted text and cite the source in the text after the quote, using standard format of author’s surname, initial. (date of publication), title of the work, name and location of publishers, page numbers. of the material you are borrowing.

- **When paraphrasing**
  
  Paraphrasing should not include the words of the original text nor follow the same sentence structure. Paraphrased information should be accompanied by citation in the text after the paraphrased section, otherwise it will be interpreted as plagiarism even if the source is in your bibliography.
  
  To avoid plagiarism: use your own words to produce the ideas that you read and avoid using statements in the original form without putting them in quotes. Again cite the reference at the end of the paraphrased section.

- **When summarizing**
  
  Summarizing procedures short version of an original text and preserves its main ideas. Summaries do not need to follow the same order as the original text. Failure to provide citation will be interpreted as plagiarism, even if the source is in your bibliography.
  
  To avoid plagiarism: summarized sections need to be accompanied by citation of the source material. Direct quotes in the summary should be used whenever incorporating word-for-word material, with citations at the end of the quoted section.

- **Checkpoint:** Do we need to cite sources on everything written?
  
  The facts that are known by most people do not need documentation as they constitute common knowledge and are not owned by a specific author.
**Penalties of Plagiarism**

Plagiarism is an act of theft of intellectual property and academic institutions are applying severe penalties to students whose works are plagiarized. These can range from discounting the work to failing the course.

Now take the plagiarism test to demonstrate your understanding of the concept of plagiarism and ways of avoiding it.

----- I understand the concept of plagiarism and am now ready to take the test.
Appendix B

Plagiarism Test

Select the appropriate radio button to demonstrate your understanding of whether the work is plagiarized or not.

sample

Exercise 1

<table>
<thead>
<tr>
<th>Original Version</th>
<th>Reproduced version</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Evidence of anti-social behaviour is observed in the school yard as children try out Kung-Fu-style movement on others. The concern is voiced by psychologists who say that players become desensitized to violent behaviour and hence consider that conflicts are resolved through superior violence”. <em>(Polias in Coffin, 2004)</em></td>
<td>Polias argues that there is evidence of anti-social behaviour in the school yard when children try out Kung-Fu-style movement on others. Psychologists are concerned that players become desensitized to violent behaviour and consider that conflicts are resolved through more violence.</td>
</tr>
</tbody>
</table>


(hide feedback until clicked)

○ This is plagiarism
○ This is not plagiarism

___________________________________________

Feedback: This is plagiarism because:

1. The writer only changes a few words and phrases or changes the order of the original sentences.
2. The writer does not cite his source for any of the ideas and facts.

sample

Exercise 2
“Evidence of anti-social behaviour is observed in the school yard as children try out Kung-Fu-style movement on others. The concern is voiced by psychologists who say that players become desensitized to violent behaviour and hence consider that conflicts are resolved through superior violence” (Polias in Coffin, 2004).


Polias warns that children are becoming more involved in aggressive behaviour that includes trying out dangerous physical movements on their friends in the playground. Psychologists interpret the emerging pattern as resulting from the understanding of children that increased fighting ability is the key to solving conflicts. (Coffin, 2004, p.128).


Feedback: This is not plagiarism because:

1. The writer accurately reproduces the information of the original source using own wording
2. He cites the source at the end of paragraphing.
Appendix C

Failure and Success Notices

Student declaration

Failure Notice
Sorry you need to study again the plagiarism tutorial to take the test. You do not know how to avoid plagiarism and cannot complete your assignment uploading.

Success Notice
Congratulations. You passed the plagiarism test. You need to apply what you have learnt in all your written work. Penalties for submitting a plagiarized work may amount to failing the course.

Now read and approve the declaration below.

* I declare that I fully understand the concept of plagiarism and know how to avoid it by paraphrasing and citing my sources when using other people’s ideas or using direct quotes for word-by-word borrowings and citing the author.
* I understand that the university has a strict policy on plagiarism and penalties amounting to failing the course are applied where plagiarized materials are caught.
□ Click to send notice to registrar’s office and exams department.
Introduction

In this work, we propose a system for guiding Japanese university students through a series of remedial training units for reviewing the English vocabulary material learned in junior high school. From the late 1990s, the compulsory school system in Japan from elementary to junior high school experienced a shift in style from a cramming education to a more relaxed style of education in which almost a third of the previously used curriculum was cut and periods for integrated study were introduced. In universities across Japan today, an ever widening range of English language background of incoming freshmen is becoming more and more apparent and it creates a challenging task of adequately placing students in a fixed number of English class levels in college. Particularly in a technical university, many students need remedial training before they can participate in courses for reading and writing technical papers in English, but without being able to dedicate staff or class periods for this, many universities and researchers are investigating e-learning methods as a solution.

One of the main problems of this approach, however, is that since many of these types of learning materials require students to direct themselves in a self-study for topics that often require repetitious drills, it is important to develop a system that can help students stay on track and on schedule to be able to complete the prescribed training required for adequate remedial education.

Study Units and Story Completion System

In this work, we introduce a story completion format for helping self-study remedial students track their progress. For each section of work that is cleared, a piece of a story is opened to the user and the graphical representation of progress along with the feeling of anticipation for finding what happens next is used in combination to help students return to the drill contents repeatedly until the unit is completed.

In the prototype of this work, we focused on the vocabulary learned by first, second, and third year junior high school students in Japan. The words are divided into small sets and students use a flashcard type of animation (Fig. 1) to quickly review the words and test how well they remember the meanings of the words using an online test.

With a passing score on a test, the corresponding piece of a story is presented to the user as shown in Fig. 2. By dividing the prescribed remedial training materials into daily or weekly units which can be organized into story...
Prototype Design and Evaluation

We are currently developing approximately 56 training units for the self-study remedial system in this work to help Japanese university students review nearly 2000 English vocabulary words introduced in their junior high school curriculum outside of their regular English course load.

In the Fall 2010 semester, we will test a prototype of the system to find out how effective the online flashcard and quiz system is in helping students to: 1) study the vocabulary units independently outside of the classroom and 2) complete the prepared units despite the repetitious nature of the drills.

In order to make it easy for instructors to tailor the contents of the training units for their students in the prototype system, we use simple text files for organizing the word lists and stamp card stories. A log of the progress of each student will be recorded automatically and instructors can view the log information for their classes from a homepage as shown in Fig. 3.

Periodic English vocabulary tests and evaluations of how long students are able to continue self-study work with the prototype system will be used to judge the usefulness of the digital flashcard and story completion training units as extracurricular remedial study materials.

References

The Role of Service Learning in Enhancing the College Experience

Service Learning is a multistep process of learning in which academic goals are accomplished through community service or nonprofit organizations. Service learning allows students the ability to discover problems within their community and to take immediate action. The type of action includes a five step process called the Procedural Model of Problem Solving (PMOPS). The PMOPS process consists of: analyzing the problem, generating and exploring possible solutions, evaluating those solutions, choosing the best solution, and implementing the solution.

While taking a Group Decision Making class in the Communication Department at Western Kentucky University, the purpose of the project was to determine how Mammoth Cave National Park employees could raise awareness to a multicultural demographic for the National Park in Cave City, Kentucky. The group collaborated with the Executive Director of Friends of Mammoth Cave. Friends of Mammoth Cave is a nonprofit organization that works in cooperation with the National Park Service to fund projects and programs that protect, preserve, and enhance the natural and cultural resources and the visitor experience of Mammoth Cave National Park.

Service learning projects are powerful tools that can provide skills to students in real world scenarios. When service learning projects are properly generated, students learn a variety of characteristics such as leadership, responsibility, confidence, marketing and promotions, communicating effectively, and scholarly knowledge.

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Abstract

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Title of the submission: Are schools in Sweden neutral learning spaces? If not, how are student teachers prepared to make the learning spaces more inclusive?

Topic area of submission: Cross-disciplinary areas of Education & Teacher Education

Presentation format: A discussion paper/ Work-in-Progress Reports or Proposals for Future Research

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Abstract
It is said that Sweden has in the last three decades become more multicultural or heterogeneous as pertains to ethnicity, races, languages and even religions due to increased migrations from different countries and continents. With the coming of immigrants it is said that Sweden is challenged by such a change. Schools as arenas of learning are one of the areas that are often mentioned as feeling this flux of pupils of none Swedish descent. Yet school has the onerous duty in educating all pupils regardless of their class, gender, ethnicity, race, colour and disabilities. Hence availability and accessibility of schools with the slogan of “en skola för alla” (“a school for all”) is given in a democratic country where education is seen as a democratic social right. Pupils are expected to gain relevant knowledge, experiences and approaches for long life learning as responsible citizens. The question, however, is whether all pupils experience these opportunities equally? From mass media and some research we hear the lamentation of immigrant children not performing well in schools. Politicians also echo this from time to time.

In this paper I make a critical analysis on what type of research on areas of inclusion and exclusion in schools as pertains to pupils of immigrant descent have been carried out in Sweden. What are the focus and perspectives? What do this research from critical stand points reveal? Does ‘othering’ and constructions of pupils based on ethnicity, religion and race exist? What are the consequences of such constructions? Other specific questions are: What are the aims and objectives of such studies? What are the theoretical and methodological underpinnings? What is the focus or subject of study? How are critical concepts such as immigrants, ethnicity, race, cultures, and religions used by researchers? How critical are these researches, in other words, what do they contribute with? Are researchers involved in critical research for change or are they involved in producing and reproducing pupils and students of immigrant descent as the other?

It is necessary, in my opinion, to make a critical appraisal of research in this area in order to learn from others who have researched in this area and to see if there are any research findings that can be relevant for teacher education and also to find any wanting areas for further research. As a teacher educator, I am often faced with the question of how well we prepare student teachers in meeting the needs of all pupils in a fair interplay where inclusiveness as opposed to exclusion prevails or is the norm. This concern is even more relevant in how and when to use research findings in teacher education. In this aspect my concern is also to see what type of education is given to student teachers. The attempt is also to analyse any research on teacher education as pertains to teaching in multicultural classrooms.

My paper should be read as a literature review report leading to further research in the area of teacher education.
ABSTRACT

Japanese manga cartoons are translated by Inada Shiho, written by Ono nori (Ryukoku University). They seem to be unsuccessful from the English language education in Japan. Illustrated by Inada Shiho, written by Ono nori (Ryukoku University) especially focus on the addressing forms like family member by their first name, not by using the honorific “Senpai” in English Speaking culture, they without using the honorific “Senpai” in Japanese culture, “ishibashi o n' t break, English Translation: “You’re the stone bridge before he leaps.”) In Japanese culture, without using the honorific “Senpai” is

References

1. Title of the submission:
   Internationalizing Teacher Education: FATITI, an Exchange Program for Teachers-in-Training

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Abstract and/or full paper.
Internationalizing Teacher Education:
FATITI, an Exchange Program for Teachers-in-Training

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Abstract

The Franco-American Teacher-in-Training Institute, a teacher exchange program designed to internationalize teacher preparation and professional development, assessed the impact of the program on its participants: teachers-in-training, mentors, teachers, students, schools and families in the community. It has proven effective in promoting the development of educators who are more self-assured, have greater confidence, and a wide range of pedagogical skills; understand well two complex educational systems (French and American); are more culturally sensitive; have acquired a second language and use that knowledge to teach students who are linguistically different; have the ability to teach an increasingly diverse student population; and are more capable of preparing responsible national and international citizens.
Why should we consider bringing a teacher (in training) from another country to teach in our schools?

Why should American teacher candidates or beginning teachers take time to teach in another culture?

Obviously, or so we have been told, our world continues to become more interconnected and our society more pluralistic. Merryfield (2000) claims that many teachers are not prepared for this new global era. For these reasons, we believe it is essential for teachers to develop global competencies and dispositions to meet the increasingly divergent needs and expectations of students, families and communities in preparing citizens for the 21st century. Previously considered a “lofty” goal, international or global education is becoming part of state or national standards for both K-12 learners and teacher education. However, teachers are ill-trained to impart internationalized content (Merryfield and White, 1996).

It is easy to assume that teacher exchanges could serve the purpose of internationalizing the educational setting. Just the nature of exchange brings one culture into contact with another culture, resulting in the awareness of other cultures and the potential development of intercultural awareness and understanding.

Since 2007, the Franco-American Teachers-in-Training Institute (FATITI) program at the University of Akron has documented the internationalization of teacher preparation and of teacher professional development through teaching exchanges and noted the emergence of global perspectives that results when bringing together two cultures in an academic setting. The results, often cited by educators who advocate a
more international teacher education curriculum as advantages of participating in such a program, include the improvement in self-assurance, confidence, and flexibility (Douglas & Jones-Rikkers, 2001; Quezada, 2004); pedagogical skills and a better understanding of the American and French educational systems (Moseley, Reeder, & Armstrong, 2008); cultural sensitivity (Heyl & McCarthy, 2003; Kushner, Carim, 2004; Landis, Bennet and Bennet, 2004); the ability to teach an increasingly diverse student population (Blair, 2002; Longview, 2009); the ability to prepare responsible national and international citizens (Laubscher, 1994; Longview, 2009); and the ability to acquire a second language and to teach linguistically different students (Coleman, 1998; Hopkins, 1999; Jurasek, Lamson, & O’Maley, 1996; Pellegrino, 1998; Adamowicz-Hariasz and Colville-Hall, 2008).

Global education has been defined as learning that encompasses problems and issues that span international borders and “the interconnectedness of systems – cultural, ecological, economic, political and technological” (p.165), learning that extends to appreciating culturally different neighbors, perceiving the world through their eyes, and realizing that all individuals of the world share similar needs and desires (Tye 2003,). The Longview Foundation defines global competence as “a body of knowledge about the world regions, cultures, and global issues, and the skills and dispositions to engage responsibly and effectively in a global environment” (2009, p. 7).

This paper will demonstrate how FATITI impacts U.S. and French teachers-in-training, based on their own perceptions and supervisory observations, with increased self-assurance, confidence, and pedagogical skill; improved understanding of the American educational system and the national French education system; increased
cultural sensitivity as measured through the IDI (Intercultural Development Inventory); the ability to teach an increasingly diverse student population and to prepare responsible national and international citizens; ability to acquire second language skills and to teach those students whose first language is different; and development of leadership skills.

The Institute

FATITI is an exchange of U.S. and French pre-service and beginning teachers. This opportunity to spend 3 months teaching in Northeast Ohio, or to teach in France, promotes collaboration between teachers at an international level, encourages them to use best practices for teaching, and helps them become globally-minded teachers who impact student learning in ways that insure students’ participation in the interconnected world arena. In addition to the exchange, FATITI fosters the creation of an international community (Colville-Hall and Adamowicz-Hariasz, 2010) and presents an immediate and direct internationalization of some of Northeast Ohio’s schools where French participants teach, collaborate with and greatly influence American mentor teachers, their colleagues, and their students.

Funded by the U.S. Department of State and the French Ministry of Education, FATITI is a product of collaboration of the University of Akron, the CDIUFM (Conference of Directors of the University Institutes for Teacher Education), the U.S. Embassy in Paris and the Franco-American Commission.

The aim of FATITI has been to create through a teacher exchange more internationally-minded teachers, that is, teachers who seek to learn from educators living in cultures in other parts of the world, teachers who understand how to interpret events through multiple perspectives, teachers who become agents in this global age through
partnering with teachers and classes in another country. The analysis of data collected as part of the evaluation process of this program advocates that teaching experiences in another culture enriches both the teachers in the exchange as well as the community.

The FATITI program goals are to:

- Promote acquisition of knowledge, cross-cultural experience, problem-solving skills, and flexibility,
- Advocate the necessity of global agents who work to find better solutions to universal educational challenges,
- Foster development of productive, engaged and critical citizens,
- Encourage citizen diplomacy, dispelling naïve cultural stereotypes,
- Advance professional growth and development in teaching research and service in international and cross-cultural education.

The evaluation tools to measure the progress of the participants in terms of the program goals include follow-up evaluations after each component of the program (seminar, cultural visits and teaching practicum), journal prompts, individual teaching evaluations, and debriefing sessions. Other sources of data include reports, anecdotal information, personal correspondence and administrative notes. Analysis of these documents builds a strong advocacy for internationalizing teacher education programs. The evidence collected suggests that U.S. schools benefit from teachers candidates who, by teaching abroad, develop a global perspective about the discipline they are teaching and the world in which they live. Students and educators, unable to go abroad, benefit from interaction with educators from another culture to broaden their horizons and to acquire an understanding of the world’s interconnectedness.
Self-assurance, Confidence and Flexibility in U.S Teachers in France

U.S. participants (pre-service teachers in social studies, math, English, French and Spanish) attend a three-day orientation at UA, participate in a three-week linguistic, cultural and pedagogical seminar in France, and a 9-week practicum in schools throughout France. This intensive intercultural experience requires them to closely examine their own assumptions about instruction, to question pre-existing stereotypes in order to “learn who the French really are, without the stereotypes” and to find ways of acquiring knowledge in different locations. Participants discovered that knowing other countries and cultures was as important as the teaching component and found it “interesting to live among people in a foreign country and adapt to see their perspective of the world and of world events.” Others mentioned personal thoughts felt by most:

• I feel like I have the chance to open up doors for my students and expose them to different cultures and parts of the world.

• I find that I have lots of stories that I can share and lots of resources and ideas from my teaching experience....”

• I think flexibility is essential for success in an endeavour such as this. Teachers everywhere have to be flexible, the job demands it. Each student and each day of teaching is different. Flexibility allows one to adapt to this. Teaching in a different culture only makes flexibility more important because there are so many more unexpected circumstances that can arise. That said, a teacher’s expectations of proper behaviour and effort on the part of their students should be pretty rigid, so that the students know what is expected of them everyday in class.
• I've found that my experiences have helped so much in teaching. I'm able to tell students about my personal experiences living in a different culture and give students real life up-to-date information about the lives of people in another country.

**Understanding the American and the French educational system**

Following a seminar that provides comprehensive information about the host educational system and three months internship in that system, both the French and American participants feel that they have gained a great deal of insight into the host system. They exchange techniques, borrow ideas, and develop opinions based on this experience and return with a better understanding of how the host culture educates their youth.

Americans in France express their thoughts:

• It is pretty similar to what I have seen in US schools. The teachers here seem to be in a similar transition from teacher- to student-centered lessons, although perhaps US teachers are a little farther along in this regard.

• I have learned a great deal about the French educational system and in turn, a great deal about the U.S. system. This experience reinforced my notion that U.S. education has a long way to go to bring its population up to par in social studies teaching.

• The school's classrooms are austere. There are tables with enough room for two students each. The teacher must leave his/her personal items in a locker in the teacher's room since each class is taught in a different room. One of the rooms she teaches in has been decorated with flags and other personal items. Teachers do not receive a budget for school supplies. All must come from their personal funds.
Additionally, teachers within a department have no meeting time to communicate or plan. There are meetings maybe once or twice a year.

- They [students] must stand when an adult enters the room. The students lift one finger in order to be called on.
- Students here are more independent than American students.

**Pedagogical Skills from France for U.S. participants**

Participants observe, then adapt to the learning environment in which they are assigned. As such, they acquire new perspectives on teaching and learning and find ways to adapt this new pedagogy to their knowledge base.

- I will definitely use more documents within the classroom. I will, of course, use examples about French life and culture to teach my content. I also plan to use photos I took to teach (both pictures of historical landmarks, architectural structures and cultural activities, such as strikes).
- I don’t think I’m going to waste my time with multiple choice, fill-in, and T/F tests ever. When my future students have an exam, they are going to have to write. It will take less time to prepare, more time to grade, but be much more valuable for student learning to assign written tests rather than “objective” tests. Social concepts that are important cannot be quantified in 25% guesses or anything of the sort. I’m interested in teaching kids higher-order thinking skills and this is one way I plan on implementing a French pedagogical idea into my classroom.
- I have freedom to teach as I would in the US and provide suggestions to my mentor teacher. She already has spent time abroad so I believe it has influenced
her style and personality. She does less lecturing than most French teachers I have heard of or seen.

**Cultural Sensitivity and Ability To Teach**

**An Increasingly Diverse Student Population**

The Intercultural Development Inventory (IDI), a statistically reliable and cross-culturally valid instrument to measures intercultural sensitivity, was used to assess both French and U.S. participants (Hammer, M.R., Bennett, M.J. & Wiseman, R. 2003). The IDI results reveal an average increase that is well above that reported by American students studying abroad who participated in the Georgetown Consortium Project. That project, which gathered statistics from 1156 students participating in 62 different study abroad programs, showed an average gain in the intercultural development of students participating in programs of similar length (13-18 weeks) of 2.33 points on the IDI scale. Among FATITI participants, the gain in the group mean was 4 points for the French students with a 13 point gain for the U.S. group. Qualitative data also support the development of cultural sensitivity among participants:

- I feel very comfortable and understand the French people, their way of thinking and way of life. I was dining with a friend the other day who has just moved here and all his reflections on cultural shock made me laugh. They were all true but somehow I have grown accustomed and no longer notice the things he was talking about.

- There is always room for growth and I felt coming into this program I had a high awareness of other cultures and cultural differences. By living in another country
I have been able to finally witness these differences first hand and experience them, which will only make me understand other cultures more thoroughly.

• I attended concerts with my friends, listened to new types of music, went to festivals and ate new types of foods, and I have learned more than I ever could have imagined. I have debated politics with people from Switzerland, the war in Iraq and Afghanistan with people from France, and have been welcomed by everyone I have met.

• It's also given me experience teaching students of a different culture than my own which in turn has helped me teaching students here of different cultures.

Ability of U.S. Participants To Acquire Second Language Skills And To Teach Students Whose First Language Is Non-English

The immersion experience facilitates one’s ability to acquire a second language. There are complications, of course, difficulty in meeting native speakers, however, the attempt to provide support for language development on both sides of the Atlantic has benefitted participants. Pre and post-OPI (Oral Proficiency Interview) scores marked linguistic progress for all participants with increases in scores from their 3-month immersion experience. Data collected over the 4 years is consistent in showing how the exchange experience supports second language acquisition. In addition, participants express their own thoughts on the topic:

• I take training classes at the IUFM with four German girls who live within the same apartment complex, and speak French with them all of the time. I prefer to
surround myself around them because they have impeccable French and I am forced to speak the language.

• When I go shopping, I use my French, but sometimes it's very frustrating when those who I interact with (employees of stores, cashiers) can identify that I'm a native English speaker and immediately switch to speaking in English with me.…

• It's really difficult sometimes to express myself to the fullest extent or try to interact with others if I can't put all of the words together.

• I speak in French with my host mother and another French student that lives with us every night at dinner. This has been very good for my language acquisition. I also speak French a good bit when I travel independently, and that has gone pretty well so far.

• I don't really get to speak much French because most people want to speak English with me.

**Improvement In Self-Assurance, Confidence And Flexibility in French Teachers in the U.S.**

Over the 4 year experience of FATITI, French participants noted the ways in which FATITI helped them improve their: 1) knowledge about U.S. culture and society which they will be able to take back to their classrooms in France; 2) English language abilities; and 3) content and pedagogical knowledge. Based on survey and interview data, participants generally felt the program helped them develop in all three areas, which, many noted, would make them better teachers and help them become more engaged in the world. In addition, participants also noted how the development of cultural and
linguistic knowledge increased their confidence and ability in both the culture and the classroom.

Developing new pedagogical ideas and skills, in terms of content and methods, is a major goal of the program. Between 85% and 90% of the participants agreed or strongly agreed that the experience “Provided [them] with a broader, more global perspective on professional practice” which may help address the long-term goal of developing global citizens who will work to create mutual understanding between the two countries. In addition, over 70% of the French participants agreed or strongly agreed that the experience “Provided [them] with useful information and ideas [they] will be able to apply to their future classroom.”

Common themes in the survey consisted of
• the difference in the student/teacher relationship in the United States.
• new pedagogical methods that participants wanted to take with them back to French classrooms.
• “take up the challenge of teaching to students from another culture and another language than their own
• to be able to teach in different and more difficult condition the ones I have in France.”
• development of oral skills in U.S. vs. writing skills in France

Participants noted they would return to France with a new understanding of the student/teacher relationship and would try to change the ways they related to their students. Examples that typify the responses of participants’ reflections, such as the use of cooperative learning and in-class formative assessment practices, related to the
acquisition of pedagogical knowledge. In their reflections, most participants noted that they had achieved the goal of being able to teach in different and more difficult (because of the language and culture barriers), felt more prepared to deal with the diversity they would see and face in their future teaching.

Instructional techniques to be “imported” were noted by a French science teacher, “There are two instructional techniques that I will use when I am back in my school in France:”

**A review sheet.** “The review sheet of the main points of a chapter, done with the students a few days before the test: it allow the teacher to focus on the most important facts he wants the students to learn; it gives students opportunity to ask questions on what they didn’t understand ; it makes students more responsible because with the chapter review and a few days to review it at home, they have no excuse if they don’t have a good mark.”

**Group projects.** “For some chapters, it’s no worth trying to teach the students the scientific knowledge: it’s too boring and hard for them, so they don’t learn anything. On that topics, it’s better to have the students involved in a project as studying boring historical documents.”

Another science teacher talked about his discovery of the U.S.’s approaches: "algebra-based physics" and "analyse-based physics" which are two different ways to teach physics that, even if they may exist in the French educational system, are not as clearly "established" as they are in the US schools. I have also discovered a third way to teach physics for weak students which is "conceptual physics" which is teaching physics with no mathematics.
Ability Of U.S. Participants To Acquire Second Language Skills And To Teach Students Whose First Language Is Non-English

Linguistic progress was noted by pre and post-OPI (Oral Proficiency Interview) scores in which all of the teachers-in-training showed increases in scores from their 3-month immersion experience. The three facets of the program that contributed to their increased capacity in English: working in the classroom (both at the university and in their host schools); living with a host family; and participating in cultural events and excursions. In Year Four, as in previous years, participants scored in the Intermediate to Advanced levels on the OPI, with seven participants improving three points over the course of the program, and one participant improving four points. Many participants noted being “satisfied about [their] progress in English” and over 95% of the interns agreed or strongly agreed that the experience helped improve their English language skills. Most participants noted how important the immersion experience was in helping them do this, both immersion into the school setting and immersion in with a host family. For example, over 95% of participants agreed or strongly agreed that the home stay experience “Provided [them] with an opportunity to practice conversational English,” something that most thought was extremely beneficial in helping them meet their linguistic goals.

Program Extension - Social Studies Teacher Workshop

In Year Two, the first three-day workshop on teaching and collaboration for social studies teachers was to establish and promote international collaboration between teachers of the two cultures. Four history-geography teachers from France conducted the
workshop along with their mentor teachers with the goal of sharing best practices for history and geography instruction. Workshop objectives included: (1) examine, compare and apply strategies for using primary source documents, (2) develop inquiry-based lessons, (3) foster students’ ability to become better writers and critical thinkers, (4) examine and apply strategies for teaching geography, (5) create globally enhanced lessons, and (6) examine possibilities and challenges of planning and implementing an educational exchange. Local area social studies teachers attended to witness the use of primary source documents and “six ways to think about documents from text sources to audio clip” as well as a series of lessons on spatial discontinuity as it relates to geography.

Local teachers benefitted from both theoretical and practical knowledge of teaching their subject in innovative ways. They saw it as a way for students to have meaningful work, one that enables them to make connections between the course content and their personal life and/or experiences, and helps students develop critical thinking (process) and writing (articulation) skills. Overall, all participants found the workshop to be informative, collaborative and practical.

In Year Four, a second two-day FATITI Social Studies Workshop for local area teachers and teachers-in-training presented by two returning French teachers who completed their second year in the classroom prompted a list of incredible highlights from sharing pedagogical experiences at the international level that is hard to meet under other circumstances. American teachers found the most useful things gained from the workshop to be:

- Different ideas and methods from France with I can use to make my lessons
better.

- A better understanding of education in another country.
- Giving students the tools to help them be critical thinkers by using primary documents and writing.
- Integrating primary source documents, higher order thinking questions (such as those involving synthesis), and more writing into lessons
- Case studies, primary documents in testing.
- Cultural differences. It helped me to reflect on how I could incorporate primary sources and more writing into my classroom.
- To be more international in my perspective.
- Enjoyed learning about differences between cultures. Learned how to incorporate primary sources into my lessons more effectively.
- Interchanges between teachers regarding classroom environment.
- This showed me the vast amount of documents available.
- Incorporation of primary source documents into assignments and assessments
- Different strategies I can use in my classroom-sources, testing, etc.
- Using primary source documents to intro, teach and test.
- Interesting ways to use primary documents and purposeful.
- Lesson design for using primary sources in a multi-step lesson.

Talking about the “opportunity to learn a different approach to teaching from a different national perspective,” local teachers found the presentation made by the two French history teachers very informative and well-done, cited “excellent examples of
practical teaching resources,” and “learned a great deal about how to use different primary sources in geography” as well as social studies. It was the “personal experience and expertise” of the two French history teachers, the “opportunity to speak with and learn from colleagues from France.” that was so compelling in the “discussion about different perspectives on a variety of cultural and educational issues”, about “French schools and culture and a variety of perspectives on both educational systems.” They also enjoyed, “learning the similarities/differences between the education of France and U.S.”

**Mentor Teacher trip to France**

In June of Year Four, FATITI sponsored a professional workshop for American mentor teachers that focused on educational comparisons and sharing of best practices through classroom visits in France. Through this opportunity, Akron-area teachers gained both theoretical and practical knowledge of teaching their subjects in an innovative way. Five Social Studies mentors and four Physical Education teachers were selected to participate in the workshop through an application process. Day trips to various schools and classes in Orleans, Nantes, Onzain and Bagneux (just outside Paris) enable us to visit establishments where former participants teach or that have hosted U.S. participants. The remainder of the trip, the mentors stayed in Paris where they visited the city and had a reunion dinner with over forty former French participants from Years 1-4. Through this professional development workshop, the U.S. teachers had an opportunity to gain new ideas for teaching/mentoring as well as to strengthen the international networks established through the program. The overall benefit from this extension was to learn what FATITI’s long-term impact is on the French participants. In addition, it served as a springboard to bring U.S. and French teachers together in France in an international
arena, to share in a discussion of best practices and other important pedagogical issues and concerns.

**Conclusion**

Over the past four years, French and American participants in the Franco-American Teachers-in-Training Institute demonstrated growth in their linguistic and cultural knowledge; their ability to function professionally in diverse educational settings; improvement in self-assurance, confidence, and pedagogical skill; improvement in understanding of the American educational system and the national French education system; increased cultural sensitivity; ability to prepare responsible national and international citizens; and the ability to acquire second language skills and to teach those students whose first language is different.

Each year, each group was given extensive opportunities to learn about and to become an active participant in their “new culture,” and were provided with the supports that helped them become comfortable and successful. During their internship they learned first hand about family and community in their new setting, the philosophy of education that influences the schools, different pedagogy, alternative teaching methods, and a variety of styles for interacting with students and colleagues. Through the experiences provided by FATITI, they also learned that they have the ability to function as a professional and that sharing professional knowledge and beliefs is an important part of a cross-cultural community of learners.

Data showed that teachers-in-training from both cultures have developed greater effectiveness in instruction, management, and assessment through examination of a culturally different pedagogy and through their experience in a culturally different
classroom. We also have evidence demonstrating growth in “worldmindedness’ among the U.S. participants, and while the French participants have not yet taken the IDI survey, we can determine from their written comments that they too have developed an increased awareness and sense of the importance of global connectedness and sharing (Merryfield, Tin Lao Yo, and Po, 2008). Therefore, we believe all participants are better equipped to be global change agents, agents who will continue to network in order to find solutions to improve learning outcomes for their students.

Additional benefits were derived by the U.S. mentor teachers and area teachers, as well as by the school community in general. Surveys completed by the mentors and university supervisors reflected an extremely high degree of satisfaction with the teaching competence of the program participants, the cultural interchange, and the opportunities they had for professional growth during this experience. Local teachers who participated in the social studies workshop and mentor teachers who went to France to visit schools praised the opportunity to observe and share teaching strategies and to engage in conversations with teachers from a different culture. Mentors, teachers and supervisors also commented on the positive and broadening influence this exchange had on the school community. The exchanges at all levels were judged to be a win-win experience for all. Clearly, the FATITI program organized by the University of Akron offers a far-reaching and multi-layered international experience that fosters intercultural awareness, global knowledge, interpersonal skills and attitudes necessary in the 21st century. We hope it will serve as a model for internationalizing teacher training and professional development.
References


Blair, J. (2002). Colleges sending teacher-candidates to see the world. *Education Week*, 22 (15, 8).


PERCEPTIONS OF SCHOOL ADMINISTRATORS AND SOCIAL WORKERS IN RURAL, SOUTHEASTERN NORTH CAROLINA

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As the needs of children within school settings are constantly changing coupled with higher testing requirements at all levels of government, many parents, teachers, and school personnel are asking “Who is the school social worker”? Something that according to Allen-Meares and colleagues (2000) as cited by (Agrestra, J., 2004), society has become engrossed with. Research has shown that school social workers are not highly valued by school administrators because school administrators are not clear on the role of school social workers (Tower, 2002) as cited (Agrestra, J., 2004). Today, the challenges of school social workers are complex and challenging. School social workers are viewed as auxiliary personnel in a setting whose primary function is not of formal classroom instruction, but providing social services (Dane & Simon, 1991). School principals have an intrical role in schools. School principals determine the power to either reject or support services that the school social workers offer to the students in the school (Hsiao-Wen Wagng, 2003). With the passing of the Individuals with Disabilities Act of 1975 (P.L. 94-142), school social workers responsibilities would now include completing social histories, the use of both group and individual therapy to counsel children and their families, seek resources within the community, facilitate home adjustment, and work with the home and school environment (Humes & Hohenshil, 1987) as cited by (Agresta, J., 2004).

It is the aim of this research study to investigate the perceptions and attitudes of intern school administrators toward school social workers and pre-service school social workers perceptions and attitudes toward administrators in southeastern rural North Carolina. The intent of this study is the hope of increasing communication between professionals to better serve the needs of students in an ever-changing society. It is imperative to have a cohesive and structurally sound school staff because the school and the family are central places for the development of children (Constable, R., 2008). To help students achieve greater success in schools, school social work has become a profession that works with children who are marginalized either economically, socially, personally, or socially to make the student’s education process effective (Constable, R., 2008).

The research will result in several strategies for building a stronger sense of community between school social workers and school administrators during pre-service courses. The strategies will then enable the student’s education process to be more effective in southeastern rural North Carolina.
FOSTERING CREATIVITY IN TIMES OF CHANGE:

HOW DO TRANSFORMATIONAL LEADERS IN THE ENTERTAINMENT INDUSTRY FOSTER CREATIVITY IN THEIR FOLLOWERS, AND WHAT CAN LEADERS IN OTHER INDUSTRIES LEARN FROM THEM

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ABSTRACT

In today’s rapidly changing business environment, organizations are under tremendous pressure to become and remain competitive. In the era of knowledge workers, for many organizations, the ability to originate novel ideas and products is their most important competitive advantage. Ultimately, leaders are responsible for organizational survival by effectively cultivating this creative potential of their human capital in spite of all the changes. Transformational leaders are best at fostering the creative potential of their followers. For organizations in the entertainment industry where innovation is the end product, fostering an environment conducive to creativity and innovation can mean the difference between success and failure of the company as a whole.

The purpose of this research is to explore the way in which transformational leaders in the entertainment industry foster creativity in their followers. In addition, the ability of employees to be creative within a transformational environment will be studied. The purpose of the study will be addressed by exploring the questions, “What techniques do transformational leaders in the entertainment industry use to foster creativity within their followers?” and “how is creativity and innovation manifested by employees in the entertainment industry who work for transformational leaders?” In addition, we will discover “how can these leadership techniques be developed in leaders of other industries who need to foster creativity in their followers?”

In this study, we will explore quantitative survey research data and statistical analysis, searching for underlying leadership techniques in addition to measuring employee creativity which when combined facilitate organizational innovation and individual creativity. We will also explore qualitative research through interviewing twelve prominent transformational leaders in the entertainment industry to investigate their leadership characteristics and their secrets to success as a leader in spite of the tremendous competition and pressures their industry faces today.
Sought in this study will be common leadership themes and patterns of leaders in the entertainment industry that could provide valuable lessons to leaders of other organizations in the future facing the same challenges and competitions.

CHAPTER 1. INTRODUCTION

Introduction to the Issue

According to Ensher, Murphy, & Sullivan (2002), in the next decade, 65% of all workers will be contingent employees, freelancers, outsourced workers, or contract specialists. Every day, more than 2.5 million temporary employees go to work for one of the 90% of U.S. companies that use temporary staffing services, and this number will only increase as organizations attempt to cut more costs to survive the internal and external business pressures (Berchem, 2005). This forecast makes understanding leadership effectiveness in organizations where the majority of employees are contingent, extremely crucial. The entertainment industry is the second largest industry in the world, outdone only by aeronautics industry, and is the number one producer of U.S. exports (Ensher et al., 2002). The entertainment industry is far from the more traditional organizational structures of many organizations who are primarily comprised of full time employees. Entertainment industry mainly relies on portable knowledge and skills of freelancers, part-timers, project workers and other types of contingent workers for its operation.

In the era of knowledge workers, the ability to originate novel ideas and products are crucial for determining an organization’s future survival. Leaders are responsible for effectively cultivating the creative potential of their human capital in spite of all internal and external changes and competitions. Transformational leaders can provide the necessary direction, innovation, inspiration to lead their followers to implement the necessary changes (Bass, 1985). For organizations in the entertainment industry where innovation is the end product, fostering an
environment conducive to creativity can be the most influential factor for organizational success, thus making the entertainment industry a good general reference for studying leadership challenges and effective leadership practices of the future.

Significance of the Study

The significance of this study stems from four factors affecting the organizations of today and the future, and consequently leadership effectiveness in those organizations. Those factors include the increasing presence of contingent workers in the future, the position of the entertainment industry in the world, its specific organizational structure, and lastly, the increasing need of the organizations of the future on transformational leadership that fosters innovation. Sought in this study were valuable lessons learned from the entertainment industry’s transformational leaders that can be applied to other organizations facing the same challenges today and in the future.

Purpose and Research Questions

This study will explore how the transformational leaders in the entertainment industry foster creativity in their followers. In addition, the characteristics and ability of employees to be innovative within a transformational environment will be studied. The purpose of the study will be addressed by the following questions:

1) What techniques do transformational leaders in the entertainment industry use to foster creativity within their followers?

2) How is creativity and innovation manifested by employees in the entertainment industry who work for transformational leaders?
3) How can these leadership techniques be developed in leaders of other industries who need to foster creativity in their followers?

CHAPTER 2. REVIEW OF LITERATURE

Leadership

Through the years, practitioners and researchers have tried to define and conceptualize leadership. Looking at the available literature on leadership the common element seems to be that leadership is an influence process (Northouse, 2010). Integrity and trustworthiness also seem to be a common thread amongst the definition of effective leaders of the 21st century.

To influence others, both one’s followers and those outside that circle, will indirectly build leadership character, and without maintaining integrity and trustworthiness, the capability to influence will soon disappear (Maxwell, 1998). To be a leader, one must have followers who recognize the value of the leader’s contribution and choose to follow him/her (Kragness, 1993). To be successful in an organization, leaders need to inspire outstanding performance from their followers towards the mission and goals of the organization. To be successful, leaders must have the effective leadership style for the environment in which they operate.

The effective model of leadership in the 21st century has been through a major shift. In the latter years of previous century, organizations needed strong management to ensure the stability, efficiency, and control of the organization. Today, leaders are needed who can bring about change and innovation in response to the constant turbulences in the environment such as the global competition, technology, and limited resources (Osborn, Hunt, & Jauch, 2002).

Leadership is a complex phenomenon, related to variables such as changes in societal values, implementation of organizational change, the impact of stress on employees, and the overall development of leadership understanding by itself (Higgs, 2003). Therefore, the
FOSTERING CREATIVITY IN TIMES OF CHANGE

qualifications for effective leadership have also shifted toward more of an ethical and transformational style of leadership, with much more emphasis placed on the significance of developing leaders within an organization. Hence, it is imperative that we study what transformational leadership entails and how it relates to leaders in the entertainment industry.

Transformational Leadership

Researchers and practitioners have developed a great number of leadership theories and approaches over the years. Leadership approaches range from autocratic leadership, to democratic leadership, to servant leadership to name a few. Other leadership theories developed by researchers and practitioners include the great man theory, path-goal theory, and leader-member exchange theory (Northouse, 2010). This paper focuses on a range of leadership styles from transformational leadership to transactional leadership. In addition, we will discuss how prevalent we found the transformational and transactional leadership styles in the sample of leaders we interviewed from the entertainment industry and its implications on their followers’ creativity and innovation.

The transformational leadership model covers a wide range of leadership styles. At one end, there is Laissez-faire leadership, which is a style of leadership that assumes individuals are motivated by internal forces and should be left alone to complete their work. The next point in the continuum is the transactional style of leadership where members agree to obey their leader totally when they accept a job. The leader is very clear about what is required and expected from the team members. In exchange for members’ work and compliance, members get paid, and depending on their performance, there is a promise of reward or a threat of punishment. The focus on transactional leadership is on short-term tasks. Although this style of leadership is needed in organizations to get the job done, it is not a recommended approach long term as it
does not motivate or inspire members for a higher goal the way transformational leadership does (Avolio & Bass, 2002).

Transformational leadership is the end point of this leadership continuum where leaders inspire and motivate followers to work toward a mutually rewarding goal (McLean & Weitzel, 1991). According to Bass (1994), transformational leadership is defined in terms of how followers trust, admire, and believe in the leader and the type of effect the leader has on the followers. Bass identified three ways in which leaders transform followers: increasing their awareness of task importance and value, getting them to focus first on team or organizational goals, rather than their own interests, and activating their higher-order needs.

According to Bass and Riggio (2006):

Transformational leaders are those who stimulate and inspire followers to both achieve extraordinary outcomes and, in the process, develop their own leadership capacity. Transformational leaders help followers grow and develop into leaders by responding to individual followers’ needs by empowering them and by aligning the objectives and goals of the individual followers, the leader, the group, and the larger organization. Evidence has accumulated to demonstrate that transformational leadership can move followers to exceed expected performance, as well as lead to high levels of follower satisfaction and commitment to the group and organization. (p.3)

Bass (1998) wrote that authentic transformational leadership is based on the following four components:

**Idealized Influence (also known as Charismatic Leadership)** – Transformational leaders are role models. They are well respected, admired and trusted. Followers describe them in terms that entail extraordinary capabilities, persistence and determination. These leaders are
willing to take risk and are consistently relied upon to do the right thing and display high moral standards.

**Inspirational Motivation** – Transformational leaders embody the term “team spirit” in the way they show their enthusiasm and optimism. They provide both meaning and challenge to the work they do. They create an atmosphere of commitment to goals and communicate a shared vision.

**Intellectual Stimulation** – Transformational leaders encourage creativity and innovation. They foster an atmosphere in which followers feel drawn to think outside the box. Public criticism is not part of their leadership style.

**Individualized Consideration** – Transformational leaders act as coaches. They respect their followers’ individual desires and needs. These leaders are considered to be good listeners, and have very personalized interaction with their followers. Followers of these leaders move continually toward developing their higher potentials.

In addition, transformational style of leadership is based on three moral aspects: the moral character of the leader; the ethical values embedded in the leader’s vision; and the morality of social ethical choices and actions that leaders and followers engage in together.

According to Burns (1978), the authentic transformational leader is undoubtedly linked with higher order values. Burns emphasized that true transformational leaders are those who are sensitive to the needs and motives of their followers.

**The Entertainment Industry**

According to Ensher, Murphy, & Sullivan (2002), in the next decade, 65% of all workers will be contingent employees, freelancers, outsourced workers, or contract specialists. In the mid-1980s, there were approximately 100 temporary employment agencies in the United State,
while today, there are more than 15,000 hiring in excess of 11 million individuals each year (Berchem, 2005). Every day, more than 2.5 million temporary employees go to work for one of the 90% of U.S. companies that use temporary staffing services, and this number will only increase as organizations attempt to cut more costs to survive the internal and external pressures (Berchem, 2005). This forecast makes understanding leadership effectiveness in organizations where the majority of employees are contingent, extremely crucial.

The entertainment industry is the second largest industry in the world, outdone only by the aeronautics industry. In addition, the entertainment industry is the number one producer of U.S. exports (Ensher et al., 2002). The entertainment industry’s structure is far from the traditional hierarchical organizational structures of many traditional companies which rely mainly on full time employees. The entertainment industry mainly depends on portable knowledge and skills of freelancers, part-timers, project workers and other types of contingent workers.

The ability to originate novel ideas and products are crucial for determining an organization’s survival. Leaders, ultimately, are responsible for cultivating this creative potential among their followers. In the entertainment industry, where innovation has to be a certainty, creating an environment conducive to creating original ideas can determine the organization’s future, making the entertainment industry a reference for studying effective leadership practices of the future.

Creativity and Innovation

Although creativity and innovation has been used somewhat interchangeably for the purposes of this study, there seems to a difference between the two. Creativity is defined as “the production of novel and useful ideas” while innovation is defined as “the implementation of creative ideas within an organization” (Ramus & Steger, 2000, p.606). It is imperative that
leaders in organizations learn how to make the most out of each employee’s creative potential in order to bring innovation to the organization (Tierney, Farmer, & Graen, 1999).

Transformational leaders’ positive and trusting relationship with their followers can create a prime environment that fosters creativity, essential to any organization in the 21st century. Leadership influences are substantial in creating a positive environment, primed for success in a creative field such as the entertainment industry. This influence is shown clearly in the quote from Hughes et al. (1999):

Perhaps the most important point leaders should remember is that their primary role is not so much to be creative themselves as to build an environment where others can be creative. This is not to say that leaders should be uncreative, but rather that most innovations have their roots in ideas developed by people closest to a problem or opportunity (i.e., the workers). (p. 251)

It has been proven through research that transformational leaders are vital to fostering creativity and innovation in their followers (Howell & Avolio, 1993). Therefore, due to the importance of innovation to organizational survival, by studying the transformational leaders in the entertainment industry, we can begin to see how leaders in any industry can enhance their followers’ creative potential.
CHAPTER 2. METHODOLOGY

Participants

Protection of Human Subjects

Twelve participants will be selected based on their extensive experience (over 8 years) as a leader in the entertainment industry. An interview protocol consisting of 7 open-ended questions will be used. All participants will sign a consent form to allow their names, organizations, and their interview content to be used as part of this study. The informed consent will ensure that participation is voluntary, and that the participant has the right to withdraw at any part of the interview, that there are no known risks to the participant. It will also state that confidentiality will be maintained, and the results of the study are available for the participant’s review at the completion of the study.

It is the policy of Pepperdine University that all research involving human participants be conducted in accordance with accepted ethical, federal, and professional standards for research and that all research be approved by one of the University’s Institutional Review Boards (IRB). This study meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohrsite/guidelines/45cfr46.html) that govern the protection of human subjects. The exemption at 45 CFR 46.101 (b)(2) is for research involving survey or interview procedures or observation of public behavior. Any disclosure of human subjects’ responses outside the research could place the subjects at risk of criminal or civil liability or be damaging to the subject’s financial standing, employability, or reputation (Pepperdine IRB, 2007).

Leaders who agree to participate in the interview will be given the informed consent and will be asked if the interview can be recorded and if the content can be used for the purpose of
this research. In the consent form, participants will also be asked if their identities and names of their organizations can be revealed in the study. Risk to participants in the study is minimized since if the participants do not consent to having their names and organizations used, their identities and the name of their organizations will be replaced with a generic title. In addition, the identity of participants will only be known to the researcher and this information will be destroyed at the completion of the study.

Interviews will be taped and later converted to MP3 files and saved on Compact Disks (CDs). Content of the interviews will be transcribed. Transcriptions, coding sheets and CDs will be kept in a locked cabinet at the researcher’s residence for five years. All other records will be destroyed after the completion of the study.

**Research Methodology**

The research methodology is an exploratory pragmatic approach with an emphasis on qualitative data through the interviews, which will be triangulated with descriptive statistics and quantitative data from the Multifactor Leadership Questionnaire (MLQ) and Kirton Adaptation-Innovator (KAI) Inventory. By utilizing the MLQ, we will determine the transformational leader’s constructs, and by allowing the leader’s followers to be assessed using the KAI framework, we will be able to determine their creative style, and then form an association with the leader’s leadership characteristics gained through the responses to the interview questionnaire.

**Interview Questionnaire**

The 7 interview questions are open-ended allowing the participants to freely express their thoughts while responding to the questions. The interview is a highly subjective instrument of
selection. Therefore, it has the lowest reliability and validity as compared to other instruments. The validity of interviews if high because the same researcher is interviewing the participants. The reliability of interview is high because we will provide the participants guidelines as to the purpose of our interview, the consent form, and the research questions. The responses to the interview questions will be recorded (if permitted), and will then be transcribed, themed and coded. The themes and data will be synthesized and studied within the framework of the research questions.

**Limitations**

There are two limitations that are recognized in this study. The first limitation is that the researcher as the instrument brings some bias into the research, although measures will be taken to limit and reduce the bias as much as possible by having others review the same data. The second limitation has to do with the location of the research being only the United States with a nonparametric sample. Therefore, the findings of this research cannot be generalized to apply to a larger population or internationally.

**Instrument**

**Characteristics of Leaders Interview Questions**

The following interview protocol will be used for all twelve participants:

1. How would you describe your leadership style?
2. How do you foster creativity and innovation within your employees and your teams?
3. Do you adjust your leadership style based on different employee’s creative styles? And if yes, how?
4. What abilities do you value in your employees?
5. What challenges do you face in your day-to-day dealings with your employees?

6. Describe to us your decision-making process. For example, when your staff brings to your attention a problem, how do you go about selecting a solution?

7. What is your motivation to lead? Why did you want to assume a leadership position?

**Multifactor Leadership Questionnaire (MLQ)**

The most commonly used gauge of transformational and transactional leadership is the Multifactor Leadership Questionnaire (MLQ), which has been developed by Bass and Avolio (1990). It provides a distinction between how the leaders see themselves as opposed to how others see them as a leader. MLQ measures transformational, transactional, and laissez-faire leadership styles along with the variables of satisfaction with the leader, leader's perceived effectiveness, and willingness to put forth additional effort. The MLQ instrument will also be used to explore the first research question of how the individual transformational leader’s characteristics were related to fostering creativity in their followers.

The MLQ 5X form was developed in response to construct validity criticisms of the MLQ 5R survey (Bass & Avolio, 2000). Utilizing 14 samples with 3,786 respondents, the MLQ Form 5X was tested for replication of the confirmed six-factor model of relationships using fit indices generated by LISREL, confirmatory factor analysis, and chi-square difference test to support construct validity and reliability (Bass & Avolio, 2000). In addition, “the latest version of the MLQ, Form 5X, has been used in nearly 200 research programs, doctoral dissertations and masters theses around the globe over the last four years” (Bass & Avolio, 2000, p. 2).

The data will be collected through a self-administered survey instrument distributed to both the leader and to the followers. The MLQ - Form 5X measures five transformational
FOSTERING CREATIVITY IN TIMES OF CHANGE

factors, three transactional factors and one non leadership factor. Permission to use the MLQ Form 5X will be obtained from the authors.

Kirton Adaptation-Innovator (KAI) Inventory

To measure the creative performance of the followers, we will utilize the Kirton Adaptation-Innovator (KAI) inventory. As verified by Riley (1993), KAI remains to be a reliable instrument for measuring creative performance. Kirton (1978) offers a measure of creativity in the continuum of either adapters or innovators. According to Kirton (1978) both innovators and adaptors are creative, but in dissimilar ways. Adaptors are creative within a smaller range. Hence, an adapter would seek improvements to the current organizational practices, not necessarily attempting to change them altogether. On the other hand, innovators allow creativity to flow within them more freely, not bound by existing procedures or limitations. According to Kirton (1978), an ideal team needs to have employees of both mindsets, meaning employees who desire substantial change (innovators), and employees wishing to improve existing organizational practices minimally (adapters). To score KAI, individuals first respond to statements by indicating their agreement level on a scale of 1-5 which results in scores in a range from 32-160.
Conclusion

This study will explore how the transformational leaders in the entertainment industry foster creativity in their followers. In addition, the characteristics and ability of employees to be innovative within a transformational environment will be explored. Sought in this study will be common leadership characteristics of leaders in the entertainment industry that could provide valuable lessons to leaders of other organizations in the future facing the same challenges and competitions.

We will determine the transformational leader’s constructs using the MLQ, and using the KAI framework, we will be able to determine the followers’ creative styles, and form an association with the leader’s leadership characteristics gained through the responses to the interview questionnaire. A pilot study of two selected leaders will be conducted to review potential shortcomings in the design of both the interview and the instructions given for completing the survey instruments.
REFERENCES


Ensher, E. A., Murphy, S. E., & Sullivan, S. E. (2002). Reel women: Lessons from female TV executives on managing work and real life. Academy of Management Executive, 16(2), 106-120.


http://www.leadershipchallenge.com/WileyCDA/


LITERATURE REVIEW PAPER:

HR LEADERSHIP AND TRANSFORMATION
WHY A HUMAN RESOURCE TRANSFORMATION IS NEEDED, HOW TO LEAD THE TRANSFORMATION, AND WHAT LEADERSHIP SKILLS AND COMPETENCIES ARE NEEDED FOR SUCCESS

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Abstract

In today’s rapidly changing business environment, organizations are under tremendous pressure to become and remain competitive. In the era of knowledge workers, for many organizations, human capital is by far their most important competitive advantage. Human resources (HR) has the largest impact on directing a strategic organizational change which would focus on hiring, retaining and developing an organization’s human capital. In order to transform human resources into executive management’s true strategic partner, HR professionals need to develop the necessary leadership competencies to align human resource strategy and organizational mission and purpose. Up until now, human resources has not been very effective at delivering on this promise of strategic human capital development. To position the HR function as the leader of the organizational success forces many organizations to require a major HR transformation. Without it, many companies would not be able to survive. This paper will discuss how to lead an HR transformation, and what leadership skills and competencies do HR professionals need to be effective in implementing this transformation within their organizations.
HR LEADERSHIP AND TRANSFORMATION

Introduction

The common question in the business community is how human resource leaders can truly become part of the organizational leadership (Lawler & Mohrman 2003). In many organizations, the human resources profession is viewed as a transactional and administrative function with no strategic impact on leadership in the organization. As a result, both the business and its employees suffer (Kent, 2002).

Much debate among the field of human resources has been focused on how human resource leaders can become more central to the inner circles of organizational leadership (Lawler & Mohrman, 2003). As Ulrich and Brockbank (2005) point out, “HR professionals are uniquely well placed to help current leadership produce the next generation of leaders by establishing leadership brand, assessing the gaps in the present leadership against this brand and investing in future leaders.” Developing HR leaders through emphasis on leadership competencies is critical to achieving a strategic HR function (Walker & Vosburgh 2003).

According to Ulrich and Brockbank (2005), “Effective HR leaders align their departments with the organizations they serve and match their resources with business requirements. At the top, HR needs to help make the whole corporation greater than the sum of its parts and to implement practices that support corporate strategies, build shareholder value and shape the corporate image. At the business unit level, HR needs to focus on strategic objectives, identifying and serving target customers, creating wealth in the marketplace and delivering an employee value proposition.”

This paper will discuss what leadership skills are necessary to transform the human resources function into the viable and value-added organizational entity and a strategic partner in the 21st century. We will discuss why a human resource transformation is needed, define what leadership skills and competencies are imperative in achieving this transformation, and what
steps must be taken by HR professionals to transform their function into executive management’s strategic partner.

**Why a Human Resource Transformation?**

In the past 50 years, the field of Human Resources (HR) has been through several major transformations. From being known as industrial relations to personnel to human resource management, the function has evolved and adapted itself in order to assist organizations in the management of people; and it’s time for another major transformation (Rothwell, Prescott, Taylor, 2008). Human resource departments in all organizations must shift their focus from merely a transactional and tactical function to a more transformational function in order to truly become the strategic partners of their organizations.

Several factors have contributed to the urgency of this transformation. The speed of technological changes, the rapid growth of the knowledge economy and the knowledge worker, increasing globalization and fierce competition and continuing cost containment in a down economy, have forced organizations to re-evaluate how they do business (Rothwell, 1998). The traditional administrative and transactional roles of human resources have become inadequate to address the human resource requirements of the 21st-century organizations. Executive management now requires that human resource professionals to develop the leadership capabilities to align human resources strategies with the organizational strategy and deliver improved organizational capabilities (Brockbank & Ulrich, 2003). Despite this increased strategic HR emphasis, Human resources in many organizations fall short of the expectations as a full strategic business partner.

Why is HR unsuited to fulfill its important strategic role? Keith Hammonds (2005, p.1) writes “Let’s face it: After close to 20 years of hopeful rhetoric about becoming „strategic partners” with a „seat at the table” where the business decisions that matter are made, most
human-resources professionals aren't nearly there. They have no seat, and the table is locked inside a conference room to which they have no key. HR people are, for most practical purposes, neither strategic nor leaders.” In his article, Hammonds continues by stating why HR must be strategically positioned to the business: “In a knowledge economy, companies that have the best talent win. We all know that. Human resources execs should be making the most of our, well, human resources -- finding the best hires, nurturing the stars, fostering a productive work environment -- just as IT runs the computers and finance minds the capital. HR should be joined to business strategy at the hip.”

Hammonds goes on by stating why HR fails to be strategically aligned with the business: “Instead, most HR organizations have ghettoized themselves literally to the brink of obsolescence. They are competent at the administrivia of pay, benefits, and retirement, but companies increasingly are farming those functions out to contractors who can handle such routine tasks at lower expense. What's left is the more important strategic role of raising the reputational and intellectual capital of the company -- but HR is, it turns out, uniquely unsuited for that."  

Unfortunately, this sentiment regarding HR is shared among more CEOs, managers and employees that we care to admit. So what should HR be doing to transform its role and image? And what competencies does an HR professional must possess in order to be a full participant in the strategic leadership of an organization? What leadership skills are needed to successfully transform HR into a strategic and value-added function within an organization? To answer these questions, we must first define what leadership is and what skills it entails.
Leadership

Through the years, practitioners and researchers have tried to define and conceptualize leadership. Looking at the available literature on leadership the common element seems to be that leadership is an influence process (Northhouse, 2010). Integrity and trustworthiness also seem to be a common thread amongst the definition of effective leaders of the 21st century. To influence others, both one’s followers and those outside that circle, will indirectly build leadership character, and without maintaining integrity and trustworthiness, the capability to influence will soon disappear (Maxwell, 1998).

To be a leader, one must have followers who recognize the value of leader’s contribution and choose to follow him/her (Kragness, 1993). To be successful as an organization, leaders need to inspire outstanding performance from their followers towards the mission and goals of the organization. Historically, human resource professionals have been struggling to be considered the true strategic partners of executive management. To be successful, HR professionals need to have the effective leadership style for the environment in which they operate. A transactional or transformational leadership style would deeply affect the success of HR professionals in leading the organization in the 21st century.

Proactive, capable leadership is required to institute a strategic HR function in any organization. In addition, HR professionals at all levels must fully grasp the business climate to best align their roles and priorities with the organizational objectives. Developing human resource leaders through emphasis on leadership competencies is critical to achieving a strategic HR function (Walker & Vosburgh 2003). Through vision, leadership development, and follow through, the HR function will gain the credibility needed for organizational success and strategic alignment.
HR LEADERSHIP AND TRANSFORMATION

Transactional and Transformational Leadership and HR

What do HR professionals need to do to be a true strategic partner in their organizations? They need to increase their business knowledge, including an understanding of how every aspect of human resources affects other functions strategically, in addition to understanding what leadership style works best for them in the field (Wells, 2003). This paper will discuss what leadership skills are necessary to transform the human resources function into the viable and value-added organizational entity and a strategic partner in the 21st century. We will discuss the range from Transactional to Transformational leadership and how that could apply to human resource professionals.

Researchers and practitioners have developed a great number of leadership theories and approaches over the years. Leadership approaches range from autocratic leadership, to democratic leadership, to servant leadership to name a few. Other leadership theories developed by researchers and practitioners include the great man theory, path-goal theory, and leader-member exchange theory (Northhouse, 2010). This paper focuses on a range of leadership styles from transactional leadership to transformational leadership. In addition, we will discuss how human resource professionals can utilize these leadership styles to transform HR into a true strategic partner in their organizations.

Transactional and transformational leadership models are two models of leadership that cover a wide range of leadership styles. At one end, we have Laissez-faire leadership, which is a style of leadership that assumes individuals are motivated by internal forces and should be left alone to complete their work. The next point in the continuum is the transactional style of leadership members agree to obey their leader totally when they accept a job. The leader is very clear about what is required and expected from the team members. In exchange for members’ work and compliance, members get paid and depending on their performance, there is a promise
of reward or a threat of punishment. The focus on transactional leadership is on short term tasks. Although this style of leadership is needed in organizations to get the job done, it is not a recommended approach long term as it does not motivate or inspire members for a higher goal the way transformational leadership does (Avolio & Bass, 2002).

Transformational leadership is the end point of this leadership continuum where leaders inspire and motivate followers to work toward a mutually rewarding goal (McLean & Weitzel, 1991). According to Bass (1994), transformational leadership is defined in terms of how followers trust, admire, and believe in the leader and the type of effect the leader has on the followers. Bass identified three ways in which leaders transform followers: increasing their awareness of task importance and value, getting them to focus first on team or organizational goals, rather than their own interests, and activating their higher-order needs.

Bass (1998) wrote that authentic transformational leadership is based on four components, idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. In addition, it is based on three moral aspects, the moral character of the leader; the ethical values embedded in the leader”s vision; articulation; and program; and the morality of the processes of social ethical choice and action that leaders and followers engage in and collectively pursue.

According to Burns (1978), the authentic transformational leader is undoubtedly linked with higher order values. Burns emphasized that true transformational leaders are those who are sensitive to the needs and motives of their followers.

Research proves that transformational leadership, when compared to transactional leadership, is more strongly correlated with lower turnover rates, higher productivity, and higher employee satisfaction (Hater & Bass, 1988). Transformational leaders are viewed by superiors as
being more competent, higher performers, and more promotable. So the same qualities in a transformational HR leader will produce these positive organizational results.

Studies have also been conducted linking HRM, transformational leadership, and organizational outcomes. According to Weichun, Chew, and Spangler (2005) “both leadership and HRM are valuable resources for organizational outcomes and competitive advantage. As predicted, human–capital-enhancing HRM fully mediates the relationship between transformational leadership and absenteeism and partially mediates the relationship between transformational leadership and perceived organizational outcomes.” This is further evidence that the combination of transformational leadership and strategic human resources have positive effects on individual and organizational performance.

In the report titled, “What Makes a Good HR Leader? Leading Now, Leading the Future: What Senior HR Leaders Need to Know”, Human Resource Management (SHRM) identifies eight leadership skills essential for HR business leaders of the 21st century. Looking at these eight leadership skills, one can see the correlation with the characteristics of transformational leaders, leading us to believe that transformational leadership in HR may be just what is needed to keep HR a value-added function in an organization. According to SHRM, these eight leadership skills include:

1. Knowledge of business, HR, and organizational Operations
2. Strategic thinking and critical/analytical thinking
3. Leading change
4. Effective communication
5. Credibility
6. Results orientation/drive for performance
The study also found ethical behavior to be a pivotal leadership quality for human resources professionals. HR leaders can demonstrate ethical behavior through their actions, judgment in decision-making, and leadership in their organizations. “Successful senior HR leaders consistently show executives in the C-suite that they understand the broad operations and processes driving business, “advised SHRM president and CEO Laurence G. O’Neil. “Equally important is the ability to explain the role of human capital issues and solutions in the context of broader business operations linking finance, operations, and marketing.” (HR Focus , p8)

So where do we start? How do we know what to transform HR to? What competencies are needed for the HR professional to be transformed into executive management’s true strategic partner? And how should the transformation take place? What should HR be prepared to do exactly? To answer this question, we must first define exactly what an HR transformation means.

**HR Leadership and Transformation**

HR Transformation is “a radical effort to change, rethink, reinvent and reposition HR”s role in the organization” (Rothwell, Prescott, Taylor, 2008). Ulrich’s definition of HR transformation is more comprehensive, it states, “A true HR transformation is an integrated, aligned, innovative, and businessfocused approach to redefining how HR work is done within an organization so that it helps the organization deliver on promises made to customers, investors, and other stakeholders.”

Each organization must uncover the necessary changes that would bring about the desired results. According to Rothwell, we must first pay close attention to how the world of business is changing and then design strategies for HR transformation to deal successfully with these
overarching changes. Although HR Transformation can be different for each organization, the basic concept remains the same. It is a radical change and repositioning of the function of human resources.

HR professionals must also possess the leadership skills and HR competencies required to succeed as a strategic business partner. Eichinger and Ulrich (1996) summarized their findings from interviews with executives as follows: "Individual members of the HR team are not strong enough or credible enough personally, to help HR succeed, much less the business."

Dave Ulrich, one of the pioneers in leading HR practitioners to thinking strategically, asserts, “HR professionals often focus entirely in the function of HR rather than externally on what customers and investors need HR to deliver. If HR professionals are to truly serve as business partners, then their goals must be the goals of the business. Transforming HR professionals into business partners isn't an end in and of itself; it's the means to a strategic, business-oriented end." Ulrich proposes a four phase model for HR Transformation as follows:

**Phase 1: Business Context: Build the business case.** (Why do transformation?) HR transformation begins with a clear rationale for why transformation matters. **Phase 2: Outcomes: Define the outcomes.** (What are the outcomes of transformation?) This phase clarifies the expected outcomes from the transformation. This is where both transactional and transformational leadership skills can be utilized. What should happen because we invest in HR transformation? The outcomes of HR transformation as the capabilities of a firm or the intangibles that an investor values.

**Phase 3: HR Redesign: Redesign HR for a Transformation.** (How do we do HR transformation?) HR transformation requires change in HR strategy around departments, practices, and people. **Phase 4: HR Accountability: Engage line managers and others.** (Who should be part of the HR transformation?) HR transformation requires that many people
participate in defining and delivering the transformation. This is where a transformational leadership approach of utilizing influence can be very effective. This phase focuses on transferring ownership to line management and on strategies for building HR’s capability to create sustained change (Ulrich, 2009). The model is shown below:

![Four Phase HR Transformation Model](image)

Figure 1: The Four Phase HR Transformation Model (Ulrich, 2009)

Organizations must adapt, and not adopt, this model to their specific business climate (Ulrich, 2009). This model can serve as a great outline for any HR leadership and transformation effort. It ensures that the right questions are asked and that the answers are acknowledged and acted upon for the change efforts to yield the desired results.
So how can we adapt the HR leadership and transformation model to any organization? According to Ulrich, “In any transformation, the pieces come together in milestones, activities, and outcomes. Milestones represent what should be done; activities define how it is done; and outcomes monitor how to tell if it has been done well. Utilizing a transactional and transformational leadership style will ensure that there is a vision for followers to uphold and that they know exactly what needs to be done.” He continues, “The milestones are presented in a linear way, but they are unlikely to happen strictly sequentially. The timing of the transformation may vary according to your culture, the changes you anticipate making, the resistance you expect to encounter, and the level of support you have from the broader organization. But when you understand and adapt the 13 milestones, you will be more successful in your transformation. It may be tempting to skip some of the milestones, but if you do, you will probably have to backtrack and consider the missing milestones in order to make progress.”

Just like any other model, the details of the milestones are the key to its success as a whole. Ulrich describes the 13 milestones which phase by phase outline the process of leadership and transformation. Ulrich explains that Phase I, or the Business Context phase, has the following milestones: “Milestone 1: Formally acknowledge that an HR transformation initiative would be of value.” How do we do that? Ulrich recommends that we must, “determine that the timing is right for an HR transformation by affirming that business conditions are conducive to it, that HR could offer more value to the company, and that senior line leaders would be supportive of the effort. This determination is likely to come from observations about the business and from conversations with other business leaders.”

According to Ulrich, milestone two of Phase I consists of creating your transformation team. Once you form your team, milestones 3 will be to define, assess, and prioritize the new business realities that necessitate HR transformation and change where under the direction of the
new HR transformation team, an assessment is made of the business realities facing the organization (Ulrich 2009). Once the business case is made, in milestone 4, this complete business case for doing HR transformation must be communicated with the key stakeholders of the transformation.

Phase II, or the outcome phase, starts with milestone 5 where an organizational capabilities audit must be done to identify the top two to four capabilities required by the business strategy (Ulrich 2009). Once the top capabilities have been identified, Ulrich continues to Milestone 6 where the organization must operationalize the key capabilities and state them as the outcomes of the HR transformation so that they can be measured and tracked (Ulrich 2009).

Any HR transformation will certainly affect the key stakeholders of the organization and a great leader will ensure that all stakeholders see the value in this effort. In milestone 7, Ulrich asks us to ensure that we “show how accomplishment of these capabilities will benefit employees, line managers, customers, investors, communities, and other stakeholders.” During this step, an HR transformation stakeholder map can be prepared that shows the value of the HR transformation for each stakeholder (Ulrich 2009).

Next is Phase III, which is the HR Redesign Phase, where the transformational leadership skills plays a pivotal role, in milestone 8, Ulrich recommends us to “create an HR strategy statement: who we are, what we do, and why we do it.” Having a clear HR strategy and being clear about who they are or the vision of the HR organization, what they do or the proposition, and why they are valued places HR on the road to strategic positioning with the organization as a whole (Ulrich, 2005).

Once an HR strategy statement has been established, Ulrich recommends milestone 9 where we “shape the HR organization with clear accountabilities for centers of expertise,
embedded HR, operational HR, shared services, and corporate.” Ulrich states, “there are five general areas of responsibility or channels in which HR professionals might work:

• Service Centers
• Corporate HR (HR Oversight)
• Embedded HR (Strategic Business Partnering)
• Centers of Expertise (HR Expertise)
• Operational Execution

Your HR transformation team can define the expectations of each of these five areas as appropriate.” Once these areas of responsibility have been determined, it is important to create a plan on how these different groups will work together. This leads to milestone 10 in which Ulrich writes “Audit HR practices to prioritize those that will align with strategy, integrate with each other, and be innovative.” Without proper alignment, HR will not be able to prioritize and assign resources where it is most needed and where it adds the most value (Ulrich, 1996 & Ulrich 2007).

In addition to transformational leadership skills, other HR competencies are needed for a successful transformation. In milestone 11 where Ulrich states you must “define what makes an effective HR professional in terms of role, competencies, and activities.” This milestone is of utmost importance since without having the right skill, knowledge and abilities of the HR professionals, the best of intentions for an HR transformation will result in its failure. The HR competencies are ultimately the determinant of the success of any HR transformation.

Other HR Competencies Needed for Transformation

There is much discussion in various literatures regarding what competencies HR professionals need to be effective. The Society for Human Resource Management (SHRM) in
conjunction with RBL Group and the Ross School at the University of Michigan have come up with a complete HR Competency Model. “This study has been conducted five times over the past 20 years and provides the most comprehensive global empirical review of the HR profession. Over the lifespan of the study over 40,000 Hr professionals and their line management associates have been involved” (Johnson, 2009). They advise every HR professional to make personal commitments to upgrade actions, roles, and competencies. In their book, “HR Competencies: Mastery at the Intersection of People and Business” authors Ulrich, Brockbank, Johnson, Sandholz, Younger define the HR competencies not just as knowledge that HR professionals must possess, but the ability to use this knowledge effectively act on what they know. They depict HR Competencies as shown below: (Ulrich, Brockbank, Johnson, Sandholz, Younger 2008)

Figure 2: HR Competency Model (Ulrich, Brockbank, Johnson, Sandholz, Younger 2008)
This model suggests that HR professionals must embrace competencies dealing with people and the business. A summary of the six HR competencies are shown below (Ulrich, Brockbank, Johnson, Sandholz, Younger 2008):

**Credible Activist.** The HR professional is both credible and active. This means that an HR professional must not only be respected and listened to in the organization, but also must have an impact by offering viewpoints and positions and taking a seat at the executive table without having to be asked.

**Culture and Change Steward.** The HR professional is also an organization development and change management expert. The skills needed are not only being able to assess culture and shape it, but also plan, facilitate, and manage major change initiatives within the organization.

**Talent Manager / Organizational Designer.** The HR professional is both a talent manager and an organizational designer. Talent management ensures that today’s and tomorrow’s talents are selected, developed, and rewarded with a succession planning process in place. Organizational designer shapes the communication and collaboration within the organization and ensures that the talent can thrive within the organizational structure and system.

**Strategy Architect.** Ulrich, Brockbank, Johnson write “Recently, the distinction between strategy formulation and execution has become increasingly blurred--the implementation of strategy is as important (if not more important) than the strategy itself. Because implementation is driven heavily by measurements, rewards, staffing, training and communications, HR is central to effective strategy implementation.” The HR professional has a vision for the future of the organization and needs to implement the strategy according to that vision (Ulrich, Brockbank, Johnson 2009).
Operational Executor. The HR professional administers the operational aspects of managing people and organizations including hiring, benefits, payroll, and training and development ensuring that policies and procedures are adhered to.

Business Ally. HR professionals understand the business of the organization fully and participate in the success of the business by effectively responding to external customers, business climate changes, and stakeholder expectations. (Ulrich, Brockbank, Johnson 2009).

Once HR professionals are clear as to the knowledge, skills and abilities they must possess, Ulrich points us to the milestone 12 which is to ensure that the HR professionals possess the competencies required “and invest in HR professionals to make sure they have the abilities to deliver on the transformation.”

This leads us to Phase IV of HR transformation, or the Accountability phase, and milestone 13, which according to Ulrich is making sure that “the transformation team is staffed by the right mix of people and engaged in the right activities.” It is critical that the HR transformation team is made up of individuals with the competencies required who can lead, starting from planning, designing, implementing and following through on all the activities from inception to conclusion to ensure a successful HR transformation.
Conclusion

Human resources professionals have the responsibility of strategically hiring, retaining, and developing human capital and ensuring the success of their organizations. For most organizations, this means HR leadership is to transform their function and combine the success of the organization’s business and its people. Just as any major organizational change, an HR transformation can benefit from effective leadership, and proper planning, management, oversight, and implementation. An HR transformation would not be complete without HR professionals who can lead this effort, and who possess the right competencies ensuring that they are their executive management’s true strategic partners positioning the organization on the path to everlasting success.

Future Research

Numerous studies have been conducted regarding styles of leadership, and their effectiveness. On the other hand, there has not been an investigative study examining the relationship, specifically, between leadership styles and human resource professionals (Kotter, 1991; Kouzes, 2003; McNamara, 1999).
References


Blending “Open” Inquiry-based Learning with Teaching in Embedded International Field-Courses: Extension of the “Field Course Experiential Learning Model.”

**Topic Area:** International Education

**Presentation Format:** Paper Session

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The aim of this study was to compare six years of data collected to establish the learning gains made by participants who carried out guided-inquiry activities with those participants that carried out open-inquiry activities while participating in the field component of the “Field Course Experiential Learning Model” as part of a Penn State University field course in Costa Rica. The overarching questions were: If the field course, Environmental Science and Conservation Biology: A Field Study in the Biodiversity of Costa Rica, is run identically except that guided-inquiry activities are replaced with open-inquiry activities in the prescribed field work, will participants report higher gains in knowledge, skills, and conceptual learning? Additionally, how has this field study experience affected the participating teacher’s instructional practices, and how do these effects compare between the guided-inquiry and open-inquiry groups? A sample population (n=66) was surveyed following their field course experiences and the guided-inquiry teacher group (n=56) survey results were compared to the open-inquiry teacher group (n=10). Participant responses were then coded via constant comparative coding process. The survey responses were then triangulated with journal responses and post-trip questionnaire responses and reflections and artifacts such as videos, presentations, journal entries, etc. for the purposing of supporting and validating the findings of this study. Although, the data analysis is in progress, initial results suggest that open-inquiry experiences have had a positive impact on teacher’s knowledge, skills, and conceptual learning. In addition, the open-inquiry experiences have helped the teachers feel more comfortable utilizing open-inquiry in their classrooms and has sparked the teachers’ creativity in their lessons.
RUNNING head: Identifying Criteria for Redesigning Learning Environments

Evaluating Criteria to Consider When Redesigning Learning Environments for the Next Generation of Students and Teachers

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Identifying Criteria for Redesigning Learning Environments for the Next Generation of 21st Century Students and Teachers

Abstract

This theoretical paper is a work in progress that discusses results from a literature review and practitioner observations that investigated the question, Given the vast changes in technology, social interactions, the environment, and international events, how do we redesign learning environments to meet these changes for the next generation of both students and teachers in the 21st Century? The research objective was three-fold: 1) to unveil the most prevalent practices driving the need to create new learning environments, 2) identify conditions that support innovations in the redesign of learning environments to address 21st century reform in pedagogy and new educational organization designs and 3) advance the conversation on the posited question. Methodology was a qualitative literature review, which included an electronic Web and library review. The expected outcome included expanded understanding of six research themes to advance research on this important question and the role of six related phenomena.
Conceptual Framework

Effective leaders in complex organizations must be able to make optimal use of domestic and worldwide knowledge networks and their access to limitless information. Leaders must begin to make unprecedented efforts to address the fundamental origin of relationships between educational and societal problems to guide decision-making and solutions for designing new learning places for students and teachers. Being an effective leader in a complex educational organization requires a leader to be a skillful learner and have the ability to drive decision-making to ensure the change process involves multiple stakeholders and diverse goals, objectives and needs. While there are many leadership theories that describe leadership styles and practices, our focus is on the leader’s responsibility to provide appropriate learning and instructional settings conducive to learners’ needs for the 21st Century. I cite following as a profound perspective about the significance of the problem being addressed in this paper.

The older model of higher education, more appropriate to the industrial age, is centered on its providers, who are presumed to know everything there is to know about a subject, and who transmit it to fairly passive students seated in a classroom, at a time convenient to the instructor, listening to the instruction for 45 hours during the course of a semester. Students who spend this time in seat, multiplied by 40 courses over a period of 4 or more years, are granted a B.A. degree. The new demands of the knowledge-based economy require a transformation of this model to one in which education is centered on the student as learner, who needs to develop the capacity to search, select and synthesize vast amounts of information into coherent knowledge (Dolence, 1995).

Among the most pivotal leadership theory within the conceptual framework for this conceptual paper is that of Peter Senge, who is credited for creating the theory of the learning organization that emerged in his renowned work in 1994, *The Fifth Discipline*. In this pivotal work he describes a systems thinking approach to organizational management, development and sustainability based on long-term solutions vs. quick fixes. Leaders can no longer rely on quick fix solutions of the past in new technological environments. Senge’s theory and the relationship to the primary question is discussed in further in this paper (Senge, et al, 1998; Senge, 1994; Senge, 1990). He provides this guiding definition of a learning organization.
According to Peter Senge (1990: 3) **learning organizations** are:

…organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. [http://www.infed.org/biblio/learning-organization.htm](http://www.infed.org/biblio/learning-organization.htm)

**Effective Leadership in Complex Educational Institutions**

![Conceptual Framework]

Figure 1 Conceptual Framework.

**Statement of the Problem**

The problem of leadership taking on more responsibility for redesigning new learning environments is complex in today’s educational leadership, policy and practice environment. Previous studies linked to other educational leadership research in the field address the problem but not always from a systems leadership and management point-of-view.

*Limitations.* An existent research limitation in this paper is linking new educational leadership skills, qualities and philosophies to a hypotheses or research objectives to theory. Also, still to be considered is how the final hypotheses will emerge in relation to the research design to study the evolving questions about criteria for guiding new professional development guidelines to prepare educational leadership and management.
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professional as 21st Century leaders with the capacity to lead designing new learning settings, especially distance learning.

**Goal and Purpose Statement**

This paper aims to expand understanding about theoretical and practical underpinnings and implications involved in developing a solution-oriented model for creating new or modernizing traditional learning environments. The anticipated outcomes for this work-in-progress is a well-developed, concise, and clearly defined problem statement that will lay the foundation for advancing the conceptual framework and/or collaborative research project to continue this research agenda. The purpose is to share information and expand understanding about gaps in knowledge about criteria that is necessary to consider when redesigning learning environments for the next generation of 21st century students and teachers.

**Research Questions**

The primary question in this review draws heavily on the literature to examine the issue, “Given the vast changes in technology, social interactions, the environment, and international events, how do we redesign sustainable learning environments to meet these changes for the next generation of both students and teachers in the 21st Century?” Secondary or supporting questions include:

1) What are some of the most prevalent practices driving the need to create new learning environments,

2) What are the conditions that support innovations in the redesign of learning environments to address 21st century reform in pedagogy and new educational organization designs and

3) How do we advance the conversation on the posited questions in this study?

**Methodology**

**Traditional or Narrative Literature Review**

The primary method for preparing and writing this paper was a qualitative interpretive framework that incorporated the traditional or narrative approach. Secondary methods included the experiential and observational knowledge of the researchers. According to Cronin, Ryan, and Coughlan (2007), this type of
review critiques and summarizes a body of literature and draws conclusions about the topic in question. The body of literature cited in this paper is made up of relevant studies and knowledge that address the primary and secondary questions on the topic Evaluating Criteria to Consider When Redesigning Learning Environments for the Next Generation of Students and Teachers. The researchers were selective in the material it uses in this paper, although the criteria for selecting specific sources for review may not always be apparent to the reader due to the complex interrelationships embedded in the topic. However, the researchers found this type of review useful in gathering together a volume of literature in on this topic area, summarizing and synthesizing it.

**Purpose.** The purpose of this paper is to provide the reader with a comprehensive background for understanding current knowledge and highlighting the significance of new research about the complexities for leaders involved in redesigning learning environments for the next generation of teachers and learners.

**Grounded Theory:** In this research, the presenter theorizes that systems thinking and sustainability are the new learning tools for 21st century leadership in the complex (learning) organization. The examination of the question is pursued via a synthesis of research on the topic question of this investigation. Findings are embedded in the discussion throughout the paper, followed by a brief summary and conclusion. The primary question provides insight about this very complex issue that we set out to investigate. Other anticipated questions will be based on theory, past research, experience, and need to expand on the primary question. These questions will direct the future research methodology; their inclusion in this conceptual paper at this stage helps to links the research problem with the methodology later. The emergent questions will direct everything that will be done as this research idea progresses. A team approach will be used to ensure questions are accurate and focused to the main or final research problem. The research questions will be designed to specifically direct the research, instrumentation and the type of analyses that will be conducted to further establish reliability measures for this research.

**Objectives.** The research objective is three-fold aiming to: 1) unveil the most prevalent practices driving the need to create new learning environments and 2) identify conditions that support innovations in the redesign of learning environments to address 21st century reform in pedagogy and new educational organization designs and 3) advance the conversation on the posited question. Methodology was an integrative literature review, which included an array of resources such as an electronic Web and library review to support data collection and reporting for this paper.
Preliminary Literature Review

This literature scan identifies major literature that supports and validates the topic question. It also focuses on areas that offer support for new research, offers an opportunity to analyze and synthesize past research in the context of the present problem being examined in this research. This conceptual paper attempts to provide a glimpse into previous research to plant seeds in the mind of the reader, while suggesting more information is needed to fully exhaust discussion on the topic. This paper is based on a wide-range literature and web reviews that is condensed into a summary of key points. The literature is presented in six themes that emerged as conditions for changing learning environments to address 21st Century educational needs of the next generation of students and teachers. The emergent themes from the research about some conditions required to redesign new equitable learning environments are 1) provide better services for teachers and students 2) invest financially in new technologies 3) identify theoretical framework(s) for curriculum and instructional development 4) educate leaders on new approaches for decision-making 5) articulate a clear vision for change and 6) Utilize social-networking technology to enhance opportunities for learning and educational equity.

Figure 2: Literature Map
Discussion

Provide Better Services

More than a decade ago, Adens, Sybouts & Wess (1998) at the end of the millennium, these researchers describe in the idea of the “blossomed university” that emerged from a population growth that for the first time in history outpaced the world’s capacity to give people access to universities. Adens, et al. (1998) believed that a sizeable new university would now be needed every week merely to sustain current participation rates in higher education. Since 1998, we have learned that as education and training become more important to citizens as life long learners, education is becoming a more attractive business opportunity for entrepreneurs — many looking to partner with public schools, colleges and universities and others desiring to provide a full alternative. Dolence and Norris (2001) in their provocative book "Transforming Higher Education: A Vision for Learning in the 21st Century", estimated the amount of learning required by every information-age worker by the year 2000 will be equivalent to 30 credit hours every seven years or a master’s degree every decade. In 2010 we are experiencing this unprecedented flood of online masters degrees in every field of study.

21st Century business venture leaders have recognized this need for rethinking learning and instructional settings and is now providing distance learning experiences to permeate the educational systems with new learning places and designs. One has only to look at the programs provided by the Drexel Online, University of Phoenix, Motorola, Xerox, Nova and many other corporate universities to note what might be termed competition from the private sector. These factors should make traditional education providers who are thinking about entering the distance learning arena more conscious of student needs or face the possibility of private profit oriented providers taking a large portion of the popular education and training experiences and federal funding from tradition providers.

With an increase in the number of colleges, community colleges, and universities offering distance education classes there is an exponential increase of people, including taking distance education classes. In
addition, with the growth of educational opportunities for students at a distance from the campus, student support systems for global learners must be developed for these distant students and students with disabilities. The Aden’s group research found three services that are needed include: timely student feedback, on-site support, and access to library materials; if these services are offered they will contribute to successful distance learning experiences.

The surge in development of distance education technologies and programs is bringing new paradigms that represent the rapid changes and challenges occurring in our educational, economical, societal and technical support systems. Given these changes and the poor employment outlook, most people are expecting to become lifelong learners more dependent upon formal learning environments than was the norm in previous generations. The literature clearly suggests that while most initial formal learning may still be traditional educational experiences in a classroom with an instructor from early childhood into high school; later formal learning experiences may not always be possible by gathering groups of learners and instructors together in one location.

The difficulties related to grouping learners often begin when specialized learning experiences become too costly to be provided in small high schools and later when family and job responsibilities as well as financial constraints confine learners to situations far away from traditional learning experiences. For most people, continued education and training are part of maintaining their employment situation, necessary to change or enhance job opportunities, prepare for a new job when a current one is lost, or for personal gratification.

Today’s nontraditional or distance students respond to most of the same principles of learning and have similar social and physical needs as students in a campus setting. Therefore, secondary and post secondary institutions choosing to provide distance learning experiences must be prepared to provide student support services of equal quality to both campus and distance students.

When students are interacting with learning experiences, it is vitally important they have consistent access to quality and current library resources. Leaders must visualize students at a distance as having the same needs as students in a campus setting. Courses that are offered frequently in the same distant locations may warrant the purchase and placement of duplicate library and media resources in the library or support service area at the distant locations. Cooperation among local libraries and college libraries will be very important as
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Education continues to go global, especially in regard to interlibrary loan services. These services need to be supported by e-mail addresses and fax numbers allowing service to students in hours convenient to both students and teachers.

Specialty publisher partnerships are another means to provide students at a distance with access to a variety of information resources. Instructors using these services identify resources needed to complete the learning experience and the publisher negotiates with the copyright holder for the clearances and costs to use the material, which is then compiled, printed, and purchased by the student. Large amounts of printed material can also be placed in database and sold to the student on membership basis in a more compact form such as e-books.

The Legislature as well as administrations, faculties, and support staffs of K-12 districts and postsecondary institutions must change their concept of campus from physical locations scattered about the State to that of a statewide campus with various K-12 districts, community colleges, colleges, universities, and corporate universities providing instructional services across this vast campus (Phillipo, 2007). All these groups must at least recognize this development and/or embrace, cooperate, and support it with reallocation of existing resources and possibly new resources. These groups along with the students matriculating on the extended campus need to prepare for a steep learning curve and a number of new problems as technologies continue to merge. Adens, et al. (1998) forecasted these problems will emerge in this century but will be remedied. As leaders grow in knowledge, they will be required to provide for the extended campus; this is not a question of "if it will occur", it is a question of "when it will occur". If education reform is to be the transformative influence that it can and should be, more needs to be invested in education and the investment needs to be distributed more effectively (http://education.illinois.edu/newlearning/learning-investment.html).

Invest Financially

These are extraordinary economic times, requiring an enormous economic stimulus to avert recession sliding into depression. These times provide cause for public investment in education on an unprecedented scale. Historically, many government-created economic stimulate have left little to show. Tax cuts or tax rebates feed into increased personal consumption, but this is not like investment in human capital or in physical capital, which also have a supply-side effect and increase productivity and output later. Wars provide a boost to industry and employment, but also leave no manifest legacy of increased productive capacity. Expanding roads may
mean increasing private transport infrastructure, which aggravates energy costs and dependencies—and in any event, they may not be needed with the rise in telecommuting, cheaper person-to-person telecommunications, digital delivery of formerly physical content, and better public transportation. By comparison, there are few public infrastructure investments as evenly distributed and with as high a total return and tangible public value than investment in human capital formation through basic and higher education (http://education.illinois.edu/newlearning/learning-investment.html).

Education, however, also needs to use resources more effectively. It is estimated that schools are used for only 13% of available hours in the year. In fact, the length of the school day, and the number of days in school per calendar year, are quite low in the U.S. in relation to most of the other OECD nations—one reason perhaps for the underachievement of students in the US as measured in international tests. Instead, schools need to become seven days per week, 7-11 resource, and a focal point of community life in a knowledge society. This is to just to consider the way we use the physical resources of the school. Similar observations, however, could be made of the school’s human resources. Teaching to the middle of the class, where some learners are bored and others lost, is hardly efficient—customized learning is more efficient. And why does the ratio of learners to teachers need to be so consistent, when today’s learning environments could span a broader range, as needed, from one teacher to one learner, to one teacher to a great many learners? Peers or more advanced learners can perhaps do a lot of the work of teachers, to the benefit of both amateur teacher and learner. However, this requires a reconfiguration of the physical plant of the school, into new and more flexible spaces reflecting a wider range of person-to-person learning relationships. The question of resource use goes to the very heart of the business of education. Higher productivity in producing desirable education outcomes might mean we can pay teachers much better and get better value for that pay (http://education.illinois.edu/newlearning/learning-investment.html).

The ‘more investment’ argument can also rest on a personal case. The personal case is this: invest now and you will reap the rewards later. But for this personal case to work, it has to be more directly personalized. At the moment, there is a less than perfect alignment between learning investors (parents under financial pressure from multiple sources or aging local tax communities) and learning dividend recipients (children and future generations of productive workers). Onerous loans create a personal disincentive. Government grants can
produce distorted effects by favoring the already-privileged and elite institutions
(http://education.illinois.edu/newlearning/learning-investment.html).

The evidence shows individuals benefit directly from education in the form of receiving a higher income. If and when you benefit, you should be directly responsible to return a portion of that benefit for the public good. One solution would be to replace loans with an income taxation surcharge in which people repay the cost of their post-compulsory education if and when they reach the average income. Low paid professionals will never pay; those not working will not pay so long as they are not working. There will be additional benefits whether an individual repays the cost of their education or not, and that is the external benefit to the society and future generations, a benefit that would otherwise not be obtained because private families will invest too little (http://education.illinois.edu/newlearning/learning-investment.html).

It may be possible to add additional incentives that come from non-monetary private benefits to the individual and broader systems of reward for generating external social benefits. Considerable thought has been given in recent years to the economics of what is called ‘social production’, or non-market production that benefits others in the society, such as the unpaid contributions to open source software, to the authorship of Wikipedia, to the enormous community volunteer sector. This has sometimes been called a ‘reputational economy’, where people work to gain the non-monetary recognition of others (http://education.illinois.edu/newlearning/learning-investment.html).

In his radio address on the economy (Saturday, December 6, 2008) President-elect Barack Obama said “to help our children compete in a 21st century economy, we need to send them to 21st century schools.” Further, he stated, “my economic recovery plan will launch the most sweeping effort to modernize and upgrade school buildings that this country has ever seen. We will repair broken schools, make them energy-efficient, and put new computers in our classrooms.” No part of economic recovery plan is more important than rebuilding the infrastructure of American education (http://education.illinois.edu/newlearning/learning-investment.html).

Too many of America’s children go to school in overcrowded buildings with leaky roofs, faulty electrical systems, and outdated technology, all of which compromise their ability to achieve, succeed, and develop the educational skills necessary to compete in the knowledge economy of the 21st century. A well developed economic stimulus plan that places education at the core of rebuilding America’s infrastructure is
n necessary for the nation to achieve the kind of high quality learning environment appropriate for the 21st century (http://education.illinois.edu/newlearning/learning-investment.html).

We have known for over a decade many educational systems are fundamentally inadequate to prepare people to compete in the knowledge economy of the 21st century. At the end of the 20th century several studies reported that America’s school infrastructure was in poor condition and lacked the capacity to create an environment where children could be properly educated and prepared for the 21st Century. Recognizing that the studies in general relied too heavily on anecdotal evidence and also presented different methodological problems, the General Accountability Office (GAO) in 1995 conducted a study that could used as a basis for determining the condition of the nation’s education infrastructure. The GAO disseminated its study to House and Senate committees and to all members of Congress. Congress passed the Education Infrastructure Act of 1994, in which it stated, “Improving the quality of public elementary and secondary schools will help our Nation meet the National Education Goals.” Despite these efforts, through good times (the budget surplus of 2000) and bad times (the current market crisis) the infrastructure of American schooling has remained almost a state and local responsibility, with virtually no help from the federal level. Given the current budget deficits among the vast majority of the States, local governments will continue to defer vital infrastructure needs from year to year due to lack of funds. A high-quality learning environment is essential to educating the nation’s children for the 21st century and the nation’s only option for a modern infrastructure in through a federal infrastructure recovery plan (http://education.illinois.edu/newlearning/learning-investment.html).

Identify Theoretical Framework (s) for Curriculum Decision-Making

Before leaders in technology education are able to identify a theoretical framework upon which a curriculum is to stand, they must first grapple with two opposing views of the purpose of technology education – education for all learners or career/technical education. Dakers (2006) identifies two opposing philosophies that can serve as a framework for technology education, both inspired by ancient Greece, with the works of Descartes and the birth of positivism. Later reappearing in Pascal’s writings of the mathematical mind, and finally with Rousseau in the mid 1700s, the theoretical arguments of academic verses vocational were established in education, and thus concluded that the overall purpose of education was to make a man (human being) or a citizen. This dichotomy of views is referenced here to make explicit the underpinnings of a theoretical framework for technology education. The position that the authors take in this dichotomy of views is
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one that embraces the best of both views by teaching technology education to all students to foster technological literacy while at the same time addressing the needs of a workforce seeking to compete in a global economy according to Kelley & Kellam (2009).

The conceptual underpinning of the proposed philosophy of technology education is founded on the ideas supported by the works of Woodward (1894), Dewey (1916), and Warner, Gray, Gekbracht, Gilbert, Lisack, Kleintjes, et al. (1947), each of whom proposed that technology education is for all learners. That is, they believed that technology education should equip the learner with necessary knowledge, skills, and abilities in the context of technology, and to live, function, and work in today’s technological society. Furthermore, the authors embrace a pragmatist view, also known as experimentalism, which has been promoted through the progressive and reconstruction movement of the late 19th and early 20th centuries. Pragmatism supports the notion that knowledge is gained through problem solving, it places great emphasis on critical thinking and reasoning, and it seeks to solve the world’s problems with an open mind (Scott & Sarkees-Wircenski, 2001). Moreover, the authors support technology education with an engineering design focus as a vehicle for fostering technological literacy while simultaneously developing the skills needed to work in a global economy. A review of some of the recent commissioned reports on preparing a workforce ready to compete in a global economy uncovers lists of necessary job skills that are also technological literacy skills (Committee on Prospering in the Global Economy of the 21st Century, 2007; National Center on Education and the Economy, 2006) stated Kelley & Kellam (2009).

Developing technological literacy goes far beyond providing vocational skills and making students “technically savvy”; it is focused on understanding how technology has changed our world and how we live in it. Michael (2006, p. 56) adds that technology education should prepare young people to cope in a rapidly changing technological world; enable them to think and intervene creatively to improve that world; develop skills required to participate responsibly in home, school and community life (citizenship); help them become discriminating consumers and users of products; help them become autonomous, creative problem-solvers; …encourage the ability to consider critically the use, effect, and value dimensions of design and technology (technological awareness or literacy); it is our belief that technology education, with a focus on engineering design, is as beneficial for students who want to become attorneys, physicians, accountants, business managers, clergy, and writers as it is for future engineers according to Kelley & Kellam (2009).
Kelley & Kellam (2009) states that Jacobson and Wilensky (2006) suggest that young learners can handle complex systems thinking even at the middle school level. They suggest using a constructivist approach to learning, a philosophy of learning based upon foundational works of Dewey (1930), Piaget (1985), and Vygotsky (1998). Jacobson and Wilensky wrote: “A central tenet of the constructivist or constructionist learning approach is that a learner is actively constructing new understandings, rather than passively receiving and absorbing ‘facts’”. They believe that this method of learning can increase students’ understanding of complex systems as well as be more interesting, engaging, and motivating for students when assigned authentic problems studied within cooperative learning environments according to Kelley & Kellam (2009).

Notice that the constructivist teaching strategies suggested by Crawford, Wankat, Becker, and Bransford et al. emphasize the critical importance of context for effective teaching and learning. Contextual learning as described by Borko and Putnam (2000) is situated, distributed, and authentic. They suggest that all learning should take place, or be situated, in a specific physical and social context to acquire knowledge that is intimately associated with those settings. Borko and Putnam also advocate that for transfer of learning to occur, students must be provided with multiple similar experiences allowing an abstract mental model to form. Hanson, Burton, and Guam (2006) proposed contextual learning as a key strength for technology and engineering education programs, allowing for transfer of knowledge from core subjects. Additionally, they suggested that contextual learning is a key concept in helping technology education align with No Child Left Behind and providing learning opportunities for students to become prepared to work in a global economy. The context of learning is also essential in designing a solution to an ill-structured problem. Glegg (1972) suggested that the context in which a solution will be applied is not only an important design consideration but also critical to learning design. Teaching engineering design must be done within a context that is authentic according to Kelley & Kellam (2009).

Wicklein (2006) and Daugherty (2005) endorsed engineering design as an ideal platform for addressing the standards for technological literacy (ITEA 2000/2002), while also creating an instructional model that attracts and motivates students from all academic levels. Today’s workforce requires job skills that move beyond excelling in the basic core subjects (Grasso & Martinelli, 2007). A national employer survey identified desired job skills needed in today’s workforce. Today’s jobs “…require a portfolio of skills in addition to academic and technical skills. These include communication skills, analytical skills, problem solving
and creative thinking, interpersonal skills, the ability to negotiate and influence, and self-management stated Kelley & Kellam (2009).

**Educate Leadership on New Approaches to Decision-Making**

Complex systems approaches, in conjunction with rapid advances in computational technologies, enable researchers to study aspects of the real world for which events and actions have multiple causes and consequences, and where order and structure coexist at many different scales of time, space, and organization stated Kelley & Kellam (2009).

“In short, systems thinking is about synthesizing together all the relevant information we have about an object so that we have a sense of it as a whole” (Kay & Foster, 1999, p. 2; Senge, 1994). Mapping out the complex issues of a system by reducing the system down to its parts and studying the relationships within those various parts is a process that leads to a better understanding of the system. Furthermore, tensions may be identified that will likely emerge when a new approach to the system is taken. Failing to understand that these tensions exist and that the system contains these complex relationships, will likely result in a poor, inappropriate design. It is critical to understand that these relationships impact the entire system and the manipulation of one relationship, in turn, affects the entire system Kelley & Kellam (2009).

Kelley & Kellam (2009) reported that Biologist Lewis Thomas wrote: “When you are confronted by any complex social system, such as an urban center or a hamster, with things about it that you're dissatisfied with and anxious to fix, you cannot just step in and set about fixing with the hope of helping. This realization is one of the sore discouragements of our century…you cannot meddle with one part of a complex system from the outside without almost certain risk of setting off disastrous events that you hadn’t counted on in other, remote parts. If you want to fix something you are first obliged to understand…the whole system” (Thomas, 1974, p. 90).

Bar-Yam (2002) confirmed this dogma by making the case that the ability of science and technology to expand human performance through design is dependant upon the understanding of systems and not just the components that lie within that system. The insights of complex systems research and its methodologies may
become pervasive in guiding what we build, how we build it, and how we use and live with it. Possibly the most visible outcome of these developments will be an improved ability of human beings aided by technology to address complex global social and environmental problems, third world development, poverty in developing countries, war and natural disasters (Bar-Yam, 2002, pp.381-382) according to Kelley & Kellam (2009).

Frank (2005) makes a strong case for a systems approach for technology education. He pointed out that, traditionally, engineering and technology education used a bottom-up instructional approach, one that attempts to determine and deliver all the knowledge and skills needed by compartmentalizing the subjects: a separate math course, a physics course, statistics, etc. Frank proposed a different approach. Based on the systems thinking approach, what follows is a proposal for a way to teach technology and instill technological literacy without first teaching the details (for instance, electricity basics and linear circuits for electronics, or calculus and dynamics basics for mechanical engineering) stated Kelley & Kellam (2009).

Kelley & Kellam (2009) reports that the premise to this approach is that complete systems can be studied conceptually and functionally without needing to know the details, a top-down approach. A top-down approach focuses on characteristics and functionality of the entire system and the interrelating subsystems. This approach to teaching engineering design addresses issues raised by some that suggest teaching engineering design in technology education excludes some students who have not had, or lack, an aptitude for upper level math or science. A top-down approach also provides a feasible solution to high school courses with students enrolled at various stages of learning, for example, freshmen and seniors in the same class. These issues are of great concern when suggesting that technology education with an engineering design focus is for all learners.

Shepherd (1998) shares the benefits of project-based learning for technology education that include student engagement, increased motivation, and increased multidisciplinary knowledge, to name a few. His findings are congruent with others who have found through research that students who experienced project-based learning in a real world setting had significantly higher scores on the Cornell Critical Thinking Test compared to students in traditional instruction (Kelley & Kellam, 2009).

Articulate a Clear Vision for Change

In an educational field such as technology education that has been accused of poorly communicating a clear mission (Wicklein, 2006); it appears appropriate to consider a new theoretical foundation for the field.
Moreover, as new demands arise for educational programs that will equip the next generation of workers who are trained to survive and thrive in a global economy, a new philosophical framework for technology education may be needed. In this article, the authors have attempted to provide a philosophical framework for technology education that holds true to some pedagogical approaches that are at the heart of the success of technology education (contextual learning, problem-based instruction, and project-based instruction), while at the same time embracing new philosophies of learning and thinking (constructivism, engineering design, and systems thinking). The current literature is clear about the type of workers needed for today’s global economy (Pink, 2005; Friedman, 2005; National Academy of Engineering, 2004; National Academy of Engineering, 2005; Woods et al., 2000). If technology educators determine that their purpose is to help prepare students to live and work in this global society, then these educators should consider carefully defining a philosophical framework upon which to build a new curriculum. The authors wish for technology educators to consider the proposed framework as a foundation for technology education as it has much promise in preparing students to function in today’s technological society said Kelley & Kellam (2009).

**Utilize Social Networking Technology to Enhance Opportunities for Learning and Educational Equity**

Every day, many students are spending countless hours immersed in popular technologies—such as Facebook or MySpace, World of Warcraft, or Sim City—which at first glance may seem like a waste of time, and brain cells. But these genres of technologies—Social Networking, Digital Gaming, and Simulations—deserve a second, deeper, look at what’s actually going according Klopfer, Osterweil, Grff, & Haas (2009).

Have you heard of the above before? Your students have, and they almost certainly have strong opinions about them. You don’t need to be a teenager to use or understand these technologies, or to use them in your classroom. Market research data indicates that many a normal, middle-aged adults uses these technologies with frequency. The fact is, you can be 17, 35, or 60, and when you begin to engage with them and observe what’s really going on, you can begin to see that these technologies are more than just entertainment. These technologies are already demonstrating how they impact the way we think, learn, and interact—and they are also demonstrating the tremendous potential they have in these areas as well stated Klopfer, et al. (2009).

According to Klopfer, et al. (2009) the emergence of social networking technologies and the evolution of digital games have helped shape the new ways in which people are communicating, collaborating, operating, and forming social constructs. In fact, recent research is showing us that these technologies are shaping the way
we think, work, and live. This is especially true of our youngest generations—those arriving at classrooms
doors, soon to be leaving them and entering the workforce and society-at-large.

Games and simulations have been a key component of training doctors and military personnel, but
even businesses such as mining companies use games about a mining company in outer space to teach its
employees about processes. Although that may seem a bit “off the wall,” the fact is major corporations, the
Department of Defense, and the medical community would not use these tools if they were not highly effective.
Although these examples are mainly centered on training purposes, there are deeper educational benefits to
digital simulations and games. Yet leaders in educational institutions have been reluctant to embrace these
technologies (Klopfer, et al., 2009). Likewise, where schools have often shield away from giving students an
online identity in a digital networking platforms to increase opportunities for learning, professional
organizations are leveraging networking technologies to increase collaboration, knowledge-sharing, and
production amongst their employees. Public education has been impeded by the security and other potential
dangers of employing social networking technologies.

Technology can have a reciprocal relationship with leaders and teachers. The emergence of new
technologies pushes educators to understanding and leveraging these technologies for classroom use; at the
same time, the on-the-ground implementation of these technologies in the classroom can (and does) directly
impact how innovative technologies continue to take shape. While many new technologies have emerged
throughout history, so has the cry for educators to find meaningful ways to integrate technologies into the
classroom—be it the typewriter, the television, the calculator, or the computer. And while some professional
educators may have become numb to this unwavering ‘call’—and for good reason—it is crucial to consider that
the excitement over games and social networking goes beyond business and industry “crying wolf” to
measurable and observable outcomes at some point in the implementation. Evaluation must play a key role in
determining what works and what does not work, but this should not thwart experimentation.

Indeed, those previous technologies have a powerful place in instruction and the classroom; but
without them, strong lessons and learning objectives can still be achieved. With these more recent technologies,
we think educators should take the call, even if only on a trial basis.

Of course, as a result of these assaults on formal education, those in the “outside world” are often
quick to pounce on educators and the way education is (perceived to be) conducted in U.S. classrooms. This
Identifying Criteria for Redesigning Learning Environments

bandwagon perspective has become a mounting dialogue, charging the field of education with the imperative for a revolution—radical transformation of its system and practices. While it is clear that education is no different from the other sectors in its need to adapt and modify to our transforming world, it is also clear that many educators currently already implement excellent teaching practices and are able to skillfully create dynamic learning environments. Access to technology alone will not make an effective learning environment, leader or teacher.

However, attacking educators’ current practices combined with the lack of acknowledgment of current best practices only hinders the growth of the education sector (Pittman 2008). There are countless educators who are masters at their craft, currently employing an array of exceptional instructional strategies. Lauding and building upon these strategies is critical to effective growth in the education sector in order to bridge the aforementioned divide. Attending to this end of the technology-teaching relationship has the additional benefit of helping to shape emerging technologies that are most effective for building student cognition and teachers instructional strategies. In the next section, Ghanem Al Bustami (2010) shares his research on what educational leaders and teachers can do to facilitate effective programs and training students to become future leaders in the workplace, including education.

How we can develop our students, teachers to become leaders? (Al Bustami, 2010)

Big Ideas for Better Schools: Ten Ways to Improve Education by Developing Leaders

Ideas for preparing leaders to develop a more systemic approach to improve support redesigning learning environments for students, teachers, schools, and communities:

1- Engagement: Project-Based Learning – Self Initiatives

Students and Teachers go beyond the textbook to study or to teach complex topics based on real-world issues, such as the community needs, education, health or water quality in their communities or the history of their town, analyzing information from multiple sources, including the Internet and interviews with experts. Project-based class work is more demanding than traditional book-based instruction, where students and teachers may just memorize facts from a single source. Instead, students and teachers utilize original documents and data, mastering principles covered in traditional courses but learning them in more meaningful ways. Projects can last weeks; multiple projects can cover entire courses. Student work is presented to audiences beyond the teacher, including parents and community groups.

2- Connect: Integrated Studies

Multi and different perspectives studies should enable students and teachers to reach across traditional disciplines and explore their relationships, like James Burke described in his book Connections. History, literature, and art can be interwoven and studied together. Integrated studies can help students
and teachers to increase and expand their investigation using many forms of knowledge and expression.

3- **Share:** Cooperative learning
   Leaders need to learn how they can create and support others to work together on project teams, students and teachers need to learn the skills of collaborating, managing emotions, and resolving conflicts in groups. Each member of the team is responsible for learning the subject matter as well as helping teammates to learn. Cooperative learning develops social and emotional skills, providing a valuable foundation for their lives as workers, family members, and citizens. These are the most important personal leadership characters.

4- **Expand:** Comprehensive Assessment
   Assessment should be expanded beyond simple test scores to instead provide a detailed, continuous profile of student and teachers' strengths and weaknesses. Teachers, parents, and individual students can closely monitor academic progress and use the assessment to focus on areas that need improvement. Tests should be an opportunity for students to learn from their mistakes, retake the test, and improve their scores.

5- **Coach:** Intellectual and Emotional Guide
   The most important role for teachers is to coach and guide others, students need to learn how they can do this through the learning process, giving special attention to nurturing a student's interests and self-confidence. Teachers can spend less time lecturing entire classes and more time mentoring students as individuals and tutoring them in areas in which they need help or seek additional challenges; this will develop their confidence and self-trust.

6- **Learn:** Teaching as life style, not only a job!
   Preparation for a teaching career should follow the model of apprenticeships, in which novices learn from experienced masters. Student teachers should spend less time in lecture halls learning educational theory and more time in classrooms, working directly with students and master teachers. Teaching skills should be continually sharpened, with time to take courses, attend conferences, and share lessons and tips with other teachers, online and in person.

7- **Adopt:** Technology
   Technology can improve almost every aspect of school, modernizing the nature of curriculum, student assignments, parental connections, and administration. Online curricula now include lesson plans, simulations, and demonstrations for classroom use and review. With online connections, students can share their work and communicate more productively and creatively. Teachers can maintain records and assessments using software tools and stay in close touch with students and families via email and voicemail. Schools can reduce administrative costs by using technology tools, as other fields have done, and provide more funds for the classroom.

8- **Reorganize:** Resources
   Resources such as time, money, and facilities must be restructured. The school day should allow for more in-depth project work beyond the 45-minute period, including block scheduling of classes two hours or longer. Schools should not close for a three-month summer vacation, but should remain open for student activities, teacher development, and community use. Through the practice of looping, elementary school teachers stay with a class for two or more years, deepening their relationships with students. More money in school districts should be directed to the classroom rather than the bureaucracy.

   New school construction and renovation should emphasize school design that supports students and teachers collaborating in teams, with pervasive access to technology. Schools can be redesigned to also serve as community centers that provide health and social services for families, as well as counseling and parenting classes.
9- **Involve: Parents**

When schoolwork involves parents, students learn more. Parents and other caregivers are a child's first teachers and can instill values that encourage school learning. Schools should build strong alliances with parents and welcome their active participation in the classroom. Educators should inform parents of the school's educational goals, the importance of high expectations for each child, and ways of assisting with homework and classroom lessons.

10- **Include: Community Partners**

Partnerships with a wide range of community organizations, including business, higher education, museums, and government agencies, provide critically needed materials, technology, and experiences for students and teachers. These groups expose students and teachers to the world of work through school-to-career programs and internships. Schools should enlist professionals to act as instructors and mentors for students.

### How do we get students and future teachers in leadership positions?

Professionals see leadership potential in students and struggle with how to tap into that potential and get them into those key leadership positions. Each student is different in how should approach hem-her about taking on leadership roles. Many students will take the initiative on their own to pursue leadership positions on campus or in their college. Others however, need a little push. With some students all it takes is simply mentioning some of the leadership opportunities available. These students will usually take this and run with it. Often these may be the students who did not know about the opportunities or just needed a small amount of support from an external force to push them to pursue leadership opportunities. Many students on the other hand need a lot more support than just a mere mention. Some students need to directly tell them that they should pursue a position because they would be successful at it. Then to stay on them repeatedly reminding them and reassuring them that they can successfully fill that position.

### Once they are ‘in place’, what do we do with them?

Once we have our students with leadership potential into those leadership roles that we knew they could learn and grow from what do we do to develop that leadership potential? We can challenge a student too much and cause a huge blow-up at an inopportune moment. We can push our students to think outside of hem- herself and social circle. We can realize that we have been pushing their way too hard. While we knew that they have amazing leadership potential and were going to be great leaders.

On the other hand, we cannot provide too much support for our students causing them to get lazy and too comfortable either. By the time we can realize that simply supporting this student’s ideas and endeavors wasn’t enough, they just need to feel free, can do, can decide, and being leaders.
Finding Balance

How do we find the balance between challenging and supporting our students? We don’t want to push our students so hard that they simply shut down but we don’t want to support them so much that they don’t try to do better either. We can give them some questions-problems - which a plant seed into their minds helps a lot. One, you are not telling the student directly that what they’re doing is right or wrong. Two, once they ponder the question for a little while they’ll most likely come up with an answer similar to what we would have suggested but because they’ve come up with it on their own and it’s their idea they’ll be more accepting of it. The key is to pose the question so that we have a slight push in the right direction. Questions like: Do you think you should check with the rest of your committee about this first? Have you considered A, B, and C? What if you did such and such instead? These questions are non-threatening but challenging. Each student is going to respond differently, and the key is to learn what works with your students and tailor our style to them.

It is often hard to find out what does and doesn’t work with our students. Some students need and like more challenge than others. Some students need a lot more support in the beginning until they get comfortable with their leadership role. It is up to us as professionals to get to know our students and learn what’s going to work best for them. Each student is going to be different; it’s simply a matter of us adjusting our advising/supervising style to be most beneficial for our students.

Preparing the future leaders for school as organizational development

A. Background and objective

Based on the vision of the organization, a leadership development programs must develop to help build a pool of resources available for the leadership positions. Broad deliverables identified were:

a) Necessary competencies and mindsets to operate in a deregulated, competitive education and schools environment.
b) Necessary competencies and mindsets to operate in upstream and downstream energy achievements.
c) Necessary competencies and mindsets to operate in a growing multinational enterprise.

B. Target group

Leaders must identify our target group in order to develop the several levels of leadership with the needed skills and competences.

C. Need Analysis

A details Needs Analysis should happen in two stages:
The first stage involved a detailed analysis of strategic challenges, competency requirements and training needs requirement based on in-depth interviews with the students – future teachers.

The second stage involved research with global education schools and faculty having extensive experience and exposure to leadership and management development programs in education and school leadership.

D. Design

Academic structure must includes programs to develop research skills, teaching strategies, communication skills, counseling and executive education, This program must design to impart competencies at three levels:

- Frameworks and concepts in the educational and instructional leadership.
- Exposure to international standards and practices.
- Advanced concepts in leadership that would address the future organizational needs such as professional development, curriculum development, and student’s assessment and evaluation procedures development.

E. Delivery

The first phase focuses on providing general leadership competencies to create a common and shared language and understanding.

The second phase to build on strategic and leadership skills. Based on feedbacks, participants can also provide extensive one on one coaching from senior teachers- students professionals.

The third phase focused on advanced concepts leadership for teaching and education, with issues like instructional supervision, curriculum, technology, assessment, community services.

F. Facilitation and follow-up

While the classroom learning is important, visits to global organizations and institutions and interactions with the education and leadership experts and analysts can generate enormous learning, the same must be translated into implementation at workplace.

G. Evaluation

The individuals and groups should assessed through their project preparation and presentations, peer reviews and personal interview with a panel of experts from and outside the organization. High performers in the programs need to be identified. Further learning paths and career opportunities also need to be derived from the exercise.

H. Way forward

To continue the learning process beyond the programs, suggestion and new up-dates ideas need to provide groups of participants – cross-functional strategic projects over a period of time. This serves three purposes:

a) Solve organization (school) problems.
b) Provide a platform for continuous strategic learning.
c) Identify and groom high performing leaders and teams in this process.

Summary and Conclusion
Many researchers and educators now advocate for an evolution in educational practices and approaches to instruction, which not only align with the processes and operations of the world outside of school, but also leverage the emerging power and potential of these new processes. It is critical that education not only seek to mitigate this disconnect in order to make these two “worlds” more seamless, but of course also to leverage the power of these emerging technologies for instructional gain and technologies.

As we blossom toward new directions by rethinking and redesigning learning environments to meet the changes for the next generation of both students and teachers in the 21st Century, this research review provides two conceptual directions, one for process and the other implementation (Al Bustami, 2010) of key practices. These topics are suggested to support the changes that were examined and presented in this report and further research and dialogue. Although these suggestions are by no means exclusive or exhaustive, they are just a few of the ideas that need to be included in the rethinking process and then implemented in the planning directions to help both the students and teachers meet the challenges of education in the 21st Century.

References and Web Resources

Completed Reference List available upon request


Senge, P. et. al. (1994;1990) *The Fifth Discipline Fieldbook: Strategies and tools for building a learning organization*


The National Center on the Educational Quality of the Workforce (1995). First findings from the EQW National
Identifying Criteria for Redesigning Learning Environments

Employer Survey, RE01, p. 3.


Acknowledgement

Jacqueline Long, Research Assistant

Jacqueline R. Long-Jackson is a minority student and native of Pine Bluff AR. She graduated from Pine Bluff High School, where she was one of the two first disabled students to graduate from that high school. Jackson graduated in 1987 with her B.A. degree in Print/Editorial Journalism from the University of Arkansas at Little Rock (UALR); in 2008 she received her B.A. degree in Sociology from UALR; and she is currently pursuing her M.A degree in Rehabilitation Counseling from UALR. She is a physically challenged student and mother of two children, currently working as a graduate research assistant in the Counseling Adult Rehabilitation Education Department and an adult peer mentor at UALR. She is a shining example of the next generation of learners that work and study from home whom leaders must consider as we rethink new learning and work places.
MISSOURI SCHOOL BOARDS' GOVERNANCE PRACTICES

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A Project Presented to faculty of the Graduate
School of Saint Louis University in Partial
Fulfillment of the Requirements for the
Degree of Doctor of Education

2009
PROJECT ABSTRACT

The purpose of this project is to link current research with actual qualitative data. The study used data collected on 446 Missouri school districts that all have met the criteria of being a public K-12 school district and had reported all five achievement areas that were being compared. The five areas of student achievement that were being compared were a district’s average ACT score, percentage who attended college after graduation, graduation rate, and the Math and English parts of the Missouri Assessment Program (MAP) test. The choice was made by the team to create a ranking system of the school districts, since one did not currently exist in Missouri, using the most recently reported data in school years 2005-2006 and 2006-2007. Schools were designated a category of a top 20% school, a neutral school or a bottom 20% school. The goal was to find the differences in the attitudes and actions that may have caused a change in the overall student performance of the top 20% schools compared to that of the bottom 20% schools. Throughout the research, the project team consistently found Eight Quality Standards that can be used by school board members for effective change. The Eight Quality Standards of effective change were used in designing the research questionnaire to show if any major differences in the top and bottom 20% group existed. The questionnaire and numerous face to face interviews throughout the state produced numerous findings of effective change which included but were not limited to; engaging the school board in the vision for the district, including as many stakeholders as possible in critical decisions, and using achievement data to improve and enhance your school district’s curriculum. All of these areas if implemented are not guarantees for success but were found in the majority of the high achieving districts in Missouri. This project will
provide current research and suggestions for how school board members can positively impact student achievement in their local school districts, as well as to lead to future research in the area of school board governance.
Title of the submission: Cultural Influence and Relevance in the Classroom: Will High-Stakes Testing Lead to the Demise of Culturally Relevant Teaching

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Cultural Influence and Relevance in the Classroom: Will High-Stakes Testing Lead to the Demise of Culturally Relevant Teaching

Objective of presentation

Two primary objectives were explored during the presentation. First the presenters discussed cultural influence in the classroom from the perspective of the students – the persons who are supposed to benefit from educational reform and innovation. The results of a mixed method research study that explored the perspectives of adolescent students regarding culture and cultural influence in the classroom was shared. A second objective was to further the discussion about the appropriate and effective classroom use of culturally relevant materials and teaching during an era of high stakes testing and accountability.

Significance of the content and process
The purpose of the research study that was shared was to gain insight into the role of culture in the classroom. The researchers invited the sixth grade teachers and principal of a large innercity elementary school to collaborate in the study with the goal of utilizing the results to enhance student achievement in an era of high-stakes testing through better teacher preparation and development that might lead to a culturally pluralistic approach to diversity in schools.

Abstract of Presentation

An essential part of ascertaining the current status or degree of one’s understanding about cultures in general is investigating and comprehending the role of culture in the public school classroom. At a time in which statewide exams and intense accountability seem to overshadow the assorted needs of a diverse student population, a concern for determining to what extent cultural influence may still exist in the classroom lead to a mixed method study that sought to engage the voices of urban sixth graders in order to provide insight into their perspectives of culture in the classroom. In the same way that students have significant understanding about their heritage cultures and languages, they also possess substantial knowledge about their own cultural and linguistic experiences in and expectations for the public school classroom. Culturally and linguistically diverse students frequently experience a curriculum that reflects little of their culture and language, causing them to sense that they are not invited to participate in the total school experience. If they are to enjoy any aspect of social justice and become active participants in a society that promises liberty for all, educators must discover what elements will facilitate an accepting and supportive environment where each student feels valued and academic achievement is enhanced for all.

Consistently, the responses of the current study participants revealed a request for recognition that was two-fold in nature, both as a symbol of understanding on the part of teachers as well as an aspect of inclusion in the classroom. Of particular interest was their strong wish for educators to be knowledgeable of their cultural traditions and celebrations in the hope that this would translate to the inclusion of aspects of their culture, language, and history to be invited into the curriculum. Ovando, Collier, and Combs (2006) have noted that linguistically diverse students possess specific needs, including being accepted by teachers and peers, the invitation to participate, and seeing themselves reflected in the curriculum. Thus, the same message emphasizing the importance of culturally relevant teaching may be derived from the responses of the students as well as researchers. Yet the assumption on the part of experts in the field that
culturally relevant teaching has been discussed for so long a period of time that surely it is being implemented serves to diminish the need to continue the debate and the dialog. In fact in an age of devotion to exams as proof that learning has taken place, many educators and schools have elected to do away with individual cultural observances in favor of an end-of-year-cultural talent show of sorts. The practice rarely leads to a yearlong atmosphere of cultural pluralism and incorporation. It may be argued that omitting cultural diversity from the curriculum does not make it disappear from reality, nor does its absence serve to facilitate improved test scores.

As students and teachers experience increasing diversity within public school classrooms in the United States, more knowledge and understanding of cultural influences and the impact of diversity issues on teaching and learning is needed. While concerned educators have frequently considered the manifestations of culture in the classroom, young students have seldom been asked about their understanding of culture or cultural elements. Teachers are expected to become more knowledgeable of cultural issues in teaching and learning while also becoming better able to address the educational needs of students’ diverse ethnic, linguistic, and academic backgrounds. A valuable resource for cultural insights is the students’ voice, yet educators frequently report that they are receiving a mixed message regarding the use of culturally relevant teaching. On the one hand, research points to this type of teaching as a valid tool in facilitating success in the classroom for diverse students. On the other hand, teachers indicate that the message from administrators is that there is no time for attending to the affective aspect of education through culturally relevant instruction because of the urgency of high-stakes testing. Thus, it would appear that the demands of the test take precedent over the needs of the students.

**Purpose of the Study**

The researchers value the voice of students and utilized the information gathered in this study to collaborate with participating sixth grade teachers to create culturally sensitive pedagogy in order to enhance academic achievement. The results of the study were used to inform teacher education and professional development.

**Participants**

The participants of the study include sixty-eight sixth graders from one inner-city elementary school in a large, southwestern city. The students are primarily of a lower socioeconomic status. Of the 800 students who attend the school, 94% are Latino and over 50% are English Language Learners (ELLs).
Methodology

Both quantitative and qualitative methods were employed to analyze, interpret, and describe the participants’ responses on a survey created by the researchers. The survey included Likert-type as well as open-ended questions. Survey questions were based upon a prior component of this study that included ninety suburban, middle school students. A multi-genre approach was used to collect classroom assignments including analytic writing, narrative vignette, and poetic and artistic transcription. The data were analyzed for emerging themes that informed the researchers in forming the survey.

The study focused on the following research questions:

- How comfortably do the student participants interact with others from different cultures?
- What impact does the teacher have in shaping cultural knowledge?
- How does the teacher inhibit or promote the celebration of diverse cultures?
- What do the students think all teachers should be teaching about diversity in the classroom?

Responses to survey questions were analyzed for emerging trends from the Likert-type questions. The open-ended questions were interpreted for potential themes. After the data were collected and analyzed the researchers worked with the school principal and participating teachers to further consider and interpret the implications of the students’ perceptions of culture in the classroom.

Findings and Implications

Responses to the qualitative portion of the study point to several key findings. First, the teacher plays an important role in establishing a welcoming, supportive atmosphere and in protecting students from misinformation and stereotypes perpetuated by educators who lack knowledge regarding the diversity of their students’ experiences and backgrounds. Nieto (2004) writes in support of this finding. In addition, students commented that they want teachers to know that difference does not mean “bad.” The students frequently noted that they want teachers to be knowledgeable of the cultural values and beliefs that are reflected in their celebrations. Students indicated their desire for the teacher to help them understand more about themselves and others.

The participants’ responses demonstrate a need for culturally relevant teaching to be included in the classroom. Students indicate their desire for culture to be explored, not repressed, in school even when preparation for high-stakes testing requires much of the school day. Implications for further study include exploring the impact of culturally relevant teaching on the preparation of students for rigorous high-stakes exams. In addition, this study as well as the original research
project should be replicated in other educational settings and comparisons of student responses in the various types of settings should be evaluated for consistency.

The information that was provided as well as the research design was straightforward. The resulting knowledge may serve to enhance the education of students at all levels. Session participants were able to critically reflect on the meaning of the students’ responses and to further the dialog about excellence and equity through multicultural education.

References


Meeting the Needs of the Non-traditional Students on the Wild Horse Desert

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Abstract

Meeting the needs of the non-traditional students on the Wild Horse Desert involves identifying and addressing the educational needs of graduate students who live in the expansive South Texas area. These non-traditional students are likely to be the first in their family to seek a college education. They are also typically entering graduate school, after they have finished an undergraduate degree, and started a career, and/or a family. All of these can cause difficulty when they seek a graduate degree. Some drive as much as 120 mile to attend a class, and the 120 miles to return home. This article is intended to review each of these concerns, based on survey research, their impact on the students, and our attempts, as counselor educators, to meet their educational needs.
Faith, Hope, and Chocolate; A Holistic Approach to Wellness

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Abstract

This holistic approach to wellness examines each of three areas included in an integrated concept of optimum health and wellness (Myers & Sweeney, 2008) …mind, body, and spirit. Each of these component parts is grounded in the theories of philosophy and theology, as well as mental health and medicine. Each part is explored individually in this article using the metaphors…faith, hope, and chocolate. This article is intended to review each of these elements in the research of the respective fields, and provide evidence to encourage a “positive state of well-being” (Myers & Sweeney, 2008).
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Abstract: Poster Session 1854

Pythagoras without walls: Moving mathematics outdoors.

The more real world experiences students in the classroom can have with things they learn in class, the better the concepts are understood. College students studied the application of the Pythagorean Thereom in the outdoors and found that environmental educational experiences improved learning. These successful activities are shared in this poster session.
This is to certify that the dissertation by

Lisa K. Hamm

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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Walden University
2008
ABSTRACT

Characteristics of Successful Inner-City Charter School Leaders

by

Lisa K. Hamm

M.A., Xavier University, 1996
B.S., Northern Kentucky University, 1991

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Educational Leadership K-12

Walden University
May 2009
ABSTRACT

The lack of successful leadership in urban charter schools has resulted in a leadership crisis, the lack of ability to transform schools, and low student achievement. This study sought to identify characteristics and behaviors of successful urban charter school leaders that can be linked to student academic achievement. This study was similar to the previous studies that identified leader characteristics attributing to their success; however, the purpose of this study was to identify characteristics and behaviors specifically of successful urban charter school leaders. Participants were Ohio urban charter school leaders with enrollments of more than 200 students, grades 4-8, with a 60% or higher poverty rate. Successful leaders were those who have achieved and sustained a school rating of effective or better for more than 3 years while comparison leaders were those of like demographics that have not achieved or sustained an effective rating, as identified by the Ohio Department of Education. This study was a qualitative exploratory multiple case study with an inductive approach using interviews and observations of 3 successful charter school leaders and 2 comparison leaders in Ohio to identify emerging themes. Open and axial coding was used throughout the data analysis process. Seven themes emerged that identified common characteristics and behaviors of successful leaders that were minimally present or completely absent in comparison leaders: Consistent navigation, holistic focus, shared mindset, mission alignment, resourcefulness, shaping and sustaining culture, and selection and development of people. If action is taken on the outcomes of this study, social change will occur by minimizing the urban charter school leadership crisis, transforming schools, and significantly raising academic achievement.
Characteristics of Successful Inner-City Charter School Leaders

by

Lisa K. Hamm

M.A., Xavier University, 1996
B.S., Northern Kentucky University, 1991

Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Educational Leadership K-12

Walden University
May 2009
DEDICATION

This dissertation is dedicated to my parents for supporting me through each endeavor in my life. As a memorial to my mother, I would like to say thanks for the desire she had that I receive the education she was not able to get. In honor of my father, I would like to say thanks for his continued support through everything in my life.
ACKNOWLEDGMENTS

To my family and friends, thanks for handling the extra load of responsibility and allowing me to focus on this study and wanting me to achieve success. Without you, this would not have been possible.

To Charles McElroy Ph.D., Laura Lynn Ph.D., and Walter McCollum Ph.D., thanks for all you have done to help me persevere and reach this destination.

To my editor Jill, thanks for the great insight and all the hard work you put forth to meet deadlines and to write with excellence.

To my dog Max, thanks little buddy for sitting with me for hours of writing without complaint.

To Oprah, thanks for reminding me to live my best life.
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CHAPTER 1:
INTRODUCTION TO THE STUDY

This study sought to identify characteristics and behaviors of successful urban charter school leaders that can be linked to student academic achievement. Previous studies of Collins (2001) and Gray and Streshly (2008) identified characteristics of leaders that attributed to their success. Although the Collins study was conducted in the business sector, Gray and Streshly argued that findings could be transferable in order to discover what the best leaders do, regardless of the industry they work within. Covey (2004) also argued for the need to transfer learning from the business sector to education in order to accelerate progress. Miles and Huberman (1994) emphasized that there are broad requirements for establishing a theoretical framework and that it could be determined by the subject’s ability to outline items studied and the relationships among them. The Collins and Gray and Streshly studies provided a preliminary background and outline. This study will be conducted much like that of the previous studies mentioned with a focus on successful leaders of urban charter schools.

The lack of successful leadership in urban charter schools has resulted in an increased leadership crisis, the lack of ability to transform schools, and low student achievement. The purpose of this study was to identify characteristics and behaviors of successful urban charter school leaders. The outcomes in this study were compared with the Gray and Streshly (2008) study to determine if the same variables emerge and if any new characteristics existed that had not been mentioned. Successful leaders selected for this study were those working in schools with an enrollment of more than 200 students,
including grades 4 through 8, with a 60% or higher poverty rate and a sustained effective school rating or better in the state of Ohio for more than 3 years. Comparison leaders selected for the study were also those working in schools with an enrollment of more than 200 students, including grades 4 through 8, with a 60% or higher poverty rate and who have not obtained an effective school rating or better in the state of Ohio for any of the last 3 years, or have not sustained an effective rating or better for a period of 3 consecutive years.

This inquiry was a qualitative exploratory multiple case study with a theoretical framework and an inductive approach. Focusing on identifying characteristics and behaviors that are attributed to the success of leaders of inner-city charter schools, the process involved both observations, and semi-structured interviews. The criteria for selection of the study were based upon specific demographics of Ohio Charter Schools from the Ohio Department of Education.

The theoretical framework for this study begins with a foundation based upon the results of Collins (2001) in good-to-great companies and is built upon with the Gray and Streshly (2008) study of characteristics of highly successful principals in good-to-great schools. Current research and theories are used in the chapter 2 literature review to explain any related concept to potential variables or outcomes in the study. Poverty is explored to illustrate the impact that it has on schools and potential leadership strategies used to meet needs. Leadership concepts related to demands of the 21st century and school reform efforts are explored. The history of school reform that includes the charter school movement is recounted to create a picture of the journey leaders have taken over
time that may impact current practices. Because of the emphasis that school leaders must put on positive and immediate action to break the many negative cycles, critical issues faced by minorities are highlighted. There is a focus on the need to prepare students to compete in a global economy and the ability of leaders to adapt to a changing world. Finally, recent success in leadership is underscored for the purpose of comparison with the outcomes of this study.

Background of the Problem

The charter school movement is a new phenomenon birthed in the early 1990s and designed to provide public school innovation and school choice options. Gray and Streshly (2008) described the modern school leader as relatively new and emphasized that little information is available that describes what the best school leaders do that makes them successful. In this researcher's quest to discover further studies similar to that of Collins (2001) and Gray and Streshly (2008) that involve the components of inner-city charter school leaders, a dearth of information was found. However, reports from the U.S. Department of Education on successful charter schools are published annually (2004). These reports have emphasized that successful leadership is an overwhelming factor attributing to school success.

There is a need to identify characteristics and behaviors of successful urban charter school leaders that can be linked to student academic achievement. Successful leaders of inner city charter schools are rare due to unique challenges such as the same funding as other public schools and school facility access (Palmer, 2007). Palmer noted that state funds allocated for the school based on the number of pupils enrolled is
typically not enough money to address facility needs along with costs for personnel, curriculum, and instruction supplies, as well as various other needs. Many schools begin by converting existing buildings into schools unless they have access to private funding through partnerships with the business sector.

According to Jacob (2007), schools serving inner-city students face a more daunting task preparing children from disadvantaged neighborhoods to be productive citizens. Urban schools contain high percentages of students living in poverty, which presents different challenges for these leaders than those who lead other schools. Even though the needs of these students are greater than those of higher socioeconomic levels, urban school programs tend to receive less funding than the other schools do, which causes a greater disparity between them (Jacob). Charter school needs are also unique in that more responsibilities are required of their leaders than are required of the leaders from traditional schools. These responsibilities range from management and reporting to teaching in a classroom (Booher-Jennings, 2006). Finally, the researcher’s intention was to study the characteristics and behaviors of successful inner-city charter school leaders and not the schools themselves, though school ratings were used to identify successful leaders (school rating data from the Ohio Department of Education).

Some effects of the lack of leadership success are (a) increasing leadership crises, (b) lack of ability to transform schools, and (c) low student academic achievement (Palmer, 2007). This qualitative exploratory multiple case study sought to identify characteristics and behaviors of successful leaders directly linked to student academic achievement that is not exhibited in unsuccessful leaders.
Problem Statement

The lack of successful leadership in urban charter schools has resulted in an increased leadership crisis, the lack of ability to transform schools, and low student achievement. It is important that characteristics attributing to leader success in inner-city charter schools be identified in order to facilitate the leader selection and development process. This study should contribute to the resolution of the problem by improving the selection and development of successful inner-city charter school leaders who will ultimately raise student achievement and transform schools.

Purpose of the Study

The purpose of this qualitative exploratory multiple case study was to determine the characteristics of successful inner-city charter school leaders in the 21st century. This study explored characteristics and behaviors attributed to raising student achievement for successful inner-city charter school leaders by comparing the findings of leaders that have sustained success with others who have not. Demographics and identifying concepts and themes that emerge were analyzed and compared to past literature to see if they resonate with what has been found in other settings. New concepts and themes that emerged were identified as new variables needed for successful urban charter school leaders.

Research Questions

What characteristics and behaviors are exhibited in successful inner-city charter school leaders that relate specifically to student academic achievement? What new
characteristics and behaviors are exhibited that were not mentioned in the previous Gray and Streshly (2008) study?

Theoretical Framework

The theoretical framework includes the path-goal theory of motivation in which the leader serves as a coach for constituents in achieving organizational goals. This theory is based on the premise that the leader modifies his or her style of leadership based upon the needs and perceptions of the followers (House & Mitchell, 1974). The four basic styles utilized were supportive, directive, participative, and achievement oriented leadership styles, yet the focus of the study was more on the application of this theory than its explanation.

Leaders identified in the studies used as a premise for the present study demonstrated the ability to work within the path-goal theory framework. The foundation of this study was based upon the results of Collins (2001) and the outcomes of Gray and Streshly (2008). Both of these studies identified leadership characteristics that can be attributed to sustained success. There are specific leadership characteristics for leaders of good-to-great companies that Collins described as level 5 qualities. The leaders who possess those characteristics can guide a business to sustained success. Specific leadership characteristics aligned with the outcomes of good-to-great companies are what Gray and Streshly discovered in good-to-great schools. These characteristics cause principals to be highly competent in facilitating continued school achievement. Furthermore, what Fullan (2005) described as characteristics and behaviors of the new
theoretician are aligned with the responsibility requirements of the urban charter school leader.

The framework for this research was built upon the studies of Collins (2001), Gray and Streshly (2008), and Fullan (2005) to determine specific characteristics and behaviors that successful inner-city charter school leaders exhibit that can be attributed to school transformation and increased student academic achievement.

Nature of the Study

This study was a qualitative exploratory multiple case study with a theoretical framework and an inductive approach. In a process involving observations and semistructured interviews, the focus was on identifying characteristics and behaviors that can be attributed to the success of leaders of inner-city charter schools.

Successful leaders selected for this study were those working in schools with an enrollment of more than 200 students, including grades 4 through 8, with a 60% or higher poverty rate and a sustained effective school rating or better in the state of Ohio for more than 3 years. If there were more than three leaders who meet the criteria for successful inner-city charter school leaders, they were chosen randomly. Comparison leaders selected for the study were also those working in schools with an enrollment of more than 200 students, including grades 4 through 8, with a 60% or higher poverty rate and who have not obtained an effective school rating or better in the state of Ohio for any of the last 3 years, or have not sustained an effective rating or better for a period of 3 consecutive years. The public data provided by the Ohio Department of Education
relating to the number of students enrolled in urban charter schools, the percent of the poverty rate, and the school rating were used as criteria for selecting participants.

During the process of data collection and analysis, this researcher engaged a fellow doctoral student familiar with inner-city charter schools, which allowed for two sets of data comparison for validity purposes. There were two stages of data collection: observations and interviews. The process of open coding took place by both researchers at each stage of data collection and compared. In order to connect related concepts or themes, the two researchers used an axial coding process.

The first stage included observations of the school leaders engaged in various contexts and activities. During these time segments, two researchers observed inner-city school leaders in action and record their observations. Examples of activities that were observed are included in Appendix A. The second stage of data collection was the interview stage. Prior to the interview stage, this researcher had asked participants to complete the questionnaire that is reproduced in Appendix B, which provides insight into the background and perceptions of the leaders. After the demographic questionnaire was completed, the interview began.

During the interview stage, this researcher asked a series of 12 questions that are listed in Appendix C. These 12 questions sought to identify characteristics and behaviors attributed to the success or lack of success of the leaders. The interviews were semistructured and flexible with an open framework, thus allowing for two-way communication for extensive exploration and an opportunity to place emphasis on the perspectives of the interviewees. The interview was recorded and notes were taken on a
laptop computer as a backup for the recording. If clarification or additional information was needed, the school leaders were questioned again in order to obtain the necessary information.

In this study, there was an emphasis on the perspectives of the interviewee during the interview process. The same process was used to find patterns in the stories of the highly successful principals interviewed in the Gray and Streshly (2008) research. Interview questions selected for the study had been modified from the Gray and Streshly study on good-to-great schools. These questions had been tested for reliability and validity in this study and are included in Appendix C.

Concepts and themes that emerged throughout the observation and interview process were analyzed and compared with the findings in the Gray and Streshly (2008) study. New concepts and themes not existing in the previous study were noted as new variables needed for successful urban charter school leaders. The outcome of this study should impact social change, as it will serve to help others in the field interested in the selection and development of successful urban charter school leaders. This research was conducted with prior permission of the school district and is in compliance with the requirements established by Walden University regarding the use of human beings in research. Letters of consent were secured from the participants involved in this research.

Definition of Terms- use oxford dictionary

Change agent: People who can make a difference in the lives of children. (Murray and Harlin (2006).
Case study: A process in which subjects are explored in depth over a sustained period of time involving a variety of data collecting procedures (Creswell, 2003).

Charter school:

A charter school is a nonsectarian public school of choice… The “charter” establishing each such school is a performance contract detailing the school's mission, program, goals, students served, methods of assessment, and ways to measure success. … The basic concept of charter schools is that they exercise increased autonomy in return for accountability for both academic results and fiscal practices to several groups: the sponsor that grants them, the parents who choose them, and the public that funds them. (Charter school,” www.uscharterschools.org)

Add definition for effective

Reliability: Consistent results for any test or experiment (Creswell, 2003).


School leadership:

Leadership is a process of influence leading to the achievement of desired purposes. Successful leaders develop a vision for their schools based on their personal and professional values. They articulate this vision at every opportunity and influence their staff and other stakeholders to share the vision. The philosophy, structures and activities of the school are geared towards the achievement of this shared vision. (Bush and Glover, 2003, qtd. in “School Leadership: Concepts and Evidence, Summary Report, Spring 2003,” http://ncsl.org.uk/de/media-84d-76-school-leadership-concepts-and-evidence-summary.pdf).

Assumptions

It was assumed that participants would allow researchers to observe them as they engage in their daily work as normal without enhancing or staging characteristics and
behaviors in any way. Participants would not view their participation in this study as a public-relations opportunity and would only share the information they view as positive or staged observations. Participants would be willing to reveal what they perceive as both positive and negative aspects of their knowledge base, characteristics, and skills. It was assumed that participants would be knowledgeable in the areas queried. They would exhibit the ability to reflect on characteristics and behaviors objectively that have positively and negatively impacted student achievement and overall school success. Answers to the interview questions attached in Appendix C would be answered honestly and openly. Information would not be hidden or kept secret. Finally, the researcher planned to identify each variable indicated in every observation and interview that is attributed to increased student achievement according to the views of the participant.

Scope and Delimitations

This was a qualitative exploratory multiple case study with a theoretical framework and inductive approach. This study took place in the state of Ohio but can be applied to inner-city charter schools in any state. Five leaders of inner-city charter schools were selected for this study. Three of the leaders were selected based upon the criteria for successful inner-city charter school leaders. Two of the leaders were selected based upon the criteria for comparison inner-city charter school leaders. These leaders were observed in action during daily activities and selected events by the researcher. Examples of observations are included in Appendix A. These leaders also completed a demographic questionnaire included in Appendix B, and were interviewed based upon 12 interview questions included in Appendix C.
The public data provided by the Ohio Department of Education relating to the number of students enrolled in urban charter schools, the percent of the poverty rate, and the school rating were used as criteria for selecting participants. Leaders selected for this study were those working in schools with an enrollment of more than 200 students, including grades 4 through 8, with a 60% or higher poverty rate and a sustained *effective* school rating or better in the state of Ohio for more than 3 years. Comparison leaders selected for the study were those also working in schools with an enrollment of more than 200 students, including grades 4 through 8, with a 60% or higher poverty rate, and have not obtained an *effective* school rating or better in the state of Ohio for any of the last 3 years, or have not sustained an *effective* rating or better for a period of 3 consecutive years.

**Limitations**

The study took place in the State of Ohio in which charter schools have only existed since 1998. There are more than 300 charter schools in Ohio but many of them have not been around long enough to measure appropriately according to the state school rating system (school rating data from the Ohio Department of Education). For the first year of a school’s existence, public information about achievement results are not available in order to allow the schools a 3-year time period before being evaluated by the State Department of Education. Schools that are being measured in the current study have existed at least 6 years but the data reviewed for the study are based upon a snapshot of 3 years and are dependent upon the conditions existing during this period of time. This
researcher did not utilize circumstantial or situational variables observed in the study that exist only within this snapshot but those that are applicable to Ohio.

Significance of the Study

Some effects of the lack of successful urban charter school leadership are (a) increasing leadership crises, (b) lack of ability to transform schools, and (c) low student academic achievement. Positive social change will occur if the findings of the study are used to inform the process of leadership selection and development. This research can be utilized professionally to recruit inner-city charter school leaders who possess specific traits. Efforts can also be made to create professional development programs tailored to meet the needs of charter schools or inner-city organizations throughout the nation. This research will generate positive social change in selecting and developing strong inner-city charter school leaders, which will impact all stakeholders within organizational school reform efforts. Such an impact within organizations in these areas of high need can be so powerful that the mission to close the achievement gap will ultimately be accomplished.

Summary

As educational systems advance into the 21st century, successful leadership is a key concern for inner-city charter schools. This researcher conducted a qualitative exploratory multiple case study with an inductive approach to build upon the research of Collins (2001) and Gray and Streshly (2008) to identify which characteristics and behaviors that successful leaders of inner-city charter schools have that unsuccessful leaders do not possess.
This chapter has provided an introduction along with the background of the problem, the problem statement, the purpose of the study, the research questions, theoretical framework, nature of the study, definitions of terms, assumptions, scope and delimitations, limitations, and significance of the study. Chapter 2 is a critical assessment of peer-reviewed research articles on charter schools, leadership, inner-city issues, and school improvement. Chapter 3 explains how the qualitative method was used to identify specific characteristics that attribute to the success of inner-city charter school leaders in the 21st century. Chapter 4 provides the demographic results in the semistructured interviews and a discussion of the relationship between the research questions and the findings. Chapter 5 presents a conclusion, implications, and recommendations drawn from the literature review, the study methodology, and the data.
CHAPTER 2:
LITERATURE REVIEW

Introduction

The theoretical framework for this study begins with a foundation based upon results of Collins (2001) in the study of good-to-great companies and builds upon this with the Gray and Streshly (2008) study of characteristics of highly successful principals in good-to-great schools. Current research and theories are used in this literature review for an explanation of any related concept to potential variables or outcomes in the study. Poverty is explored to illustrate the impact it has on schools and potential leadership strategies. Leadership concepts related to demands of the 21st century and school reform efforts are explored. The history of school reform including the charter school movement is illustrated to create a picture of the journey leaders have taken over time that influences the way leaders lead. Critical issues faced by minorities and those that work with minorities are highlighted because of the emphasis that school leaders must take positive and immediate action to break the many negative cycles existing in society. There is a focus on the need to prepare students to compete in a global economy and the ability of leaders to adapt to a changing world. Finally, recent successes in leadership are underscored for the purpose of comparison with the outcomes of this study in chapters 4 and 5.

In business and social sectors across the United States, the lack of solid leadership has reached a crisis point. The social sector includes the education field, where urban schools face formidable challenges in finding competent leaders (Kozol, 2005). Kozol
argued that the nation is failing inner-city students and highlighted the differences in expectations, funding, and overall programming between suburban and urban schools, emphasizing the need for leaders to make serious changes in order to prevent a lost generation. Truscott and Truscott (2006) highlighted the term urban became common only after World War II when the middle class left the cities for the suburbs and many rural citizens moved to cities for jobs and opportunities. As the middle class left the cities, poor people, often African American, populated inner cities due to low housing costs hence the birth of urban education (Truscott and Truscott). Szente (2006) highlighted the inner-city challenges of poor academic achievement, behavioral problems, and issues with personnel, students, and families that are not as common as the issues found in the more affluent urban schools and those in the suburbs or rural areas.

Payne (2001) identified the unique needs of children and families who live in poverty and who specifically require leaders who have a greater understanding of those needs. Graseck (2005) argued that administrators should not overlook their nurturing, supportive, even ministerial role. Challenging behaviors of all kinds derive from unmet needs of belonging, mastery, independence, and generosity (Brendtro, Brokenleg, & Van Bockern, 2002). According to Marshall (2000) maladaptive behaviors are addictive and students are destined to engage in misconduct repeatedly until the cycle is broken. Massey, Szente, and Stewart (2005) emphasized that one means of addressing the needs of failing schools in federal reform efforts has been to create charter schools, especially in high need areas of the inner-city.
According to Andrews and Rothman (2002) the charter school movement affected less than 1% of children a decade ago but now. Just as is true for inner-city schools, charter schools have to have unique leaders with specific abilities (Wohlstetter & Smith, 2006). Operational challenges exist in charter schools that are not common to that of public or private schools (Wohlstetter & Smith). Charter schools have an agenda to partner with other organizations and resolve systemic issues through creative methods (Wohlstetter & Smith). The focus of this study was on leaders of inner-city charter schools that have achieved and sustained success for more than 5 years. The outcome of the study was to identify characteristics needed for inner-city charter school leaders in the 21st century. Many changes that have occurred in the past few decades require leaders who exhibit the ability to ensure that organizations can achieve greatness and sustain it.

Articles, Research Documents, and Journals

The literature review demonstrates the background of issues related to the research question by breaking down potential variables that may affect the outcome to include: (a) school reform efforts, (b) inner-city student issues, (c) charter schools, and (d) leadership characteristics known to contribute to the success of organizations. This research study used relevant books, journals, and research documents. The search terms that the researcher used were: charter school leaders, urban AND charter schools, inner city charter schools, urban school leaders, educational leadership, effective charter school leaders, successful charter school leaders, as well as successful charter schools AND leaders. No refereed studies were located that emphasized characteristics of inner-city charter school leaders that attribute to their success. Such studies are needed to guide
21st-century leadership preparation programs and aspiring school leaders serving this demographic.

**Education in the 21st Century**

The same answers resound that have always existed when parents and educators are asked what they want for children. They want these students to reach their potential, to love learning, to have more opportunities, to be happy, and to thrive as always but they have to acknowledge that the world has changed. Jacob (2007) asserted that recent technological advances have made it increasingly difficult for those with anything less than a college degree to find a job that offers a living wage. Even manufacturing and other blue-collar jobs require knowledge of algebra and sophisticated reading comprehension. Now schools must provide an education that used to be only for a select few (Jacob).

Merrifield (2005) argued for the need of more school specialization to increase productivity and creating better matches between students and educators. A better match between students and educators is especially important to older children who are developing specific interests and to children with special needs. Merrifield argued implementation of more specialization in a competitive education industry would diversify schools and drastically change the practice and use of standardized tests due to its usefulness.

Political and social changes have opened the world to new opportunities and technological advances have connected the world like never before (Friedman, 2007). For instance, Friedman argued that advances in fiber optics will soon allow cables to carry all
printed material in the world in seconds via a single cable. Most people on the planet have embraced the fast moving changes. Students have become hyper communicators through text messaging, among other means, for they were born into a digital world (Friedman). Technological tools have become extensions of the student brain, but technology is only part of the changing world (Friedman).

Researchers questioned if the nation is making as much of the opportunity to move education into the 21st century as many other countries are. Ravitch (2007) emphasized that our public education itself is obsolete and that other countries are overtaking us and we are losing the global competition because of our public schools. Friedman (2007) argued that in a flat world, a nation's greatest resource is its educators. It is their responsibility to prepare students for the changes of the day. In a report on strengthening schools for the 21st century, U.S. Secretary of Education Spellings (2007) noted that the nation has made great progress through the No Child Left Behind Act of 2001 (NCLB) in closing the achievement gap, but there is much more work to be done. In a U.S. government report on the need to change schools to compete in a global economy Spellings also emphasized:

We must make our high schools more rigorous and encourage students to take more advanced math and science classes. Employers today need workers with "pocket protector" skills-creative problem-solvers with strong math and science backgrounds. Whether children want to be auto mechanics or cancer researchers, they must have these skills. (U.S. Department of Education, 2007)

Friedman (2007) emphasized rather that students need advanced knowledge skills, access to digital tools and the ability to use them, access to vast amounts of information, and the desire to be lifelong learners. Students of the 21st century need to be able to
communicate, collaborate, and create in order to understand and embrace the world in which they live (Friedman). The U.S. has begun to make changes in education to lay the foundation of the future, and now has a clearer understanding of what is needed and how to access to information about students in schools (Friedman). Expectations have been raised for students, but too many students are not getting the knowledge, skills, or access to resources that they need to compete globally (Friedman).

The U.S. Department of Education (2007) reported that out of a hundred students entering ninth grade, only 79 will graduate from high school and 21 will receive a college degree. These numbers are even smaller in high schools with large populations of poor minority students. Not all students have access to the technological tools of the future (Wohlstetter & Smith, 2006). Friedman (2007) argued that action can be taken to improve the state of education in the United States. He emphasized the need to focus on appropriate education to access the new middle class jobs and to think globally. Education must continue to build on the foundation of clear standards, quality instruction, quality assessments, and shared accountability. Stakeholders in the educational arena have sought out solutions to problems for 21st century schools.

Some educational researchers claimed the answers lie in specific school reform efforts that create competition among educators and stop the monopolization of schools, such as the school choice movement (Duncan, 2006) known as the Charter School Movement. NCLB indicated that the answer is to hold teachers more accountable for a given expected amount of progress for each student each school year. Elmore (2006) and Brown (2006) found resolutions in selecting and developing school leaders for 21st-
century challenges. Ambach (2006) claimed that the solutions reside in allocating resources to the preparation of leaders for high need areas. Jentz and Murphy (2005) claimed that educational leaders fail to reveal their lack of knowledge or ability to handle situations, so there is a need to create a platform in which they can reveal confusion in order to learn and grow organizations.

Kelley, Thornton, and Daugherty (2005) claimed the answers to be in the ability of educational leaders to develop a positive school climate. Payne (2005) argued that educators need to understand the true definition of poverty and to have strategies to meet the needs of the students and families in order to achieve success in schools. Collins (2001) identified organizations that have sustained success largely due to the characteristics of their top leaders. Gray and Streshly (2008) utilized the outcomes in the Collins study to test their application to successful school leaders and found complete alignment, except highly successful school principals exhibited the critical ability to build relationships with faculty.

Preparation for the Demands of the 21st Century School Leader

Elmore (2006) argued that school leaders are not adequately prepared for the needs of the 21st century and that the nation must rebuild a system for the preparation of school leaders. He stated that the design must be based on four principles: (a) everything should be anchored in the instructional core of schooling, (b) systemic problems require systemic solutions, (c) professions have practices, and (d) powerful practices require strategies. He explored leadership preparation programs and the need to rebuild them. Elmore asserted the current process of certification and licensure has contributed to the
“catastrophe of education” He expressed that higher education institutions focus more on making money than the outcome of the student’s education and its implication in the student's life. For example, in many teacher preparation programs, the institution does not focus on helping the student become a certified teacher of quality. Institutions are concerned with enrolling students for any coursework that takes them through the process of earning a higher degree, but are less concerned about whether the courses are preparing these young men and women for challenges of the current decade for urban schools (Ambach, 2006). In order to combat these problems, Elmore highlighted specific principles that could shape the work of new leadership preparation programs.

Elmore (2006) argued for specific core instructional programming as the first principle of leadership preparation programs. He said that selecting school leaders should be based upon their experience with handling current demands and their ability to multitask, be multidimensional, and have a wide knowledge base of instructional practices. According to Elmore, to be able to manage themselves, time, money, and other issues early on and assume a leadership role, individuals must have experience prior to engaging in such demanding responsibilities.

The second principle indicated is that systemic problems require systemic solutions. Fullan (2005) explored this concept as tri-level systemic reform, meaning that systemic problems exist at all levels and must be resolved with the involvement with all stakeholders. Elmore (2006) focused on tri-level systemic reform regarding leadership preparation and certification programs. He argued that districts should be allowed to run their own training and certification programs and universities should not have a
monopoly on certifying administrators. Local control would enable strong connections to actual practice. States would license private providers and local districts, breaking out of the mold of existing institutional practices.

Elmore (2006) noted, unlike other industries, that education does not have certain practices that are understood by all stakeholders. He established a third principle to emphasize the need to set up specific practices in educational leadership. According to Elmore, one way to improve the practice of educational leadership is to monitor entry into the profession by controlling access to the knowledge base where educators can demonstrate mastery of a body of knowledge in the practice of that knowledge. The only organization that has addressed this problem is the National Board for Professional Teaching Standards (NBPTS). This organization established specific standards that encompass all elements of the teaching practice (NBPTS, 2008). Harlin (2005) argued that the National Board Certification process can serve as a professional development tool especially in low-achieving or hard-to-staff schools and that this has been an underutilized resource.

To earn national board certification, teachers must go through a 1-year process in which they demonstrate their effectiveness by videotaping classroom exercises and completing a portfolio that proves success in each standard. Teachers who go this route get nationally certified and become known to the profession as instructional experts. Elmore used the NBPTS organization as an example to demonstrate that a similar process can be used for educational leadership. The fourth principle established by Elmore (2006) is that powerful practices require strategies. These practices involve specific skills and
knowledge used in the development and execution of a plan or overall design. Rather than a list of dos and do nots, the fourth principle involves a way of operating that effectively engages all players in a system where everyone has a role. They are all aware of the direction, the objectives, and steps to be taken to achieve a specific goal and are involved in every part of the process. Environments that operate from the fourth principle would be engaged in proven strategies as opposed to just any teaching strategy. Although experimentation is welcomed, the end result of high student academic achievement and effective practices must be achieved by all.

Educational leaders play a variety of roles. They are superintendents, central office personnel, principals, assistant principals, and so on. These leaders also assume a variety of titles because of the creation of the unique roles based upon innovative school programming designs (Fullan, 2005). In the last 2 decades, as these new roles and titles have become more common, charter schools have become a means of dealing with 21st century approaches to education (Finn & Kanstoroom, 2002). Researchers are concerned about the abilities of the school principal, the top operations leader of the school, including Brown (2006), who addressed their role and the importance of specific training to help them to be more prepared to tackle the challenges of the day. The first thing she suggested was the need to raise admission requirements for leadership preparation programs to attract the right people with proven leadership qualities as well as at least four years of teaching experience. Letters of recommendation from various educational stakeholders would be included as proof of what the applicant has done to raise student academic achievement.
Like Elmore (2006), Brown (2006) emphasized the need to rethink required coursework. Rather than the current theoretical knowledge based courses, courses for administrative preparation programs should be based more on realistic situations. Not to suggest that theory should be eliminated, but only as it relates to 21st century reality such as the need to read and interpret data as a strategy for improving student academic achievement and the ability to analyze situations and make instructional decisions.

Administrative candidates also should be given ample field experiences providing opportunities to observe and to participate in actual work environments as well as being assigned a mentor. Brown (2006) believed in the need to broaden the learning experience for leaders outside of university settings by involving them in realistic work environments in such a way that will develop leadership skills and allow for the opportunity to reflect on and use their new knowledge. Some researchers believe that not only do educational leadership preparation programs in general need to revamped overall, but that leaders who work in high poverty areas need to be targeted (Nehring, 2007). It has been proved that these leaders experience the greatest challenges and thus need to have the most experience and best abilities (Ambach, 2006).

School Reform in the Past 2 Centuries

In the past 2 centuries, school leaders have been faced with school reform efforts. Nehring (2007) argued that over these 200 years, school reform efforts to provide thoughtful schooling have come up against common challenges that are embedded deeply in culture. These forces are described by the author as the six conspirators. They work together to tear good schools apart in unrecognizable ways. The conspirators tend to (a)
view schools as factories, (b) allow community fears to drive school activity, (c) impose plans that look great from above and make little sense at ground level, (d) crash promising innovation, (e) exhibit the tendency of schools to say yes to all legitimate requests, and (f) promote favored groups to the detriment of others.

Schools have been based on the factory model of the industrial age. Ayers and Klonsky (2006) highlighted Chicago's troubled public schools and 60 of the large corporations that ended up taking them over. Known as the Chicago Renaissance Project, 100 new charter schools in neighborhoods were created across the city over a 6-year time period to provide new school options in areas of poverty and overcrowding. Nehring identified these circumstances as a manufacturing metaphor and emphasized that the danger posed is in not recognizing that the intellectual and social development of children are more complex than the production of goods. The more that the practices of factory-like environments are implemented, the more the necessary conditions for true learning are diminished.

Fear has served as a means for causing people to act in both positive and negative ways from the past to the present. Nehring (2007) cautioned against using fear for school governance impulses and reactive forms, described by him as the fear factor, arguing against imposing plans without knowing the effect they will have on the environment. An example of what not to do is highlighted by Nehring as the standardized testing mandates. To those at the top leadership level, it appears that testing would serve as a means to report hard work and punish those who do not work hard. Those who work in every day school environments understand that such actions lead to frustrated students...
who become uninterested in learning and lose opportunities to learn a wealth of
information in the curriculum had it not been tested. This dangerous way of thinking
brings about unintended consequences that contradict educational missions, described by
Nehring as the view from the top.

Nehring (2007) argued against the danger in public education of utilizing
systematic bureaucracy to tire the innovative. Eventually people become exhausted with
sustaining innovation when it goes against the grain of the system or if it exists in a long
term combative mode. He differed with the need to assess new programs based on
effectiveness rather than how they fit within the system and described this conflict as the
grand interlock. Schools are designed to serve the public but have become too
accommodating to interest groups. Nehring disagreed with the tendency for schools to be
all things to all people and cautioned that attempting to do so would end up
accomplishing nothing. This accommodation is described as the politics of appeasement.

Many groups are favored to the detriment of others even within school systems in
the different parts of a state. Nehring (2007) highlighted the disparity among school
funding allocations in Massachusetts in different towns. He noted that some towns had
received $5,000 per child more than other towns had received. This has been true for
other states as well (Nehring). Higher income areas receive preferential treatment when it
comes to school funding allocations. Schools in these wealthy areas receive more per
pupil than those in areas of poverty even though the allocation comes from the same
source (Nehring). The danger of this disparity is that those who were advantaged become
more advantaged and the rest of society tends to erode (Nehring).
Nehring (2007) encouraged school leaders to combat the resistance against school reform efforts and urged these leaders to think differently about school reform. His article provides background knowledge about the obstacles against thoughtful school reform efforts and to teach school leaders to apply the accompanying practical lessons.

Questions were asked to invoke thoughts about how to combat the 7 conspirators described in the article including:  
(a) Where in my practice do the language and thinking of product assembly appear?, (b) Where in my practice am I allowing myself to respond reactively to fear?, (c) Do the policy decisions under my jurisdiction take into account their full effect at the point of impact?, (d) Are there places in my practice where I am allowing fit to trump effectiveness? , (e) When aiding something new, how will it affect existing activities and influence the school’s central mission?, and (f) who gains from this decision and who loses? Nehring argued that understanding the tendencies in our culture that work against thoughtful schooling will aid the ability to ask helpful questions and develop useful strategies to build and promote inquiry and reflection, all elements of effective thoughtful schooling. The results were not geared toward anyone’s self-interest but rather to enhance the quality of learning for our students. According to Hoyle and Slater (2002), the purpose of school reform was to produce high performers who become our future leaders of a troubled world but cautioned against allowing this goal to take the place of happiness, love, and service.

*Embracing Confusion*

Jentz and Murphy (2005) argued that most leaders are often confused because of growing daily challenges, but they choose to hide their perplexity and fail to take the
necessary actions to problem solve for fear that their lack of knowledge may be revealed. In other words, they make decisions not to act instead of acting with potential failure. If they do address an issue and merely pretend to know what they're doing, the results are bad decision-making and prevention of a potential growth experience. Jentz and Murphy described this cycle of hidden confusion as the lost leader syndrome.

Jentz and Murphy (2005) explored a method managers can use to transform their confusion from a liability into a resource. This method is called *reflective inquiry and action* (RIA) and can be used to promote learning and new ideas along with the ability to take effective action through a five-step process. Through these means, managers can use their need to make sense and involve people in the process without sacrificing goals, values, or judgment. Designed for small groups in private sessions, the guiding principles behind RIA are embracing one’s confusion, structuring a process for moving forward, and listening reflectively.

Jentz and Murphy (2005) highlighted many moments that leaders have faced and have in common in which they are presented with an obstacle or a serious problematic situation and yet pretend to function without being altered or having a level of concern. The authors illustrated various circumstances that might alarm administrators such as unexpected personnel issues, failed initiatives, or even tragedy. Jentz and Murphy demonstrated a position for revealing high levels of concern or confusion to constituents even though the technique goes against conventional thinking.

In order to be successful in sustaining reform efforts, Jentz and Murphy (2005) stood against hiding confusion. The high cost of deciding to keep the information or pain
of a situation private was demonstrated as a high cost for all constituents. In order to bring about substantive and sustainable progress, all team members must have high levels of trust and truthful communication. The RIA model is held up as a path to success for managers when they deal with unexpected problems or sensitive emergencies (Jentz & Murphy). The goal of the model is to turn confusion into a resource. The steps consist of multiple cycles in multiple venues that are flexible and opportunistic (Jentz & Murphy). They are as follows: (a) embrace your confusion, (b) assert your need to make sense, (c) structure the interaction, (d) listen reflectively and learn, and (e) openly process your effort to make sense.

Embracing confusion is to acknowledge that one is confused. Admitting confusion helps with the process of problem solving (Jentz & Murphy, 2005). Recognition is given that leadership is about being out front, about not having the choice but to encounter situations that will be confusing, and about accepting that confusion is not a weakness (Jentz & Murphy). Asserting the need to make sense is clarifying one’s understanding of the situation by speaking the circumstances out loud as one understands them to be (Jentz & Murphy). This allows for the opportunity to structure a process that can turn confusion into a productive, shared search for innovative solutions (Jentz & Murphy). Along with innovative solutions, Smith (1997), argued rights, public policy, attitudes, values, pedagogy, and the use of innovative strategies are interrelated and must be aligned.

Jentz and Murphy (2005) explained that structuring the interaction is designing a means of involving others in the process of joint inquiry. At this time, there is a need to
develop a plan of specific steps and procedures to accomplish a goal within a given timetable, and an agreement about how decisions and actions are made. Listening reflectively and learning is different than typical listening. Usually people listen in order to be prepared to make a decision or judgment. Reflective thinking is done in order to put oneself in the position of the speaker without judgment and then clarifying the person’s position or understanding by repeating some of the concepts back to them. This can be a challenge, especially to those who do not reciprocate listening. Jentz and Murphy described this kind of reflection as an area that requires much practice.

It is important for leaders to develop specific people skills if large groups of people are going to be able to work cohesively toward a common goal and to meet the needs of school reform efforts while being able to sustain them. Jentz and Murphy (2005) argued that leaders need specific skills in the RIA process that give them the ability to take constructive action, even in the wake of confusion. What is significant is that there are tools available such as the RIA for educational leaders to use it as a platform to hear the ideas of stakeholders, and to use them in their own confusion (Jentz & Murphy). The goal is to obtain new information and to learn from mistakes, which sometimes means revealing the lack of knowledge (Jentz & Murphy). Environments that engage in models such as this one, also inadvertently address school climate. Researchers have highlighted school climate as integral to leadership effectiveness and school reform efforts (Kelley, Thornton, & Daugherty, 2005).
**Flaws of Macro School Reform Efforts**

Large school reform efforts have been instituted in attempts for making mass improvements through policy reform. Booher-Jennings (2006) illustrated unintended consequences of accountability systems and compared them to emergency healthcare situations, describing this action as educational triage. Specifically, NCLB is highlighted as an example of the flaws in such a plan. The intention of the policy was to improve the outcome for all students, especially those who have been neglected in some way and have historically failed. Nevertheless, because of the punishment for failure that many individual teachers, schools, and districts may face, they began to strategize ways of meeting goals for adequate yearly progress and in the process forgot specific student needs. Neuharth-Pritchett (2005) highlighted current accountability trends in schools and strategies for documenting student progress and using it to intervene with low performing students.

In many cases, data are used to group students according to how they are predicted to perform on a test, and then instructional decisions, including resources, are made to ensure that the right number of students will pass it (Hess & Finn, 2004). Those students that are believed to not be ready to pass the test do not receive instruction in the same way as those who are borderline students (Hess & Finn). Also, the different groups are not given the same resources. Booher-Jennings (2006) emphasized the ethical and moral dilemma that most educators face when placed in this position because of macro accountability systems. Booher-Jennings encouraged educators to make better choices, even when faced with the possibility of losing their jobs. Regardless of whether or not a
student can contribute to a school’s bottom line, teachers should choose to teach all of the
students. Emphasis is placed on the fact that if enough teachers stand up against these
mandates and stand up for all students, then the chance of being asked to go against their
beliefs will be minimized or eliminated. Murray and Harlin (2006) argued that teachers of
children of poverty need more of a good grasp of content knowledge about the different
subject areas along with the ability to view themselves as agents of change.

According to Kohn (2004), educational accountability is viewed as a dark period
in American education for a significant segment of the minority population. Sheppard
(2006) argued it more disturbing for inner-city schools because of callous repercussions
that include publicly identifying low-performing schools in the media. Steele (2004)
asserted that this mindset restricts opportunities and contributes to dropout rates among
African Americans.

Hess and Finn (2004) argued that NCLB has become political, has caused
confusion, and is not working as intended. The purpose of the reform was to impose
sanctions on schools that fail to meet their obligations and to take action against those
ineffective schools in which students have been trapped. Most stakeholders are working
hard to put this law into practice with good intentions, but critical assessment is needed
about how the law is or is not working to raise the achievement of students (Hess &
Finn). Among the key lessons from the focus of this study were that low performing
students may not be welcomed in all schools regardless of the school choice focus due to
the measure of accountability and responsibility within the law (Hess & Finn).
Measuring School Reform Efforts

Among school reform efforts is the school choice movement. All but 10 states in the United States have adopted a charter school law of some kind, allowing for the creation of new public schools based upon the laws of each particular state (U.S. Department of Education, 2007). Various views at all levels of the spectrum have been explored on this initiative. Duncan (2006) explored Chicago's Renaissance 2010 school reform efforts and posed arguments against it. As in many states across the nation, the school choice movement in Chicago has been attacked by constituents (Duncan). However, Duncan emphasized that some who have previously stood against the movement are now attempting to participate by opening their own schools. Duncan emphasized that school reform is not about creating winners and losers but making new efforts to help children become successful.

Researchers have tried to identify ways to create almost a foolproof method of predicting whether or not a school reform effort or a new school option would be successful. Coulson (2005) argued for the need to be able to measure market education and to rank school choice reforms. To aid this process, he suggested providing a metric for rating school reform plans based on the size and quality of the educational marketplace. The specific metric addressed by Coulson is called the market reform metric. Its purpose is to rate existing educational systems by attempting to predict the outcomes that specific proposals would produce. With this tool, the characteristics within the proposals would be measured comprehensively to avoid potentially bad proposals and to predict successful ones. Stollar, Poth, Curtis, & Cohen (2006) argued for the need to
use a tool of some kind also to identify whether or not innovations are sustained by themselves, or if they are sustained, because of the organizational principles and design.

*A Systems Approach to School Improvement*

Thornton, Shepperson, and Canavero (2007) examined how program evaluations can be utilized for ongoing learning, learning that affects organizational change and overall school improvement. They explored an organization's capacity to learn and emphasized the ability to learn if they can (a) disseminate information, (b) solve problems, (c) experiment, and (d) analyze experiences they have or were had by others. These elements are much like those of Jentz and Murphy (2005), that there is an argument for hitting a process of obtaining information, analyzing, and reflecting. Thornton et al. emphasized the need to have an effective system for receiving feedback. Data must be used continuously along with program evaluations that result in shared perspectives. Thornton et al. expressed similar concerns for the ability to sustain progress in the same way as Collins (2005) and Fullan (2005) did. Short-term strategic planning is not useful for sustaining what has been learned in an organization over time. Meaningful improvement of schools requires holistic organizational transitions and substantive leadership. Thornton et al. highlighted 5 core disciplines or aptitudes establishing pricing as a means of emphasizing whether or not organizational personnel have the capacity to adapt and learn. These 5 core aptitudes are (a) personal mastery, (b) mental models, (c) shared vision, (d) team learning, and (e) systems thinking. All 5 are needed if the people from the organizations have hopes of learning. Many of these are shared ideas among the current researchers explored in this paper.
Thornton et al. (2007) argued that organizational staff learns through individuals and that the organizations must contain people who are committed to ongoing growth and development. Staff development is integral to the process of personal mastery and can be used to develop systematic procedures to improve personal capacity of personnel. Ediger (2006) argued that school administrators are responsible for the growth and development of all staff and therefore must stay abreast of the latest trends that develop leadership characteristics in vital areas. Organizational change takes time and quick fix approaches that show mediocre improvement should be avoided. Evaluations can be used in the process of program improvement as specific strategies to raise student academic achievement are created and revised. Thornton et al. emphasized a common vision. Without one, schools do not have the capacity to meet goals or take action in an agreed-upon direction. There must be a shared vision, and everyone must be involved in the process of reflection, evaluation, and decision-making.

Thornton et al. (2007) also highlighted team learning as a means to guide improvement. Organizations are described as a composition of interdependent components that function together towards predetermined goals with guidelines and strategies. Ongoing review and evaluation are necessary in systems thinking. These elements drive continuous improvement and discourage the possibility of repeating mistakes. Thornton et al. wrote that in complex organizations, nothing is ever influenced in one direction, which means that NCLB must not be able to construct educators if systematic systemic school improvement is expected. School leaders have to accept general directives of federal legislation but must also use program evaluations and new
accountability data to make decisions that assist in school improvement and help the schools to be engaged in ongoing learning and internal growth.

The relationship of systems thinking, program evaluation, and organizational learning all intersect in organizations that are engaged in deep learning and new ways of thinking. Each of these ideas can be utilized as means of sustaining school improvement. As stated by Fullan (2005), all stakeholders must be involved in the process of school improvement, including students but little has been done to act on this idea.

Middle School and High School Reform

Interviews, surveys, and observations have been conducted in a variety of population groups in order to identify the effects of school reform efforts; however, the voice of the students has been missing from the process. In one specific research project, by Bushaw (2007) middle school students were involved in a study that measured the success of school reform by seeking out their opinions on current school activities in their preparation for success in high school and college. Bushaw highlighted some high school reforms that were taking everyone in the right direction. The areas addressed were testing, the helpfulness of teachers, student relationships, homework, and how students were engaged in decision-making. Bushaw discovered that students want to graduate high school and go on to college. Still, according to the poll, what occurs in high school with the dropout rate and the lack of preparation for college demonstrated that something must be happening to prevent the students from reaching their goals. Bushaw highlighted this outdated view of the U.S. high school as the root cause for the disparity between student
goals and their actual achievement. This view is identified as the sort of select mission in which some students are purposely prepared for college and others are not.

Bushaw (2007) explored the feasibility of offering a challenging course of study for all students without intentionally or systematically failing some of them. The argument made for replacing the idea of preparing some students for college and others for work was to prepare everyone for meaningful post-secondary career opportunities according to their personal interests. The suggestion was to identify for the students particular interests such as working with their hands, working with people, or working in specific career interests. Bushaw challenged educators to discontinue the sorting of successful and unsuccessful high school students and to redirect their efforts toward preparing students for this new definition of college.

Bushaw (2007) said that in changing the focus to preparing all students for post-secondary careers, it is important to figure out how college is involved in this process. For educational institutions to identify their mission as preparing students for college is to ignore current outcomes. However, to rethink this mission in terms of career opportunity will heighten student success, which in turn will build successful educational programming. Exploring the ninth-grade high school program status, Bushaw described it as the time students begin to disengage and become at risk for dropping out. This grade was highlighted as having high failure rates, so school programming that helped students with the difficult transition from middle school to high school was emphasized. An issue in the 21st century is the financial burdens that prevent low income students from attending or finishing college. Bushaw emphasized that policymakers should consider
increased need-based funding like Pell grants, help students access low interest loans, and find ways to allow students to take college credits in high school to reduce the amount of time being in college and thus reducing costs.

*The Role of Technology in School Reform*

Henson and Steele (2007) demonstrated effective decision-making in a school system in South Dakota. There was a need for a choice to be made between building a new school and selecting much-needed resources for academic success. The previous school building in the school district had been condemned and there was no money to build a new building. A collaborative effort with all stakeholders was formed to obtain a laptop for every student by tying together resources between the state of South Dakota and the school districts.

This process was initiated by the governor of the state. A clear timeline with all the steps of the establishment of a systemic reform plan was indicated in addition to a plan to sustain the progress. The initiative was divided into three areas: starting strong, finishing strong, and staying strong. The goal by 2010 was for South Dakota to be the first in the nation in the percentage of students going to college, technical school, or dance training. This goal highlighted the desire to go beyond standardized testing goals and to build a deeper desire to impact the lives of the students into daily practices (Henson & Steele, 2007).

The achievement of these goals included ongoing professional development involving preparation for goal achievement (Henson & Steele, 2007). Many strategies were developed and executed in order to communicate best practices and adequately
prepare all stakeholders to implement them. Among the most highlighted effective methods was one in which certain staff were trained to train others in specific best practice methods. Another key element of this training was for teachers to attend technology academies in the summer months in order to have the skills sets and the knowledge base to use the laptop computers effectively. Many of the ideas expressed by Fullan (2005) in Henson and Steele’s article were put into practice in the school system and South Dakota. The process of planning, coordination, and teamwork along with a one year timeline provided a model for applying effective school reform models. Also provided was a model for how school systems can take problematic situations and turn them in to effective initiatives for school reform.

This particular school system can be used as an example for educational leaders in many ways. First, it took one person to initiate action, which happened to be the governor, but the action of any person of influence can be instrumental in school reform and student academic achievement. Collins (2005) pointed out that technology should be used in a way that accelerates the mission. This school used technology for that reason, and thus was effective in its accomplishment. The focus was on student academic achievement, rather than the building in which the students were being educated. Not only was their process for student academic achievement effective for that particular year, but it was also effective for subsequent years of lifelong learning.

*Technology and Low Socioeconomic Areas*

Thomas (2007) demonstrated the need for all students to be well educated in technology to be productive citizens one day. Students from low socioeconomic levels
often have limited access to technology, not only contributing to the overall achievement gap but also to the lack of opportunity gap in the workforce. Thomas also mentioned various industries that require owners and employees to have working knowledge in many types of technology including agriculture, newspapers, communication, trucking, and other industries. Thus, schools are challenged with obtaining technology education by providing hands-on practice to close the achievement gap for all students.

Thomas (2007) also emphasized the need to teach technology effectively and use it is an important life skill. A key component of staff development is using technology to integrate all curricula and to do so by exercising the whole learning process and regular teaching pedagogy. Technology must be used as a means in school reform efforts to close the achievement gap and ensure students are prepared for the future job market. This issue paints a new perspective on the need to involve technology in school reform efforts. Some schools have done this by focusing on specific areas of specialization for particular age groups. Others have been designed specifically with technology specialization in mind.

School Specialization

Merrifield (2005) explored the areas and impacts of specialization in a competitive education industry. The purpose of the school choice movement is to create competition and to allow the opportunity for areas of specialization to flourish. The thinking behind this was that students with specific areas of interest and giftedness would be attracted to programs with those specializations. In this case, they would not have to go to the neighborhood school but would be able to choose which school best fit their
needs, one advantage of which would be the raising of their achievement levels (Merrifield). Another advantage of the movement would be the opportunity to create more learners with a specific knowledge base and a given area of their interest and thus impact positively the market place for that area (Merrifield). An example of this concentration would be schools that are specialized in arts training that produce actors, dancers, or specialists in other forms of art (Merrifield). Another would be specialized science programming in which students become experts in different fields of science and become chemists or scientists in various areas of need. In some situations, specialized schooling is strictly geared for certain populations with specific needs who need a targeted curriculum to meet those needs in order to help them achieve the same opportunities that students of higher social economic levels usually have (Merrifield).

Merrifield claimed that the main purpose of the school choice movement has been lost due to the federal mandates of NCLB and that there is a need to get back to the original concept.

Merrifield (2005) predicted that competition will continue to produce specialization if federal mandates allow competition to proceed in the right way. He believed that it should be recognized that school programming and specializations in K-12 programs should be designed to meet diverse student needs. University settings provide options, and according to Merrifield, there should be more specialization options in K-12 programs as well. Failure to develop and allow more specialization within K-12 programs is failure to institute the true purpose of the parental choice school options in the school reform effort. Merrifield argued that what schools do and how they do it could
vary in an infinite number of ways just as fast as children and technology change. Specialization would occur by focusing on specific subject areas like math or business but would also mean embracing different ways of teaching and learning.

The Role of Child and Adolescent Development in School Reform

Researchers advocated a shift to a focus on child and adolescent development in our schools. Concerns have been addressed by a number of them about the failure of educators to more readily implement the knowledge that the expression of intelligence is interactive and developmental (Comer, 2005). A claim has been made that the underlying reason for not focusing on child and adolescent development is that many still believe that performance in school and in life is determined by one's genetics and a fixed intelligence. Comer blamed these inflexible ideas on economic, political, and social forces that impede the results regarding the expression and development of intelligence.

Comer (2005) expressed discontent for the educational system of the last two decades and claimed that educators have focused wrongly on the areas of curriculum, instruction, assessment, and modes of delivery when the focus should have been on child and adolescent development. He declared that when child development has been addressed, it has been done incorrectly, because the focus has been on the problem behavior of the student instead of the real issues that contribute to the cause of the problems. Comer stated that the capacity to learn is developmental and the focus should be on how to create a culture that promotes positive development. He identified six critical developmental pathways that children develop as they interact and learn in their school environment. These developmental pathways are physical development,
social/interactive, psycho-emotional, ethical, and cognitive-intellectual development. All of these pathways can be widened by creating a positive school culture. Kunkel (2007) demonstrated a strong belief in school culture in the early 1980’s by leaving a teaching position in the public school system and creating a new school aligned that represented her belief system.

**Emotional and Social Intelligence and School Leadership**

The changing society has caused the need for school leaders in the 21st century to develop an array of competencies and to understand emotional and social intelligence and the development of a positive school climate and culture. The ability to exhibit skillfulness in these areas has been known to separate the good leaders from the great ones (Goleman, 2005). These discoveries have caused many organizations to incorporate the ideas into preparation programs for current and aspiring school leaders.

**Leadership and School Climate**

Kelley et al. (2005) explored the relationships between the measures of both leadership and school climate. The background of various studies relating to leadership styles and school climate issues were highlighted. Specific variables researched were student academic achievement, leadership, school climate, teacher effectiveness and perceptions of teachers and leaders. Various assessments for each area were utilized to assess different components of schools and leadership styles that impact school climate. Perceptions of the teachers were compared to the answers given by the principals for self-evaluation on leadership style. The relationships among the variables were examined.

Communication, decision-making, innovation, advocacy, evaluation, and staff
development were critically assessed by teachers and principals.

Kelly et al. (2005) emphasized power, authority, and the position of the principal to impact the climate of the school. The authors stated that many principals lacked the feedback to improve the school because of the climate that has been created or because of the immaturity or other situational characteristics of the followers. There is a need for principals to be highly skilled in building a strong cohesive team whose members trust one another and communicates openly. Principals must be able to receive critical information to avoid making bad decisions and to have a handle on the perceptions of all of those within the organization. Kelley et al. argued that leaders should be aware of the needs of their constituents in creating a climate in which all stakeholders have embraced the vision and are empowered to act in ways that create and sustain an effective school climate. The ability to develop such a climate has become an integral leadership skill in the 21st century. However, much more has been learned over the past two centuries from school reform efforts that can be utilized to prepare future leaders.

Chaltain (2007) emphasized the need to understand the balance among freedom, security, and order and specified that educators can accomplish this through the understanding of creating shared cultures that unify diverse groups. The key to accomplishing this is leadership. He developed a five-part framework for school leadership to assist educators in the process of creating conditions that balance both freedom and order in schools. The framework emphasized the principles and process of (a) reflection, (b) connection, (c) creativity (d) people development, and (e) developing a shared vision. The process of developing an inspirational school climate should have the
involvement of all stakeholders within each of these elements.

Cautioning against the tendency to view it as a distraction from educational goals, Beghetto (2007) also defended the idea of utilizing creativity in schools in order to cultivate new and unique ideas. He acknowledged educator dilemmas when making decisions about the use of instructional time, but claimed the solution was an effective implementation of ideational code-switching, the ability to move interchangeably between personally meaningful ideas and to exercise creativity constraints toward a specific outcome on a given task. This is also highlighted in the ability to exercise both intrapersonal and interpersonal creative expression. Beghetto emphasized Sternberg’s (2004) argument that successful creators are able to balance their ability to generate ideas with their ability to select, test, and consider the implications of ideas, and then communicate the value of the idea to others. Beghetto stated that in order to implement ideation code-switching successfully, key components of successful teaching and learning must be implemented, which are to encourage student ideas, and listen and give ongoing formal feedback.

**Leadership and School Culture**

Comer (2005) stated that children walk on six critical developmental pathways as they interact and learn in their school environment and as they observe and participate in the culture of the environment. He said that students begin to internalize their surroundings through relationships and a sense of belonging, so a good school culture provides children with confidence and motivation to learn. Comer reminded educators that many children do not naturally value academic learning. It must be developed within
the learning environment. Many school leaders do not realize that school culture must be created and must be their primary responsibility, thus Comer developed a framework to assist school leaders with building a positive school culture. An important part of this structure is a focus on planned strategies and nurtured relationships. When implemented in a given educational setting, the results of Comer’s framework were both academic and behavioral successes. Among one of the key issues addressed is the issue of teacher preparation.

**Social-Emotional Component of Leadership in Developing School Culture**

Goleman (2004) advocated for the need to teach emotional intelligence and social intelligence. Elksnin and Elksnin (2004) added to this claim with a rationale for teaching social emotional skills. Social-emotional problems for children and adolescents with learning disabilities have increased over the last three decades and are a point of contention for school leaders. These educators have to be mindful of these issues and to have a plan to meet the needs of the students. Elksnin and Elksnin contended that there are a multitude of academic interventions that have impacted academic achievement positively for students with learning disabilities, but too few validated social emotional interventions. To address the needed interventions adequately, a more complete understanding of the causes of social-emotional problems must exist. The authors expressed concern about the way policy informs practice to ensure that children and adolescents with learning disabilities receive the social-emotional skills intervention as they require. School leaders must be able to take appropriate action to meet student needs
across all spectrums regardless of the policy constraints; they must find a way to inform policy of the best practices.

Elias (2004) stated that social-emotional learning has a great deal to contribute to theory and practice in the area of learning disabilities. Emphasizing that most students with learning disabilities also have difficulty with relationships and with social situations, he identified three key skill areas that are needed and called attention to the fact that social-emotional learning is the main source of these difficulties. These three key skill areas are (a) recognizing emotions in self and others, (b) regulating and managing strong emotions (both positive and negative) and, (c) recognizing strengths and areas of need. Elias also provided examples of comprehensive intervention that are linked to academic and social-emotional learning.

Elias (2004) wrote about the argument of not pulling children out of class for intervention because it reduces opportunities for natural peer interaction, develops a social stigma, and may cause educators to lower their expectations and lose confidence in the student’s abilities. Elias also expressed concern about subliminal messages students receive when they are in remedial settings, among which are that may never find their way out of the settings, maintaining that the more effective way to address intervention is through successful inclusion, described as relying on the ability to implement positive peer modeling, which occurs when there is a cycle of instruction, rehearsal in practice, and immediate and specific feedback. Elias defended a total of 15 skills involved in social-emotional learning and connections with disabilities, listing essential principles that complement the list of skills to guide the intervention. These principles state that (a)
caring relationships are the foundation of all learning, (b) emotions affect how and what we learn, and (c) goal setting and problem solving provide focused direction and energy for learning. Elias stated that in education we must direct our attention to skill development as well as the creation of a classroom climate that will allow for this development and reflect individual student strengths.

The Role of Poverty in Schools in the 21st Century

The Children's Defense Fund (Reid, 2006) released statistics indicating that since 2000, 1.3 million more children have become victims of poverty. Edelman (2007) stated that the organization illustrated an urgent crisis in the nation at the intersection of race and poverty that puts black boys at a one in three lifetime risk of going to jail. The report estimated that tens of thousands of children and teens are pulled into this pipeline, and so it called for hard work and persistence to build a transforming movement that completes the work of the civil rights movement to end the poor conditions of children and families living in poverty. The report emphasized that the U.S. does not have a level playing field for all children. Moreover, contributing factors to the pipeline in the education system are the lack of early childhood education and early detection for circumstances that impede learning, zero tolerance discipline policies, and failing schools. Zero tolerance policies expose children too early to criminal institutions and street behaviors such as drugs and violence when the school does not address issues within the school and community.

Edelman (2007) also revealed that the nation is spending three times more per prisoner than per public-school student. Edelman argued that after Brown v. Board of Education and the integration of schools, many were not prepared to walk through the
doors of opportunity and were separated by poverty level. She further contended that some people were distracted by materialism and forgot the purpose of the civil rights movement in which the basic teaching for the purpose of education which is to give back and make the world better. Edelman’s report also stated that 86% of black fourth grade children cannot read. Being able to read was described as a catalyst for reversing racial progress and social death. Edelman argued that the United States has the wrong priorities and that dollars should be spent educating students to eradicate poverty in our own country and around the globe as opposed to addressing issues of war.

Payne (2005) emphasized that poverty is a critical element of diversity and argued for the need for educators to operate with the tool box of strategies. Payne defined poverty as the extent to which an individual does without resources. Educators usually assume that poverty is about financial hardship, so Payne highlighted eight resources that influence poverty including the following: (a) financial, (b) emotional, (c) mental, (d) spiritual, (e) physical, (f) support systems, (g) relationships/role models, and (h) knowledge of hidden social class rules. The presence or absence of these resources determines the impact of poverty.

Pellino (2006) stated that teachers have the power to make a difference in the lives of children regardless of the level of poverty. Children living in poverty are more likely to attend schools with fewer resources, but if the child is strong in other areas the impact of financial poverty may be decreased. If a child is stronger emotionally, spiritually, and physically, there may be a teacher that is able to motivate the student and minimize the effects of poverty on his or her education. Cooter (2006), Payne (2005), and
Tableman (2004) each developed strategies that educators can use when working with poor students and their families, focusing on raising self-esteem and practical skill development.

Ayers & Klonsky (2006) emphasized the need for a caring school culture that meets holistic needs of students and the need for teachers with an aspiration to use their hearts and minds in the service of student learning. Ayers & Klonsky identified a rationale of students for a high drop out rate was best expressed by one student when he stated “no adult cared if I stayed.”

**Common Challenges of Inner-City Schools**

An investigation of the challenges in inner-city schools targeted academic achievement, behavior problems, low teacher satisfaction, financial problems, parent involvement, and the lack of student and family motivation (Szente, 2006). Kozol (2006) emphasized the low expectations of educators, rundown facilities, and inequality in school programming and learning opportunities. Payne (2005) illustrated the specialized needs of children and families living in poverty that make up a large portion of inner-city schools and in some cases more than 90% of the school population. Szente reported recent statistics from the National Center of Education Statistics that urban students are twice as likely to live in poverty as students in the suburbs and are more likely to receive free or reduced lunch prices. In addition, urban students are more likely to be subject to health problems and physical danger as well as to engage in risk-taking behavior. Drug and alcohol abuse, high crime rates, incessant violence, and extreme poverty are just a few of the negative environmental factors that create even more challenging educational
circumstances for inner-city schools and their surrounding communities (Dandridge, Edwards, & Pleasants 2000). Even though it is clear that inner-city schools have desperate needs, evidence indicates states and districts are frequently slow to aggressively improve or overhaul failing schools (American Federation of Teachers, 1999; Brady, 2003).

According to the Education Commission of the States (2003), urban schools tend to perform below national testing averages and are more likely to end up in the category of failing schools. Szente argued that the realities of poverty and lack of resources prevent most urban children from reaching their full potential. More investigation is needed in the area of poverty and its impact on education and what role education can play to combat poverty in the 21st century.

Murray and Harlin (2007) conducted a study to identify the strategies that brought about the success of an urban magnet laboratory school. In this school, 50% of the students enrolled were eligible for free and reduced lunch programs. This school was balanced racially and had a variety of achievement levels. Its success was questioned because it did not contain real inner-city poor children but in fact the school shared comparable demographics to that of other public schools. Murray and Harlin argued that the difference was not in whom the students were but how they were treated. Students were able to select academic topics to study and assignments to complete. They were responsible for their own behaviors. Obtaining experienced effective teachers and their participation in ongoing development were a key strategy to the success of the program. Among some of the major differences identified in the teaching staff compared to others
was how they saw themselves as agents of change and people who can make a difference in the lives of students. Among some of the other characteristics deemed integral to the school’s success were key partnerships in the community and a quality tutoring program. Hollister (2006) highlighted the importance of community and its ability to bring profound and powerful changes if it is united and willing to implement inspired ideas that others may consider outrageous. Carter and Friesen (2005) emphasized partnerships as a way to provide services and education that build capacity among inner city youth. The partnerships identified combine skills sets that produce research to serve the community in the development of needed policies and programs.

School Reform Efforts Designed to Combat Urban Issues

Booher-Jennings (2006) contended that many education reform efforts have been characterized as faddish and presented as silver bullet approaches. Too often, as in NCLB they have brought about unintended consequences for all stakeholders. Among these are actions that include going after percentage goals for adequate yearly progress by ignoring the needs of the lowest achieving students in focusing only on students that are on the border of passing the achievement testing. Booher-Jennings encouraged teachers to teach all students regardless of the school’s bottom line. Kozol (2006) argued that regardless of what many believe to be miraculous attempts to integrate students to provide equal education opportunities, black parents still flock to suburban schools because they realize an extreme disparity exists in inner-city schools regardless of the nation's attempt to mask it. Attempts to integrate students have failed due to our ravaged national history,
extremes of inequality, and over a century of severe segregation, demonstrated by high
dropout rates and achievement gaps.

National Concern for Leaders Serving High Need Areas

Ambach (2006) noted that 200 of the largest districts enroll about 40 percent of
the nation’s students and nearly 75% of those students live in poverty. From this statistic,
a deduction was made that if the leaders in these areas are given what they need in terms
of training and resources, then efforts for reform would be more successful. Ambach’s
argument targeted resources towards an area that has the greatest potential to affect
schools. The most impoverished areas were characterized as a group of high-value. This
area is described as the Fortune 300 in efforts to compare this significant group of leaders
to Fortune 500 companies, including superintendents of the 200 largest school districts,
50 chief state school officers, and 50 other national education leaders. This comparison is
drawn to illustrate the direction in which leadership preparation needs to go if we plan to
make significant strides for the future. Highlighted examples of what must be done in
education to provide advanced leadership training to top school executives in these areas
are the investment that Fortune 500 companies make in executive learning as well as the
military commitment to ongoing career development for its leaders.

Ambach (2006) emphasized several components that should be a part of the
educational program for the Fortune 300 leaders. To prepare these leaders, there is a need
to study the best practices from various industries in and outside of education, as
emphasized by Covey (2004). There is also a need to involve leaders in opportunities to
reflect on lessons learned and to have the opportunity to connect with others who have
served in similar capacities. There could even possibly be a formal mentoring program in which the new leaders are mentored by those who have gone before. Another key component that could be viewed as unrelated is the emphasis on encouraging leaders to pursue intellectual interests in the sciences, arts, or humanities in order to engage them in the process of ongoing learning opportunities, and to avoid the potential of becoming narrow-minded. The main goal of the leadership development program is on the need to find a way to learn what works, have the ability to implement it, and then most importantly be able to sustain it. Ambach cautioned against becoming frustrated with the demands of addressing widespread needs and allowing those to shift the focus from those serving in areas that have the most needs and are most crucial to making effective progress in school reform efforts. This can be avoided by strategically designing a program, offered in university settings or other national forums, that meets the needs of these leaders and can be sustained for the successors of these leaders (Ambach).

The 21st century leaders face many challenges. Fortunately, much has been studied and revealed about what is effective and what is not. The key to lack of success in a leadership role is in having knowledge about challenging areas, having access to them, and having experience in making decisions related to them. Although much knowledge has been gained, there is still much to know. Some researchers question whether or not one is effective if they seem to know everything, or if they're more effective if they reveal that they do not (Ambach, 2006).
Charter Schools

Manno, Finn, and Vanourek (2002) described charter schools as the liveliest reform in American education and a part of a big idea of public education. They are defined as an independent public school of choice, freed from rules but accountable for results. Charter schools possess some similarities to district public schools with some of the prized attributes of private schools and crucial differences (Manno, Finn, and Vanourek.) A charter school is open to all who wish to attend it (i.e., without regard to race, religion, or academic ability), is paid for with tax dollars (no tuition charges), and is accountable for its results to an authoritative public body (such as a school board, state agency, or public university) as well as to those who enroll and teach in it. Palmer and Gau (2005) argue that the success of the charter school movement depends on the effectiveness of authorizers.

The differences according to Manno, Finn, and Vanourek.(2002) are they can be created by almost anyone; they are exempt from most state and local regulations and are essentially autonomous in their operations; they are attended by youngsters whose families choose them and staffed by educators who choose to work in them; and they are liable to be closed by the public authority that authorizes them if they fail to produce satisfactory results. According to Williams (2007) some charter schools are founded and led by teachers. In New York City Williams highlighted two schools operated by the United Federation of Teachers governed by a board of trustees made up of teachers, community members, and parents. According to Nathan (1998), even Rosa Parks, a founder and the civil rights movement applied to start a charter school.
A study Fox (2002) conducted described the origination of the charter school movement in the state of Ohio. In the fall 1997, Ohio adopted a plan for the implementation of charter schools in its eight largest urban school districts in fall 1998. Subsequent legislation allowed the establishment of charter schools in any of Ohio's 21 large urban districts or in any school district declared by the state board of education to be in a situation of academic emergency.

Charter schools resemble private schools in two important particulars. First, they are independent. Although answerable to outside authorities for their results, they are free to produce those results as they think best. They are self-governing institutions with wide-ranging control over their own curriculum, instruction, staffing, budget, internal organization, and much more. The second similarity is that nearly all of them are schools of choice. Nobody is assigned against his or her will to attend (or teach in) a charter school. Charters are, quite simply, redefining and reinventing what is meant by public education. Traditionally, Americans have defined a public school as any school run by the government, managed by a superintendent and school board, staffed by public employees, and operated within a public-sector bureaucracy. In this familiar sense, a public school is not very different from a public library, a public park, or a public housing project (Manno, Finn, and Vanourek, 2002.)

The U.S. Department of Education (2008) reported that 4,000 charter schools educate more than a million students in 40 states and Washington, D.C. The department reported that long waiting lists and admission lotteries are testaments to their growing needs and that President George W. Bush and Secretary Spellings were committed to
seeing charter schools opened in every state. Since taking office, President Bush invested more than $1.4 billion in the Charter Schools Program and more than $262 million on charter school facilities to reduce waiting lists. The president's 2008 budget provides $214.8 million to continue the Charter School Program, including $200 million to help create new charter schools and an additional $14.8 million in matching funds to states that offer per-pupil financial assistance so that charter schools can obtain facilities (U.S. Department of Education, 2008). Current president, Barack Obama has also made known his support and plans to support the ongoing mission of charter schools (U.S. Department of Education, 2009). According to Stuart Wells (2002), charter school reform has been embraced by policy makers on both sides of the political aisle and by diverse groups of activists as one of the most promising solutions to the problems of public education.

Christensen, Aaron, and Clark (2005) argued that problems of public schools are identified by most people, but that they are not able to change, and that charter schools seem like a good start due to new educational models that will allow more people to consume effective educational services in increasingly convenient settings and at a much lower cost to the taxpayer. Manno, Finn, Bierlein, and Vanourek (2002) argue that much is to be learned from charter schools and policy makers, professionals, taxpayers, parents, and others committed to revitalizing public education should welcome charter schools as a giant step toward the reinvention of public education in America.

Morley (2006) also argued that charter schools are becoming an increasingly important part of America's primary and secondary education system. Stewart (2002) argued that charter schools have created more opportunities and that charter school’s are...
designed to allow freedom from the constraints imposed by local school districts, charter schools have greater flexibility to select specific models of operation. Steward emphasized that flexibility provides an opportunity to design, implement, demonstrate, evaluate, disseminate, and extend specific educational models. According to Heaggans (2006), charter schools have the potential of reinventing education through curricular initiatives. Premack (2002) argued that charter schools in California have provided a diverse collection of educational programming. Raywid (2002) highlighted that public interests are being addressed more readily through charter schools. Coulson (2005) highlighted the number and variety of school choice proposals that continue to grow and that education markets have been argued more efficient, academically effective, and responsive to the demands of families than state-run school monopolies because of this growth in school choice. Arne Duncan (2006) identified this school reform effort as an effort to make every child in every school a winner.

Legislators have authorized grant programs to assist with start up costs for charter schools and facilities as a way to allow public schools to restructure themselves as charter schools under NCLB. There is much debate about whether or not schools should be nonprofit or for-profit entities, but at the present time both types exist. Charter school laws differ from state to state. The key characteristic of a charter school is that it obtains public funding yet has private management and thus contains elements of both public and private schools. Charter schools do not charge tuition and receive all funding from state and local governments. Defining potential operators as any members of the local community, state laws place little restriction on who can start a charter school.
Enrollment in a charter school is optional but the schools rarely have geographic boundaries in which students can attend (Morley, 2006). If a charter school has more students who desire to attend than open seats, then it admits students by lottery due to the public-school open enrollment policies. Prior to opening, there must be approval from an authorized agency. The level of scrutiny applied to charter school applications varies from state to state. Among the types of charter schools within the states are new startup schools or conversion charter schools. New startup charter schools can be initiated by individual founders, partnering groups, or organizations. Conversion charter schools are schools that were once public schools. Both types of schools can be for profit or nonprofit organizations. Nonprofits have dominated the industry but for-profits do maintain a presence. Charter schools are non-sectarian and must comply with antidiscrimination, auditing, safety and health, and other applicable state and federal laws (Morley).

Many charter schools utilize such nontraditional facilities as nonschool buildings. According to Wohlstetter & Smith (2006), partnerships expose students to opportunities that school cannot. They gave an example of a charter school housed in one church that educates students in grades 9-12 in which students learn about art, philosophy, literature, and cultural studies as part of integrated thematic units with an approach that stresses hands-on application of computer technology, Internet research, work study, and community service. Another charter school housed in a church in New York is highlighted by Massey, Szente, and Stewart (2005) as one that meets the needs of parents, teachers and community by educating 105 inner-city children.
Morley (2006) noted that charter schools determine their own educational objectives and basic curricula but those are approved by chartering agencies. Some charters are designed to target specific population needs and others are specialized educational innovations. Charter schools are regulated by the monitoring of student academic achievement outcomes. Government agencies do not interfere with operational decisions of charter schools as long as they can demonstrate success. When charter schools fail, chartering agencies respond by closing the schools.

Saiger (2005) argued that waves of school reform have ushered in because the most troubled school districts within the last few decades have lacked accountability and incentives for improvement. Manna, and Witte (2006) analyzed flexibility and accountability in the nation's education reform debates and how these values were considered in addition to developing state charter school laws. The outcome of the analysis suggested that elected officials who write charter school laws be mindful that some of the issues centered on accountability and flexibility may present challenging conditions for charter school operators in the attempts to support good public policy. A suggestion was made to allow for the revision of charter school laws incrementally based upon the experience or non-experience of some states and the ability to pass public scrutiny. Also, it was found that the number of charter schools within the state were due to the political context within a given state. Furthermore, lawmakers are cautioned against low profile interest groups and reminded to remain non-partisan.

Heaggans (2006) conducted a study to determine the impact charter schools have on urban youth. The argument was made that charter schools have the potential to
reinvent education through curricular initiatives and stronger educational outcome because of the lack of bureaucracy. A critical element highlighted in the study was the promotion of inequality in the wake of the 50th anniversary of Brown v. Board of Education, a Supreme Court case that ruled segregation was unconstitutional and was prohibited in public schools by the United States Constitution (Hirsch et al., 2002). The Heaggans study emphasized that the separate-but-equal doctrine that has manifested itself in charter schools but explored the argument of Finn, Manno, and Vanourek (2004) that indicated half of charter schools are in urban districts having 40 percent of students at risk for dropping out of school.

The Heaggans (2006) study also explored the U.S. Department of Education's fourth year National Study of Charter Schools (Nelson, 2000) which released outcomes that a higher percent of students enrolled in charter schools than in public schools were eligible for free or reduced lunch and were from minority groups. Segregation and inequalities have been revisited because of recent arguments that the charter school movement is allowing segregated schools and is out of compliance with Brown v. Board of Education. The results indicate that the largest population in most urban communities is African-American and that 40% of charter schools have been developed and established in urban communities. Segregation is not a goal of the charter school movement but rather has been a result of meeting the needs of underserved populations. At this point, the charter schools have the support of the same people and legislation that were supportive of the establishment of separate but equal and the Brown v. Board of
Education case because of the ability to address the achievement gap in urban areas of poverty in which previous efforts have made little headway.

Harrison (2005) criticized the government's job in providing education, stating that the reason for the failure was a political focus benefiting teachers’ unions and public interest groups rather than a true public interest which is to provide children with a quality education. Among some of the flaws emphasized were the lack of information, ability to satisfy customers, control costs, innovate, and the ability to ensure quality teaching. These governmental behaviors have caused the reduction of efficiency and have harmed those living in poverty. In efforts to resolve these problems, choice and competition in schools have been introduced to the education market to increase productivity and customer satisfaction while having more control over quality teaching and innovation as the needs of children living in poverty are met. Because decisions are made politically and true educational issues are ignored, Harrison argued that government run schools are poorly managed internally. He defended the market system because of the decision-making methods used in the accountability structure. In this system, success is evaluated on the basis of student academic achievement results and the ability to satisfy customers. Harrison contended that no adjustments in the public system will provide a solution except that of school choice options. According to Finn and Kanstoroom (2002), charter schools present innovation minded principles and utilize professional staffs in ways that traditional schools can not.
Giftedness and Leadership

Sternberg (2005) argued that people obtain leadership roles, not by demonstrating high scores on tests of knowledge, but by leading with their ideas. He showed that leadership involves both skills and attitudes. Gifted leaders are currently skillful in making and implementing decisions that represent creative, intelligent, and wise judgments, and they excel in (a) creative skills and attitudes to generate fresh and good ideas for leadership, (b) analytical intellectual skills and attitudes to decide whether they are good ideas, (c) practical intellectual skills and attitudes to implement the ideas, (d) persuasive skills to convince others to value the ideas, and (e) wisdom related skills and attitudes to assess the long and short term impact of these ideas on the individuals and institutions as well as themselves. Sternberg contended that the United States is too individualistic and risks developing successive generations of self-interested young and that will continue to work against the self-interest of the nation. Sternberg claimed that the nation’s interest should be in developing leaders that embody three characteristics: intelligence, creativity, and wisdom.

WICS Model of Giftedness and Leadership

To address the need of developing leaders who embody characteristics of intelligence, creativity, and wisdom, Sternberg (2005) developed a model that is referred to as WICS. The acronym represents wisdom, intelligence, and creativity synthesized, and is so ordered to make it pronounceable. Sternberg argued that these elements are a form of developing competency and expertise that can be utilized in making leadership decisions but depend largely on the environment and its influences. This model can be
used in the development of wisdom for leaders in which they can exercise a higher form of intelligence by making a difference in the world.

*Thinking Styles and Scientific Giftedness*

Park, Park, and Choe (2005) examined thinking styles and scientific giftedness to determine the relationship between the two. The study consisted of a thinking style inventory and a scientific giftedness inventory, resulting in an argument for development and implementation of school gifted programs to be based on their participants’ psychological characteristics and intellectual abilities. The study highlighted Sternberg's 13 thinking styles that fall within 5 dimensions and the researchers proposed that thinking styles and learning approaches are related. According to the research, the more creativity generating and complex thinking styles are related to holistic modes of thinking. The more simplistic thinking styles are related to analytical modes of thinking, which has implications for science instruction and for gifted curriculum. Among some of the issues explored for gifted learners are the implications involving thinking styles. An example is one in which teachers tend to give better grades to those who have thinking styles that match their own. This finding may also impact the interactions school leaders have with stakeholders.

*Leaders as Critical, Successfully Intelligent, and Wise Thinkers*

Sternberg (2004) demonstrated the need for critical, intelligent, and wise thinkers. Sternberg attempted to predict the future of the United States based upon the ability to accomplish this task. In exploring this idea, Sternberg found four possible futures for America that can be determined by the educational system and argued for the need to be
successful wise critical thinkers. Sternberg argued that critical thinking requires skillful
analysis and evaluation, emphasizing the importance of being able to distinguish between
true and false, credible and incredible, rational and irrational, and the ability to determine
the correct argument for a relevant conclusion. All of these thinking skills are necessary
in order to be able to function beyond merely surviving in society. Without these skills,
we are ill-equipped for leadership and lack problem-solving skills. Without these
abilities, the school environment will likely be dysfunctional and cycle through confusion
and disarray.

Sternberg (2004) described the higher capacity of deep thinkers with creative
skills as those with the ability to (a) generate new ideas, (b) analyze the ideas
(determining the good ideas from bad), (c) exhibit practical knowledge in knowing how
to implement the ideas, and (d) persuade others to value the ideas. This ability has been
described as thinking outside of the box. Sternberg also emphasized the need to have the
ability to create and sell ideas. He cautioned against the assumption that ideas will sell
themselves and explained that new or different ideas are usually viewed with suspicion
and distrust, emphasizing that people are comfortable with current views of thinking and
become uncomfortable with change. Sternberg cautioned educators against the narrow-
mindedness that can be found in those who have achieved an expert level of intelligence.
Without a commitment to learning as a lifelong process, knowledge can both facilitate
and impede creativity. If the latter occurs, there is a loss of achieving the highest potential
that knowledge can offer.
Resilience was also emphasized by Sternberg (2004). We must be able to identify and surmount obstacles and be able to encounter resistance, looking and listening beyond the opposition that attempts to prevent moving forward. Sternberg advised the development of awareness of well-known figures in society who have faced and overcome opposition, and creative people whose ideas were not welcomed but held to their beliefs. The key is to be prepared to confront similar obstacles and participate in brainstorming strategies that will develop this intelligence. To build upon this thought, Sternberg encouraged another way to develop successful thinkers by sensible risk taking, reiterating that creative people take sensible risks and produce ideas that others ultimately admire and respect. However, Sternberg stated that successful intelligence may not be enough given the many examples of society in which smart and educated people have lacked something fundamental from their intelligence.

Sternberg (2004) emphasized that we must teach that it is important and not just what one knows, but how one uses what one knows, and whether one uses it for good ends or bad. Sternberg argued against the tendency to only look out for one’s own interests but also but for the interests of others. Sternberg argued that knowledge only is insufficient in producing the future we hope to create. Knowledge does not guarantee satisfaction, happiness, or the behavior that looks beyond one's self interests. Wisdom is better attainment of goals, can be taught to others in all subjects, and provides a way to develop a more harmonious world. Sternberg provided examples of previous world dictators that were good critical thinkers, but lacked wisdom and ultimately caused insurmountable harm and death. Sternberg emphasized that students benefit from
learning to judge rightly, soundly, and justly on the behalf of their communities.

Sternberg believed that the greatest thinkers in history, and the truly great people were not necessarily those who distinguished themselves on tests but those who distinguished themselves for their creative and practical accomplishments that make a difference and shape the environments in which they lived.

*School Turnarounds*

Another strategy used by school reform experts is to study schools that have turned around from low performing to high-performing and to identify factors within the schools that caused the decline in the first place that might have hindered the transformation. Duke (2006) emphasized that the only stories that are told in school reform are the successful ones. He added that there is much to learn from the unsuccessful ones but, of course, those stories are never told. Duke highlighted the reliance upon the experience of veteran educators, and key components of the school improvement process. Among the most integral components discovered are 11 characteristics of successful school turnarounds that are important in training specialists. These characteristics are (a) prompt assistance for students having difficulties, (b) teacher collaboration, (c) the use of data in decision-making, (d) actions of leaders that set the tone for others, (e) organizational structure to support student academic achievement, (f) ongoing professional development to sustained results, (g) alignment among curriculum, instruction, and testing, (h) regular assessments that measure progress, (i) high expectations of students, (j) positive communication with parents
throughout the process of improvement, and (k) adjustments in the schedule to create more academic time.

Duke (2006) argued that more research is needed in six areas including the process of school decline, the nature of teamwork, the effectiveness of specific interventions, midcourse corrections, unanticipated consequences, and specific personnel issues. Many questions were posed around each of these general topics and it was suggested that further exploration is needed. Still, within the investigation, many successful strategies were discovered. One school was highlighted for the process of academic review and it was noted that there is a right and wrong way to conduct this process. The most highly productive way of implementing the academic review process was in roundtable meetings in which participants received student background information prior to the meeting. During the meeting, time was devoted to discussing how to make immediate instructional adjustments to support individual students and to assign responsibility for the interventions that involve reporting back on progress at the next roundtable. This is an example of effective teaming that has been instrumental in many school environments in the school improvement process. It is also been mentioned that in the road to recovery from low performance that there will be pitfalls in implementing change. Duke (2006) highlighted the research of Fullan (2005) in an effort to caution those involved in the school improvement process to expect that things will get worse before they get better. The key is to learn from those who have gone before us and to expect that there will be challenges at different stages of the improved day-to-day process. Schanin and Reiter (2007) highlighted a process of change in four stages: entry
into the process, implementation of the process, assimilation of the process, and assessment of the results of the change. It was argues that using this process empowered parents and teachers.

Description of Level 5 Leaders

Collins (2001) argued that level 5 leaders can be developed over time and could be discovered all around us; he illustrated the progression of a level 5 hierarchy of leadership. This hierarchy is based on different characteristics, competencies, and accomplishments at each level. Leaders at level 1 produce results and have good work habits. Level 2 leaders have a say in group projects as contributing team members. Level 3 leaders have demonstrated the ability to organize people and resources toward the accomplishment of a goal. Level 4 leaders have performed at higher levels than others and partnered in the accomplishment of overall visions and commitments. After successfully proceeding through all four levels, level 5 leaders build lasting greatness by obtaining both humility and the intense professional will to accomplish the mission of their organization. Collins emphasized that a leader does not necessarily need to master all 5 levels in sequence, but all level 5 leaders do successfully accomplish all that is demanded on the preceding levels.

Distinguishing Factors of Highly Successful School Principals

Gray and Streshly (2008) studied highly successful principals in order to identify certain characteristics and behaviors that cause schools to be very successful. This study built upon the research of Collins (2001) that sought to establish whether or not the qualities of CEOs in good-to-great companies were related to behaviors in highly
successful public school principals. The results of the study indicated leadership qualities exhibited by principals who have been very successful in increasing student academic achievement regardless of the obstacles they may have faced. The study also explored the similarities and differences between school principals and business leaders and identified universal leadership attributes applicable to the business and social sectors, both private and public. The outcomes of the study were designed for those who aspire to be successful school leaders while taking into consideration the needs of the 21st century.

Gray and Streshly (2008) discovered that successful school leaders exhibit a wide range of personalities that contain specific solid core leadership qualities and characteristics that attribute to the accomplishments of their schools. This qualitative study identified elements necessary to produce great schools and explored characteristics of the principals that can be correlated with long-term educational success. It also identified the absence of leadership characteristics that cause failure in the accomplishment of goals in low-performing schools of comparable demographics. The outcomes in the Gray and Streshly study revealed a close alignment of the results in the Collins (2001) study with one key distinction between CEOs and the highly successful school principal, which was that the highly successful school principal had the ability to build relationships among faculty. Chapter 5 will include recommendations for future research. One recommendation is to survey students to determine if the ability of school leaders to build relationships with students is a quality of a good leader. The other actions that were aligned with the outcomes of the Collins (2001) study of executives of Good-to-great Companies are as follows: (a) exhibited hedgehog concept, (b) confronted the
brutal facts, (c) had ambition for success of the school, (d) understood how to select people and put them in the right positions, (e) exuded a culture of discipline, (f) exhibited duality of professional will and personal humility, (g) had compelling modesty, and (h) had unwavering resolve.

The highly successful school principals exhibited the hedgehog concept in the Gray and Streshly (2008) study by being passionate about student academic achievement, being clear about the strengths and the purpose of the school, and by lining up behaviors to address this specific focus. These administrators exhibited the ability to confront the brutal facts by obtaining real data including the analysis of student academic achievement and demographics with a commitment to work through challenges regardless of the obstacles. Beatty (2007) described this process as the uneasy partnership of school improvement in school effectiveness. Petrides (2006) emphasized the need to build trust among others by taking the focus off of who is not performing and target the improvement process. Chaltain (2007) cautioned against the use of snapshots data and isolated parts of the system because deeper problems do not get resolved.

The principals demonstrated ambition for school success by encouraging professionalism and leadership among staff, developing school leadership successors, and putting the school before personal ambitions. They also exhibited the ability to understand how to select people and put them in the right positions because they had the latitude to hire and fire staff. These principals remained persistent in getting the right people even if they had to maintain less successful staff for a short period of time. The highly successful school principals exuded a culture of discipline without
micromanagement tactics by promoting teacher responsibility in focusing on student academic achievement. These administrators exhibited duality of professional will and personal humility because they were humble while being fearless and acted as buffers during times of conflict between the school and outside forces. The highly successful school principals had compelling modesty in giving others the credit for successes while taking the blame for failures. Finally, these principals had unwavering resolve by exhibiting relentlessness, aggressiveness, persuasion, and continuous involvement in the primary operations of the school.

The distinguishing factor in highly successful school principals in the Gray and Streshly (2008) study was the ability to build relationships with staff members. This trait is deemed necessary because a collaborative school environment requires teamwork and the development of professional learning communities. Effective communication is also a requirement of the school principal. Without effective communication and the ability to build and maintain positive relationships with stakeholders, the results indicate that there is a likelihood of failure in accomplishing school goals.

*Ongoing Exposure to Teaching*

For an administrator, Culross (2004) argued for the necessity of continuing the practice of teaching as a priority regardless of the demands that other roles in administration may bring over a school year. Culross emphasized that teaching helps measure knowledge and skills, and allows for better decision making due to ongoing hands-on experience.
Responsibilities of School Leadership

Marzano, Waters, and McNulty (2005) identified 21 responsibilities of school leaders based upon the correlations they have with student academic achievement. The 21 categories of behaviors highlighted were referred to as responsibilities based upon the examination of 69 studies in a meta-analysis. The outcome of the study indicated that the behaviors had a significant relationship with student academic achievement and were described as behaviors of school leadership that work. These 21 behaviors are identified as (a) affirmation, (b) change agent, (c) contingent awards, (d) communication, (e) culture, (f) discipline, (g) flexibility, (h) focus, (i) ideals/beliefs, (j) input, (k) intellectual stimulation, (l) involvement in curriculum, instruction, and assessment, (m) knowledge of curriculum, instruction, and assessment, (n) monitoring/evaluating, (o) optimizer, (p) order, (q) outreach, (r) relationships, (s) resources, (t) situational awareness, and (u) visibility.

All of the 21 responsibilities were found to have a significant relationship with student academic achievement. The outcomes for Marzano et al. (2005) were also aligned with the description of the characteristics of successful CEOs of good-to-great companies in the Collins (2001) study and highly successful principals of good-to-great schools in the Gray and Streshly (2008) study, but are explained in different terms or categorized as a single behavior, whereas in the good-to-great studies they would be deemed as sub behaviors within a larger characteristic. For example, Marzano et al. identified affirmation as a responsibility in which the school principal recognizes and celebrates accomplishments while acknowledging failures. This characteristic is also present in both
good-to-great studies but is described in different terms. In the good-to-great studies, affirmation is described as compelling modesty which is the ability to assign credit for successes to others and take personal blame for failures. The element of the compelling modesty of the level 5 leader description in the good-to-great studies is that leaders affirm others by giving them credit for successes while taking the blame for failure.

Among some of the differences in the Marzano et al. (2005) results from Collins (2001) and Gray and Streshly (2008) is the responsibility to (a) recognize and reward individual accomplishments through the responsibility of contingent rewards, (b) establish a set of operating procedures and routines known as the order responsibility, and (c) to provide teachers with materials and professional development necessary for the successful execution of their jobs known as the resource responsibility. The outcomes of the studies highlighted have been critically assessed to determine the variety of research perspectives and outcomes in the areas of school leadership, charter schools, inner-city issues, school reform efforts, and needs for quality education in the 21st century. Each component of the literature review is essential to understanding the many different facets of the background of this study and the critical aspects that affect the outcome of the results.

Summary and Conclusion

The need to identify characteristics for urban charter school leaders in the 21st century is well documented. The literature explores the (a) needs of the 21st century, (b) progress and history of school reform efforts that impact the current state of education, (c) unique issues of urban schools, (d) charter schools, and (d) leadership characteristics
that cause success in both the business and education sectors. The gap in the research is in identifying leadership characteristics in urban charter schools specifically that can be attributed to leaders’ success regardless of the obstacles they face. Understanding the characteristics that cause the success of inner-city charter school leaders could raise student academic achievement and decrease the achievement gap, provide leaders with new knowledge to help them become successful, and transform inner-city charter schools in the 21st century. Many of the barriers that may prohibit educators from becoming successful inner-city charter school leaders may never be eliminated totally, but the results in this study may increase the knowledge of what is needed to be successful and how to access tools and utilize strategies that lead to success. Chapter 3 describes the application of the qualitative methodology, its overall approach, and its rationale. In this chapter, there is a presentation of the design of the study, research approach, interview questions, data gathering, and data analysis procedures. Chapter 4 provides the demographic results in the semistructured interviews and a discussion of the relationship between the research questions and the findings. Chapter 5 presents a conclusion, implications, and recommendations drawn from the literature review, the study methodology, and the data.
CHAPTER 3:
RESEARCH METHOD

This study addressed the problem regarding the lack of successful inner-city charter school leaders. In order to enhance the selection and development process of strong leaders, it is important to identify characteristics that can be attributed to a leader’s success in guiding inner-city charter schools. The problem can be resolved through the contributions of this study to improving the selection and development of successful inner-city charter school leaders. Ultimately, student achievement will rise and the transformation of schools will occur.

Research Design

This research project was a qualitative exploratory multiple case study with a theoretical framework and an inductive approach. Five different leaders were the subjects of this multiple case study that was explored inductively in an attempt to identify characteristics and behaviors that are attributed to the success of leaders of inner-city charter schools. Although all 5 leaders to be utilized for this study serve in the state of Ohio, the findings of the study can be applied to all states. The participant selection process involved using demographic data from the Ohio Department of Education that match the criteria needed for the study. Three successful leaders and two comparison leaders of inner-city charter schools in the state of Ohio were selected based upon the demographics that closely match the criteria of the inner-city reflected nationally in areas of high need. The selected demographic also reflects the areas that include both elementary and middle school students, allowing the opportunity to study leaders serving
areas that include middle school populations. Much of the literature reviewed in chapter 2 underscores the challenges in areas of high need (Ambach, 2006), and this involves serving middle school students through strategizing dropout prevention, emphasizing higher learning, and preparing these children to compete in the global economy (Freidman, 2007). All of these issues are stated to be contentions for schools beginning at the middle school level, and therefore, that age group was utilized for the study (Bushaw, 2007).

The successful leaders selected for this study were those working in schools with an enrollment of more than 200 students, including grades 4-8, with a 60% or higher poverty rate, and who have sustained an effective school rating or better in the state of Ohio for more than 3 years. If there were more than three leaders that meet the criteria for successful inner-city charter school leaders, they were chosen randomly. Comparison leaders selected for the study were also those also working in schools with an enrollment of more than 200 students, including grades 4-8, with a 60% or higher poverty rate, but who have not obtained an effective school rating or better in the state of Ohio for any of the last 3 years, or could not sustain an effective rating or better for a period of 3 years consecutively. The public data provided by the Ohio Department of Education relating to the number of students enrolled in inner-city charter schools, the percent of the poverty rate, and the school rating were used as criteria for selecting the participants.

Charter schools have existed in Ohio since 1998. In this state, all public schools, including charter schools, participate in state achievement testing and are rated in one of the following categories: academic emergency, academic watch, continuous
improvement, effective, and excellent. The ratings are dependent on whether or not 75% of the student population or better pass state achievement tests in each subject at each grade level. Schools are also measured based upon attendance percentages and graduation rates. For this study, leaders were selected based upon whether or not each school leader serving in the urban has achieved an *effective* rating or better and sustained it for a period of three years or more. The 3-year period was used for this study because charter schools in Ohio have only existed since 1998. In the first 3 years of each school’s existence, the school is not given achievement ratings even though it does participate in state achievement testing. The state gives each school a grace period of 3 years before releasing achievement test results to the public and rating them according to state standards. For this study, the leaders selected have been serving in schools that have existed for more than 5 years in the urban with a high percentage of students living in poverty, including those from middle school.

The process of this study involved reviewing public demographic data, creating a demographic questionnaire, and having two researchers do observations and interviews. The focus was on identifying characteristics and behaviors that are attributed to the success of leaders of inner-city charter schools, determined inductively by exploring multiple cases involving 5 leaders: three successful and two comparison leaders. Participant selection was based upon specific school demographics. The criteria for leadership selection were based on those leaders working in schools with an enrollment of more than 200 students, including grades 4-8, with a 60% or higher poverty rate, and who have sustained an *effective* school rating or better in the state of Ohio for more than
3 years. If there were more than three leaders that met the criteria, they would have been chosen randomly. This researcher used the public data provided by the Ohio Department of Education to identify leaders that met the criteria. The method of establishing a relationship with the research participants was through an introductory electronic mailer and a follow up introductory phone call to establish commitment to the process. Participants who made the commitment were given a gift registration to the state National Charter School Conference in the 2008 or 2009 school year.

Before beginning the interview process, school leaders were asked to complete the demographic information questionnaire. Based upon the information in this document, three successful inner-city charter school leaders and two comparison charter school leaders with the same demographics were selected as study participants. The interview was recorded and notes were taken on a laptop computer as a backup for the recording. When clarification or additional information was needed, the school leaders were contacted via phone or video conferencing in order to obtain the necessary facts.

Qualitative Research

Corbin and Straus (2008) described qualitative research as the ability to step into the world of participants to see their points of view in order to make new discoveries to create empirical knowledge. They described a qualitative researcher as one who is curious, creative, and not afraid to trust his or her instincts. Qualitative research can be contrasted with quantitative research in that qualitative research allows the researcher to get an inner experience of the participants to discover variables rather than to test existing variables. This study did engage in the process of qualitative research in that it
allowed the researcher to explore the inner workings of the successful inner-city charter school leaders and comparison leaders through the process of induction, causing concepts and themes to emerge.

Miles and Huberman (1994) emphasized the strengths of qualitative data, which focus on naturally occurring events and on the lived experience of people in order to interpret real-life circumstances. Thus, these data are well suited for interpreting the meaning of events, processes, and structures and connecting them to the social world around them. Qualitative data have been advocated by Miles and Huberman (1994) as the best strategy for discovering information, exploring a new area, and developing hypotheses. This study focused on the experience of leaders, the interpretation of their characteristics and behaviors, and the relationship that these factors have to their success, or lack thereof.

Corbin and Straus (2008) emphasized the many different properties of qualitative research. The authors contended that good qualitative research exhibits the following characteristics: (a) a humanistic bent, (b) curiosity, (c) creativity and imagination, (d) a sense of logic, (e) the ability to recognize diversity as well as regularity, (f) a willingness to take risks, (g) the ability to live with ambiguity, (h) the ability to work through problems in the field, (i) acceptance of the self as a research instrument, and (j) trust in the self in the ability to see value in the work that is produced. This study has incorporated all of these components as elements within the study.
Reliability and Validity

Miles and Huberman (1994) noted that issues of instrument validity and reliability are dependent upon the skills of the researcher. Meanings emerging from data have to be tested for strength and confirmation, and the authors defined this process for obtaining validity. According to Miles and Huberman, the researcher is responsible for removing potential biases to ensure validity. All important observations in a study should be included rather than selecting those based on the researcher’s personal views and preferences. Two surveys were utilized for this study. The first survey (Appendix B) was sent to participants with consent forms. This survey requested basic demographic information such as highest education level and number of years employed in education. The second survey (Appendix C) was used to guide the interview process. This series of questions was modified from the Gray and Streshly (2008) study.

During the process of data collection and analysis, for validity purposes, this researcher engaged a fellow doctoral student familiar with inner-city charter schools to allow for two sets of data comparison. There were two stages of data collection: observations and interviews. During the observation stage, each researcher recorded a separate set of data and compared each other’s data at the completion of the observation. The observation data were open coded by each researcher based upon concepts that emerged and then compared again. The same process occurred during the interview process with the participant. At the completion of each stage of data collection and open coding of both researchers, this researcher engaged in axial coding separately from the second researcher and then compared the grouped concepts or themes.
Research Questions

The following research questions guided the study: What characteristics and behaviors are exhibited in successful inner-city charter school leaders that relate specifically to student academic achievement? What characteristics and behaviors identified in the outcomes in this study were not mentioned in the previous Gray and Streshly (2008) study? The specific questions that were used to guide the observations can be found in Appendix A, and the interview questions can be found in Appendix C.

Informed Consent

The permission of the Institutional Review Board was obtained to solicit information for this study from inner-city charter school leaders. Establishing a relationship with the research participants was done through an introductory electronic mailer and a follow up introductory phone call to ascertain commitment to the process. Participants that did commit were given a gift registration to the state Charter School Conference for 2008. Participants involved in the study were sent two different surveys. The first survey (Appendix B) was a demographic questionnaire accompanied by a consent form (Appendix D), and those were sent to each of the 5 leaders. The first 3 leaders were classified as successful and the other two were utilized for the comparison study. The second survey (Appendix C) was a series of questions modified from the Gray and Streshly (2008) study to guide the interviews for the qualitative study. Participation in the study was completely voluntary.

A deadline was given for the return of consent forms. If the consent forms were not returned within 10 days, the researcher planned to send out additional e-mails and
make further phone calls to encourage participation. When the researcher received completed consent forms from a participant, an e-mail was sent or a phone call was made to set up the interview process. The second survey (Appendix C) was made available to the interviewee via e-mail.

**Ethical Protection of Respondents**

First, the researcher explained to all participants that they would maintain their anonymity in the study. Next, they also were made aware that no negative statements or derogatory statements would be made about their school system or their leadership. Interviewees were informed of their right to refuse to participate in that all risk of reprisal cannot be guaranteed. Finally, the researcher followed all the requirements established by Walden University regarding the use of human beings in research, and she secured letters of consent from the participants involved in this study.

**Confidentiality**

Participants in the study will remain anonymous. They were observed in a variety of activities and situations and participated in a recorded face-to-face interview. Although they were quoted when needed, they were not identified. To hide their identities, pseudonyms were used for the participants and the schools in which they work. All data will be securely maintained and locked in a safe by the researcher for a period of 5 years.

**Criteria for Respondent Selection**

The first group of participants for this qualitative study was selected based on their positions as inner-city charter school leaders who have sustained success over a
period of 3 years or more with state testing results from the Department of Education for the particular state in which each one resides. The second group of participants in the study was identified as the comparison group based upon their positions as inner-city charter school leaders who have matching demographics to that of successful inner-city charter school leaders.

Data Collection

There are many sources of data in qualitative research. Corbin and Straus (2008) identified a variety of ways in which the researcher can collect data alone or in combination such as: (a) interviews, (b) observations, (c) videos, (d) documents, (e) diaries, (f) memoirs, (g) newspapers, (h) biographies, (i) historical documents, and (j) autobiographies as well as other sources. The primary sources for this study were documents, observations, and interviews. The documents that were analyzed are the demographic questionnaire in Appendix B, the Department of Education demographics report, the data results of the observations included in Table 1, and the interview questions in Appendix C. Both the observations and interviews were flexible and open ended in order to allow ample opportunity for inductive exploration.

There were two stages of data collection: observations and interviews. An open coding process was used by both researchers at each stage of data collection and compared. In order to connect related concepts or themes, the two researchers used an axial coding process. The first stage included observations of the school leaders engaged in various contexts and activities. During different time segments, each researcher observed inner-city school leaders in action and recorded their observations. Examples of
activities that were observed are included in Appendix A. The second stage of data collection was the interview stage. Prior to the interview stage, the primary researcher asked the participant to complete the questionnaire included in Appendix B. This questionnaire provided insight on the background and perceptions of the leader. After the demographic questionnaire was completed, the interview began.

During the interview stage, this researcher asked a series of 12 questions. These 12 questions sought to identify characteristics and behaviors attributed to the success or lack of success of the leaders. The interviews were semi-structured and flexible with an open framework, allowing for two-way communication for extensive exploration and an opportunity to place emphasis on the perspectives of the interviewees. Each interview was recorded and notes were taken on a laptop computer as a backup for the recording. If clarification or additional information was needed, the school leaders were questioned again in order to obtain important information. In this portion of the study, like Collins’s (2001) research, during the interview process, there was an emphasis on the perspectives of the interviewee. The same process was used to find patterns in the stories of the highly successful principals interviewed in the Gray and Streshly (2008) research. Interview questions selected for the study have been modified from the Gray and Streshly study on good-to-great schools, and have been tested for reliability and validity in this study.

The researcher interviewed, recorded the interview, collected data, analyzed the data, and summarized the results. Data collection was conducted in person. The interview was recorded and a laptop was used for taking notes to back up information. Various concepts were explored through a series of 12 questions related to experiences of the
inner-city charter school leaders. The focus of the interviews and the data collected was upon the perceptions of the interviewees. There were a total of 5 interviews conducted. Three of the interviews were with successful inner-city charter school leaders that have sustained success for 3 or more years. Two of the interviews were with comparison leaders to serve as demographics. Note cards were used to record each new variable that revealed itself from each interview.

Each related variable was grouped within a concept and coded according to that concept. Variables or concepts that existed in individual interviews were eliminated from the study. Variables or concepts that existed in all three successful inner-city charter school leaders that did not exist in comparison leaders were noted as variables attributing to the success of the inner-city charter school leaders. If two of the successful inner-city charter school leaders identified a common variable not represented in comparison schools that was not identified for the third successful leader, a follow-up interview was conducted with this third leader for clarification. If the variable or concept was still not identified in the third successful school leader, the variable was identified as a variable in two of the three successful leaders.

The variables and concepts that emerged from the study were compared with the variables of highly successful principals in the Gray and Streshly (2008) study. Results were categorized as confirmed, not confirmed, not revealed, or as a new variable. Results that were confirmed were those that were noted in the Gray and Steshly study as variables attributing to the highly successful principals. Results that were not confirmed were those noted in the Gray and Steshly study that this researcher’s findings contradict
in some way. Results that were not revealed were those in the Gray and Steshly study that were closely related to the findings in this researcher’s study but were not categorized or were indicators of success according to participants. Results indicated as new variables were those concepts that emerged from this researcher’s findings that were not indicated in the Gray and Steshly study. Specific emphasis of new variables was placed upon issues relating to inner-city charter schools that do not exist in the schools participating in the Gray and Steshly study. This research was conducted with prior permission of the school district and was in compliance with the requirements established by Walden University regarding the use of human beings in research. In addition, letters of consent were secured from the participants involved in this research.

**Instrumentation**

This researcher and a fellow doctoral student who has worked within inner city charter schools for more than a decade served as the primary instruments for observing, interviewing, carrying out document analysis, and collecting and analyzing data. Miles and Huberman (1994) emphasized the markers of a good qualitative researcher-as-instrument as: (a) familiarity with the content in this setting under the study, (b) strong conceptual interests, (c) a multidisciplinary approach, and (d) good investigative skills. This researcher and her fellow researcher each have experience in the development and leadership of an inner-city charter school, as well as all content, concepts, and various approaches of the study.

Both researchers had experience using the Janesick (2004) observation methods and exercises, as well as identifying characteristics and behaviors of leaders that were
presented as concepts or themes. The interview protocol was developed and had been used in a similar way first by Collins (2001) and later by Gray and Streshly (2008) with modifications. The interview questions used can be found in Appendix C. These questions were modified from previous studies to reflect issues related to inner-city charter schools. The questions had been tested in the previous study for reliability and validity.

Observations

The first stage of data collection included observations of the school leaders engaged in various contexts and activities. During certain time segments, observations of inner-city school leaders in action were recorded. Examples of the activities that were observed are included in Appendix A. The observations were conducted by this researcher and a fellow doctoral student knowledgeable about inner-city charter schools, as indicated in the explanation of instrumentation and methodology.

During the observation stage, each researcher recorded a separate set of data and compared one another’s set at the completion of the observation. An open coding process was used by both researchers at each stage of data collection and then compared. The observation data was open coded by each researcher based upon concepts that emerged and then compared again. In order to connect related concepts or themes, the two researchers used an axial coding process.

A laptop computer was used for taking notes in all observations. Some observations were videotaped based upon the comfort level of the participants and if permission was granted from the necessary parties. Examples in which videotaping may
be included were situations that involved simultaneous activities or engagement from any interaction and reactions involving participants. One specific example may be a meeting that was being held by the leader in which there was a need to observe the reactions and interactions of everyone in the room.

Interviews

Merriam (2002) emphasized that interviews are conducive to allowing researchers to communicate with participants in order to understand their point of view or a particular phenomenon. There are a variety of interview types ranging from highly structured to very unstructured. In this study, this researcher utilized a semi-structured interview approach modified from the Gray and Streshly (2008) study. Merriam described a semi-structured interview as exploratory and open ended in order to obtain better information about perceptions and meaning. There was also a semi-structured survey developed to guide the interview process. This survey was sent to each participant in advance with a note indicating that additional information provided during the interview would be appreciated. At the conclusion of the interview process, transcripts were emailed to the participants to allow for the opportunity to add, clarify, or expand their thoughts.

Interview Questions

The following 12 research questions are modified from the questions in the Gray and Streshly (2008) study and guided the interview:

1. What kind of leadership style do you think you have? What kind of leadership style would your staff say that you have?
2. Take a minute to write down the top 5 factors that you think have contributed to school success in improving student academic achievement performance. When you think you have the top 5, number them in order of importance with one being the most important factor. Let me know what you have written beginning with number one.

3. Give some examples that illustrate the factors that you chose as the top 5 factors contributing to the school’s success.

4. What decision did the school make to initiate an increase in student academic achievement during the years prior to achieving success? What sparked that decision?

5. What process did you and the school staff use to make key decisions and develop key strategies that led to the increase in student academic achievement performance at the school? (This is not what decisions the school made, but how you went about making them.)

6. How did the school gain commitment from everyone to agreeing with its decisions? Teachers, parents, students? Give me a specific example of how this took place.

7. What did you do to ensure that teachers continue to focus on improving student test performance?

8. What did you try that didn't work during the years before attaining a positive school ranking? Why didn't it work?
9. Many schools undertake change programs and initiatives, yet their efforts do not produce much in the way of results. One of the remarkable aspects of your school’s transition is that it moved forward over several years, and was not just a short-term upswing. We find this extraordinary. What makes your school different? What were the primary factors in maintaining the rankings of similar schools over the years? What efforts did you make to ensure that the school continued to sustain its success?

10. When you think about your work here, where you most proud of? When you leave your position as school leader, what do you want to be remembered for?

11. What unique challenges of inner-city schools have you overcome that you think have attributed to your success as a school leader? What unique challenges of the 21st century have you had to overcome that have attributed to your success?

12. What else would you like to tell me about the reasons for the success of your school in raising student academic achievement?

Data Analysis

Corbin and Straus (2008) described analysis as the act of giving meaning to data or the process of examining something in order to find out what it is and how it works. Corbin and Straus illustrated the performance of analysis as breaking a substance into various components to examine them closely and to categorize them according to their properties and dimensions. Inferences made about the data during analysis rely upon the experience and training of the researcher.
This was a qualitative exploratory multiple case study with an inductive approach. This researcher, along with a fellow researcher, used both open coding and axial coding for validity purposes. Corbin and Straus (2008) argued that open coding and axial coding go hand in hand and serve different purposes, which is also true for this study. The open coding process was used first to break the data apart and identify concepts that stand for the data or determine what themes emerge from the data based upon their properties. Raw data were collected on note cards. Each piece of data was labeled with a concept and given a code name based upon the concept for analysis. Concept labels were based upon the researcher’s interpretation of what is observed and stated in the interviews. This process continued throughout each of the observations and interviews.

At the completion of the analysis of each of the observations and interviews, emerging themes that could be identified were noted and coded. Axial coding was used in the second step to put the data back together by relating the concepts and codes. Any concepts and themes that emerged were rated according to levels of importance as contributing factors to leadership success. These identified concepts and themes were compared with findings in previous studies of good-to-great schools as a means for checking the outcomes of those studies with the findings of this study. New concepts and themes that emerged in this study were noted as new variables identified in successful leaders of inner-city charter schools.

Summary

This qualitative exploratory multiple case study used an inductive approach through observations and semi-structured interviews to analyze common characteristics
and behaviors of successful inner-city charter school leaders in the 21st century. The researcher was responsible for each element of the study including its reliability and validity, as well as protecting the rights of participants. In this study, three successful leaders and two comparison leaders from inner-city charter schools were interviewed and observed in a variety of activities and situations. The data were collected, categorized, and analyzed to identify common characteristics and behaviors of successful inner-city charter school leaders in the 21st century. Chapter 4 provides the demographic results in the semi structured interviews and a discussion of the relationship between the research questions and the findings. Chapter 5 presents a conclusion, implications, and recommendations drawn from the literature review, the study methodology, and the data.
CHAPTER 4:
DATA ANALYSIS FINDINGS

Introduction

As educational systems advance into the 21st century, successful leadership is a concern for inner-city charter schools. This study was conducted to identify characteristics of successful inner-city charter school leaders. The researcher conducted a qualitative exploratory multiple case study with an inductive approach to identify which characteristics and behaviors successful leaders of inner-city charter schools have that unsuccessful leaders do not possess. According to school rating data, some leaders have been able to minimize the effects that various challenges have on their success. Therefore, the purpose of this qualitative exploratory multiple case study was to explore characteristics and behaviors that can be attributed to raising student achievement in successful inner-city charter school leaders by comparing the findings of leaders who have sustained success with others who have not. The demographics and identifying concepts and themes that emerged were analyzed and identified as new variables needed for successful urban charter school leaders. The following research questions guided the study: What characteristics and behaviors are exhibited in successful inner-city charter school leaders that relate specifically to student academic achievement? What characteristics and behaviors identified in the outcomes in this study were not mentioned in the previous Gray and Streshly (2008) study?

The criteria for selecting leaders for the study were based upon specific demographics from the Ohio Department of Education. Participants were leaders in
schools with an enrollment of more than 200 students, including grades 4-8, with a 60% or higher poverty rate who sustained an *effective* school rating or better in the state of Ohio for more than 3 years. To identify the characteristics and behaviors of successful inner-city charter school leaders, the researcher interviewed and observed three different successful people who fit this demographic and two comparison leaders with matching demographics who have not obtained success according to the criteria.

**Data Collection and Analysis**

Using a theoretical framework and an inductive approach, this qualitative exploratory multiple case study took place in the state of Ohio. Five leaders of inner-city charter schools were selected for this study. Three of the leaders were selected based upon the criteria for successful inner-city charter school leaders. Two of the leaders were selected based upon the criteria for comparison inner-city charter school leaders.

There were two stages of data collection: observations and interviews. The researcher observed these leaders in action during their daily activities and events. Examples of observations are included in Appendix A. These leaders also completed a demographic questionnaire that is included in Appendix B, which provided insight into their background and perceptions. The second stage of data collection was the interview stage. During this stage, this researcher asked a series of 12 questions, listed in Appendix C, in order to identify characteristics and behaviors attributed to the success or lack of success of the leaders. The interviews were semi-structured and flexible with an open framework, thus allowing for two-way communication for extensive exploration and an opportunity to place emphasis on the perspectives of the interviewees. The interviews
were videotaped and reviewed later so notes could be taken on a laptop computer as a backup for the recordings.

Data collected on all 5 subjects incorporated observations included in Appendix A, the demographic questionnaire included in Appendix B, and answers to questions and discussion that transpired from interview questions included in Appendix C. Notes were taken on a laptop computer by two researchers at each stage of data collection. Each researcher recorded data for each observation and interview individually. At the completion of the data collection process on all 5 subjects, both researchers examined their notes on the responses of observations and interviews with three successful inner-city charter school leaders and two comparison leaders. After the notes were compared, at each stage of collection, both researchers used an open coding process and compared the data again. At the completion of data recording, both researchers again compared notes to ensure the reliability and validity of the outcomes. The researchers then condensed the notations into chunks of information and coded them as comprehensible names or abbreviations. For example, during the interviews, participants were asked a question about what 5 factors contributed most to their school success. A common answer involved some form of staff development, yet the answer was stated differently by each participant. Some participants in the study used the words “teacher training,” others “professional development,” and still others “training sessions.” The content gathered for this category was coded as “S D,” which stood for staff development.

After each researcher agreed upon the outcomes of the field notes and codes for each concept, the process of axial coding began. During this process, the researchers
together were able to connect certain concepts from the codes. For example, during the interview process, it was discovered for all three successful leaders in the study that development content was nearly interconnected with selecting the right people, but the same was not true for comparison leaders. The successful leaders shared stories during the interviews of the importance of selecting the right people because of the turmoil they experienced when they had not employed qualified staff members. Many stories were told about the strategies taken to improve the hiring process and how in many cases even extensive training would not help some people become even minimally adequate for the role they needed to play. Importance was placed upon the need to first select the right person and then to have a strong development plan in place for them. Again, it was clear for these school leaders that the concepts of selection and development were highly interrelated. This revelation within the outcomes caused the researchers to decide to connect the two concepts and to characterize them as a theme called “the selection and development of people,” which is further illustrated in the findings. The tabulations resulting in such findings are illustrated in Table 1.
Table 1
Tabulation of Findings

x – Present at high levels
0 – Present at moderate to low levels
No marking indicates absence

<table>
<thead>
<tr>
<th>Characteristics and Behaviors</th>
<th>Successful Leaders</th>
<th>Comparison Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to work with urban students</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Accessible to stakeholders</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Affirms others</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Academic time (maximum use)</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Aware of school operations</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Change agent</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Clear and focused direction</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Communication strategies</td>
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<td>x</td>
</tr>
<tr>
<td>Community outreach</td>
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</tr>
<tr>
<td>Culture of achievement</td>
<td>x</td>
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</tr>
<tr>
<td>Culture of collaboration</td>
<td>x</td>
<td>0</td>
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<tr>
<td>Culture of discipline</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Data collection</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Flexibility</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Focus</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Goal setting</td>
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<tr>
<td>High expectations</td>
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<td>0</td>
</tr>
<tr>
<td>Holistic programming</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Knowledge of curriculum</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Knowledge of instruction</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Mission alignment</td>
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<td>0</td>
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<tr>
<td>Monitoring of goals</td>
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<td>0</td>
</tr>
<tr>
<td>Ongoing assessment</td>
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<tr>
<td>Problem solving</td>
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<td>Proven methods</td>
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<td>Purposeful platforms</td>
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<td>Relationships</td>
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<td>Resourcefulness</td>
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<tr>
<td>Safe and orderly environment</td>
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<tr>
<td>Selection of staff</td>
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<td>Staff development</td>
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<tr>
<td>Utilization of staff</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Vision casting</td>
<td>x</td>
<td>0</td>
</tr>
</tbody>
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After various stages of data analysis were completed, certain characteristics and behaviors were found to be exhibited within the study at high levels for the three successful leaders that were absent or only minimally present for the two comparison leaders. These characteristics and behaviors identified for the successful leaders were then identified as the 7 emerging themes of successful inner-city charter school leaders in the 21st century. These 7 themes were examined at the conclusion of the study for comparison with the background theoretical framework that served as the foundation for this study. The previous studies used were based upon results of Collins (2001) in the study of good-to-great companies and builds upon this with the Gray and Streshly (2008) study of characteristics of highly successful principals in good-to-great schools. The comparisons of the outcomes of this study are illustrated in chapter 5 in the theoretical framework section.

At stage two of the data collection process, interview questions were used to guide a discussion in the attempts to discover characteristics and behaviors within the three successful leaders that caused their success that were not exhibited in the comparison leaders. At times, the questions did not produce exact answers but the open discussion format allowed each participant the opportunity to reflect more deeply and to provide information that offered a picture of distinction between the two types of leaders in the study. The observations served the purpose of allowing researchers to see if the data collected during the interviews were accurate. For example, if a participant claimed to focus seriously on a safe and orderly environment, the school observation visit revealed whether or not this was true and at what level orderliness was present. Students
in all cases appeared to be at least minimally in order, but observations during transitions at lunch and dismissal clearly distinguished which leaders effectively implemented the need to have a safe and orderly environment and which leaders did not.

**Interview Questions**

The findings were organized by the results of salient data from interview questions of characteristics and behaviors that were exhibited during the observations and communicated at high levels in the interviews for the three successful leaders within the study but were absent or only minimally present in the results for the two comparison leaders. Certain interview questions were eliminated from the reporting within the findings that did not produce useful results. Some of the questions did not render results specifically to the question but were successful in providing related information to the study due to the flexibility of the interview format. In each of the interviews, participants provided information useful for identifying characteristics and behaviors within successful leaders that were absent or minimally present within comparison leaders.

The data collected during the observations were used to inform the researcher prior to interviews of further needed questioning, and to confirm or disprove the information gathered during the interviews. Out of the 12 questions used during the interviews, 5 questions rendered results that demonstrated common characteristics and behaviors present at high levels within successful leaders that were absent or minimally present within comparison leaders. Other results were obtained from dialogue that occurred during the interviews or during the observations. The interviews were open ended and semi-structured to allow participants to contribute additional or connected
thoughts to the questions. When participants contributed information that was not a direct response to the question, it was recorded and categorized according to related content within the questioning.

Five areas that rendered common findings from questions are explained and differences between characteristics and behaviors of successful leaders and comparison leaders are highlighted. After illustrating the outcomes of the data, there is an explanation in the findings of the 7 themes that emerged, indicating characteristics and behaviors present at high levels within successful leaders that were absent or minimally present within comparison leaders. These characteristics and behaviors also presented distinguishable actions or conditions present at high levels in successful leaders that were absent of minimally present in comparison leaders. Identifying these actions and conditions led to the development of the 7 themes. The tabulations resulting in findings of characteristics and behaviors present at high levels in successful leaders and absent or minimally present in comparison leaders are illustrated in Table 1. These 7 themes were examined at the conclusion of the study for comparison with the background theoretical framework that served as the foundation for this study.

The previous studies used were based upon results of Collins (2001) in the study of good-to-great companies and builds upon this with the Gray and Streshly (2008) study of characteristics of highly successful principals in good-to-great schools. The comparison of the outcomes of this study is illustrated in chapter 5 in the theoretical framework section. These actions and conditions are explored at length after first having been explored in chapter 4.
Five Factors that Contributed to School Success

School leaders in the study were asked the top 5 factors that they think have contributed to school success in improving student academic achievement performance and were asked to rank them in order of importance, with one being the most important factor. Most leaders in the study were not able to rank the factors in order of importance but they were able to list at least 5 factors that have contributed to their success. There were 27 areas that were present at high levels within successful leaders that were absent or minimally present within comparison leaders. The first of these areas were ongoing evaluations and goal setting.

Ongoing evaluations and goal setting. Evaluations and goal setting occurred at some level for all 5 of the school leaders in the study. The differences among leaders occurred within the number of data used, the type of data, the rate of data collection, and implementation of the findings. Everyone participated in data collection and used data in goal setting, but the three successful leaders engaged in this process continually. The three successful leaders varied in the way data were collected and what types of data were selected. However, all three successful leaders conducted ongoing evaluations and assessments and collected different types of data to establish goals and make decisions. All three of them were consistent in using the evaluation process as a regular part of the operations involving all stakeholders.

The three successful leaders used data from self-created assessments in which they measured targeted areas they or other key stakeholders had selected for a particular purpose. The outcomes of these data were shared regularly in some form although the
methods of communicating outcomes varied among leaders. For the comparison leaders, the main data used for goal setting and evaluation was the annual state achievement test, school rating data, and the state school report card. The successful leaders used this data but emphasized the need to collect ongoing incremental data along the way. For example, in specific areas of need, successful leaders measured the ability of the students to perform that skill or exhibit mastery every quarter or even sooner.

*Decision Making.* All school leaders in the study were asked what decision the school made to increase student academic achievement during the years prior to achieving success, what sparked that decision, and what latitude and restrictions they had in making those decisions. They were also asked what process they used with the staff when making decisions and planning strategies to increase student academic achievement. (This is was not what decisions the school made, but how the leader went about making them.) From this dialogue, characteristics and behaviors emerged that were present at high levels in successful leaders and absent or minimally present in comparison leaders. The three successful leaders emphasized the process of decision-making and indicated a series of ongoing decisions that were instrumental to their success. Rarely did these leaders take credit for any decisions or actions personally. They talked about the need to be aware of everything possible and to be involved at high levels in order to be positioned to make decisions quickly and then guide others in the process of implementing the decisions. During the observations conducted by researchers, there was a sense of thoroughness in the three successful leaders as evidenced by their ability to be visible and aware of their environment and the way they took time to address each issue,
big and small. When a leader became aware of a problem or area of concern throughout the school day, an immediate decision to address that problem was made. In some situations, problem solving was delegated. In other situations, the leaders recorded the need to address the issue and indicated a timeline for resolving it.

During the interview, each leader described different decisions when specifically discussing school programming. These differences were due to the diverse types of schools. The common characteristics and behaviors of the successful school leaders were in the amount of time it took them to make a decision and implement it as opposed to the comparison leaders. All leaders engaged in regular decision-making, but the difference was within the action taken and how quickly the decision was implemented. There was a sense of urgency for all three successful leaders to become aware of problems and to address the problems quickly. For comparison leaders, awareness of the need to make a change or a decision was present, but the implementation was not immediate or within a reasonable amount of time. Comparison leaders allowed some problems to perpetuate, which caused bigger problems, so they were not able to focus on the significant elements of student achievement that would cause success as it did for the successful leaders.

Vision for Their Schools. School leaders were asked what they want most and hope for in the future for their schools. During this line of discussion, school leaders began to share their dreams, dreams for their students and their futures. They shared dreams for the teachers, other staff, and extended community. For example, they spoke at length about their desire to see their students go to college, backed up by extensive college preparation programs. They even had pictures of alumni on the wall who were
attending or had graduated from college. Current high-achieving students had their grade point average posted alongside their picture. They also shared dreams for the school as an organizational whole and where it could be in the future in order to impact the lives of hundreds and even thousands of students. This discussion led to an awareness of what leaders do to develop a school culture that reflects the values of the leader and the organization.

All 5 leaders had hopes and dreams for their schools. The differences between the successful leaders and comparison leaders were related to the level of activity leaders spent in communicating and acting out a clear direction and vision. The successful leaders created an ongoing platform in which the leader could cast a vision and navigate a clear direction, something these leaders seemed to do naturally. They were able to pull people together and communicate a direction effectively. They engaged in this process regularly. They communicated whether or not each stakeholder was headed in the right direction regularly for all levels of the organization. If a member of the organization was off track, the leader created a plan for getting them back on track. If this plan failed, a number of attempts would be made, but ultimately if the member did not engage in activities aligned with the mission and vision and would not maintain the right direction, the member would likely lose his or her position. All stakeholders engaged in ongoing activities that involved casting visions and providing direction.

These characteristics and behaviors were present within comparison leaders as well, but there were a few distinguishable missing elements. Comparison leaders did not spend much time talking about the future or planning for it. All of the leaders in the study
were able to engage in daily activity with the students and cast a vision for their futures. All of the leaders envisioned effectively preparing their students for college and career and overall life. The difference of successful leaders and comparison leaders were related to be ability to cast an organizational vision. Successful leaders regularly cast vision for the organization and all the stakeholders within it. They navigated the steps along the way to achieving that vision. This was not observed or identified for comparison leaders. Additional questions were targeted for the comparison leaders related to this concept, but little information was yielded.

*Sustained Success.* School leaders were asked about their efforts to ensure that the school continued to sustain success. All participants in the study communicated the need to have team members within the organization who had a shared mindset. One difference between the successful leaders and comparison leaders was the level of expectation held among the leaders to succeed. The three successful leaders were relentless individuals who attacked challenges no matter how large and who expected success. They did not back down from the challenges of the inner-city or of being a school leader. The comparison leaders definitely gave what appeared to be their best efforts, but it was clear that they lacked the determination to persevere. In situations where the circumstances seem to present challenges that were too much to bear, the leaders decided to refrain from applying energy in that direction. In some situations, there was an apathetic attitude compared to that of the successful leaders. During the interview process, all leaders communicated thoughts about problem solving in a bold manner but during the observations, the level of energy directed at addressing challenges was clearly
distinguishable between successful and comparison leaders. During the interview, one comparison leader even stated that regardless of what he/she did, this particular problem would not change and so he/she had to take care of what was within his/her control. Successful leaders seem to persevere regardless of the challenge.

Holistic Needs Programming

Another difference that related to problem solving and educational programming in general was the ability of the successful leader to address holistic needs more effectively than that of the comparison leader. All 5 leaders had strategies for addressing holistic needs of students. Some had school nurses and counselors and some had particular extended day programming designed to meet various student needs. The characteristics and behaviors that were present at high levels within successful leaders and absent or minimally present within comparison leaders were that they continued to work to find the resources to address holistic needs. The needs of the inner-city students are vast largely due to the issues of living in poverty. The successful leaders were able to create an environment in which students living in poverty were not limited in their opportunities for learning, enrichment, or resources in the school setting. These students of successful school leaders were able to have opportunities just like many students living in higher socioeconomic conditions, even though the leaders have limited budgets and received more than 30% less funding than traditional public schools. Still, the leaders were able to succeed and meet the needs of students holistically. These leaders were successful by being resourceful with community partnerships and by targeting specific staff with particular talents to meet needs. Staff selection was done carefully by hiring
teachers that were also committed to extended day programming to address holistic needs. The staff was utilized as a resource for more than teaching a class. The leader was aware of their talents and used them in order to meet the needs of students and spur their interests to pursue new educational and life learning opportunities. Comparison leaders allowed their staff members to focus strictly on classroom teaching and had limited programming to address holistic needs due to what they deemed to be limited resources. Other results from data are further illustrated in the findings.

Findings

The data collection and analysis research process of the inner-city charter school leaders caused 7 specific identifiable concepts and themes to emerge. Specific characteristics and behaviors were present within successful leaders at high levels and absent or minimally present in comparison leaders. These characteristics and behaviors presented distinguishable actions or conditions existing at high levels in successful leaders that were absent or minimally present in comparison leaders. Identifying these actions and conditions led to the development of the 7 themes. The concepts and themes that emerged were identified as variables needed for successful urban charter school leaders. Salient categories of information were supported by data collected in the interviews and observations of the school leaders. The researcher looked for identifiable themes to emerge related to the success of the school leaders, which were as follows: Theme 1: Consistent Navigation, Theme 2: Holistic Focus, Theme 3: Shared Mindset, Theme 4: Mission Alignment, Theme 5: Resourcefulness, Theme 6: Shaping and Sustaining Culture, and Theme 7: Selection and Development of People. The 7 themes
that emerged from the study represent the results of common characteristics and behaviors of each of the successful leaders that were minimized or completely absent in comparison leaders. The tabulations resulting in these 7 themes are illustrated in Table 1.

*Theme 1: Consistent Navigation*

Successful inner-city charter school leaders have the ability to be highly engaged in daily operations while navigating the direction and big picture of the organization. The researcher’s data show that leaders who employ consistent navigation have clear direction and are faithful to their missions. Within the structure of their days and their involvement with stakeholders, these leaders cast vision in ways that include the big picture, daily actions needed to accomplish their missions, and communication strategies to achieve success. Part of the navigational process for these leaders is about modeling a strong work ethic themselves by working as long and as hard as anyone else. They arrive early to work and stay late. These leaders are visible and are aware of what is happening in all aspects of the organization.

The navigational process is no different for casting visions to students. Successful leaders create opportunities for students to envision their futures and make incremental progress towards accomplishing their goals according to the results of the study. College and university partnerships and visits occur regularly for upper-level students. Students are counseled individually and made aware of their strengths and weaknesses, their academic status, higher education opportunities, and future goals. For those students in need of improvement, plans are set in place to help them progress, which involve hard work for both students and educators.
Successful leaders constantly measure each element of the school to determine whether or not expectations are being met. They engage naturally in the process of quality improvement and use the results to improve current systems and to develop new systems where needed. They are not afraid to initiate change or to deal with difficult issues. Communicating the needs of the organization effectively, they provide direction on how to meet those needs. These leaders do not point out the direction from afar, but rather, they guide the process up close with high levels of involvement. Once a system for improvement is set in place and is deemed effective, and it is working as it was designed to do, these leaders delegate responsibility to trusted team members and then partner with these team members for ongoing monitoring for success. This process is continuous, cyclical in nature, and integral for the successful leader’s consistent navigational process.

Theme 2: Holistic Focus

Leaders who use holistic focus concentrate on the needs of the whole child or whole person from different vantage points within the organization. They are able to meet the needs of stakeholders by coupling the focus to achieve excellence with understanding and reaching out to meet individual needs. They approach each stakeholder as a vital family member who is to be treated with special care and concern, yet the leaders also couple this mentality with high expectations of the stakeholder. A common phrase that could be used to express this thought process is —to whom much is given, much is required." The essence of this expression came up so much that it was repeated almost verbatim or in the actions of the successful leaders, e.g., the leader who dealt with a
missed paycheck of an employee by addressing the problem personally with the accounting personnel without delay. In this study, this theme was best described successful Leader 1 who said that leaders must “eat the small stuff.” They strive to cover every detail and address problems as they arise, leaving themselves little room for surprise or lack of preparedness for a particular incident.

All 5 leaders in the study made regular attempts to address students’ holistic needs. Nevertheless, the three successful leaders in the study were constantly developing strategies for becoming aware of individual student needs and then utilizing staff members, creating programs, and even working one-on-one with the students. Successful leaders had more readily instituted ongoing programs to address needs of poverty, health concerns, and dysfunctional home conditions than that of comparison leaders. In some situations, successful leaders had partnerships with community organizations to extend a hand to the family of the student in need. The successful leaders expressed the desire to address these issues first if the student is going to perform academically. These leaders had an acute awareness of these student needs and how to meet them without broadcasting the actions to others, which, in turn, created a level of respect and appreciation from the students for the school leaders. As a result, these students tended to display more academic effort than in the past when their needs went unmet. Comparison leaders were heartfelt about the living conditions of their students but were not successful with implementing strong action plans to resolve the problems. Further explanation of these processes is included in the resourcefulness theme.
Along with addressing the holistic needs of students, successful leaders had strong accountability plans in place for all stakeholders, including the parents of the students in need. The school leaders communicated expectations to parents according to the ability of the parents to have control over a given circumstance. In some situations, the expectation was to have a parent ensure the student’s attendance at school every day all day in a case where extended day tutoring was necessary. A particular student may be struggling academically, but the school leaders felt this was largely attributed to absenteeism. The school leaders agreed to provide extended day tutoring in order to meet the student’s needs but expected the parent to ensure daily attendance in order to make the tutoring after school a viable option. If the parents did not comply with this plan, it was understood that continued truancy problems would be communicated to the court system so the student would likely be retained in school.

*Theme 3: Shared Mindset*

The process of sustaining a cohesive team with shared values is ongoing. Such team leaders focus primarily on the need to surround themselves with those of like minds, shared values, and vision, while balancing the team with diversity of backgrounds, skills, and knowledge. New ideas and challenges related to ways of improving programming are welcomed, while interpersonal struggles and loss of focus from the desired goal are not. Large amounts of energy are placed upon developing a strong cohesive team with members who share core values and purpose that dictate specific actions to be taken by each person. This cohesiveness is transferred to the students in that they are made to
understand the purpose of their education and how they are to spend their time and energy.

The successful leaders in this study are individuals who have a mindset to attack challenges no matter how large. They have big dreams for their schools and expect the institutions to succeed. They are strong believers in building people and programs through motivation, knowledge, and skill. All of the leaders in this study have opted, career wise, to work under urban conditions or circumstances deemed as challenging, and have removed themselves from comfortable work situations or what they describe as easy schools in which students have home support and few economic challenges. All leaders are aware of the challenges of the urban, but the mindset of the successful leaders can be best described as an acute awareness of the plight of inner-city youth and a passion to change their circumstances by elevating the students through education. Comparison leaders in the study have passion too but seem to accept defeat more readily than successful leaders. For example, Comparison Leader 1 said, “There is only so much time in the day” and Comparison Leader 2 said, “Well, we do what we can, but without the support of the parents it makes it difficult to make big changes.” Successful Leader said, “We do whatever it takes.” Successful Leader 3 said, “We want people who make things happen.”

In contrast, successful leaders are offended by those who accept defeat. They have the tendency to look beyond obstacles for solutions to insurmountable problems. They seem to be drawn to those individuals who are willing to roll up their sleeves and share in the challenges. They are not interested in those who are looking for comfortable positions
in which they can sit back and put in the time of their workday just to receive a paycheck. In fact, successful leaders work diligently to build a team of people that exhibit a mindset of getting down to business and are willing to do whatever it takes to get the job done. Their teammates are also willing to assume various roles depending upon the needs of the organization and partner with the leader to determine that role and know that it will change according to different circumstances.

*Theme 4: Mission Alignment*

Successful inner-city charter school leaders align everything they say and do with an overlying mission, a clear and direct one. All objectives, goals, and actions are set in place for the sole purpose of mission accomplishment. Curriculum selected for the educational program is research-based and proven to raise achievement and is specifically aligned with the mission of the school. Instructional strategies are also research-based and improved based upon achievement outcomes that result from having used the strategies. Courses, instructors, daily programming, staff development, parent communication, and community partnerships are all carefully calculated according to what will best help the school accomplish the main mission.

*Theme 5: Resourcefulness*

All leaders involved in the study have something in common: limited resources. It was discovered that charter schools receive one third less funding than their public-school counterparts in the state of Ohio, the state in which this survey was conducted. The reason for limited resources is unknown but is believed to be due to the lack of legislation in the state allowing property tax monies allocated for public schools to be used for
charter public schools, even though charter schools are also public. In cases where student enrollment is higher, resources are more plentiful, but all leaders experience limitations due to lack of funding. Facilities used for the schools represented in the study are not traditional school buildings but ones that had been converted to academic use from a previous use such as for church or business. None of the school buildings is similar to each other. Not only were the conditions and the facilities of these successful inner-city charter school leaders challenging, but the leaders’ access to resources is also challenging. Regardless of these financial challenges and limited resources, these leaders are able to provide a high quality education for students through resourcefulness and strategic partnerships with outside community organizations and, in some cases, colleges and universities. These leaders know how to make the most of the resources available to them for school success even when the resources are severely limited. Successful leaders engage in ongoing planning, for how they will utilize community resources to meet students’ holistic needs. For a further example on differences between successful in comparison leaders and how they utilize resources to meet holistic needs of students, see the holistic focus theme.

Theme 6: Shaping and Sustaining School Culture

Much emphasis was given by the successful school leaders upon the shaping and sustaining of school culture. This theme rated at a high level of importance as one of the top three factors in the success of inner-city charter school leaders. Among the top elements existing within the cultures of these successful leaders are a culture of achievement, discipline, collaboration, accountability, family-oriented relationships
among colleagues and stakeholders, and recognition and celebration of successes. Each
of these elements is different within each of the organizations but is present and highly
visible in every one.

A culture of achievement was established among all stakeholders within all
schools of the successful leaders. Successful leaders make a habit of collecting ongoing
data and using these data to make decisions, a strategy known as data-driven decision-
making. Individual needs are addressed, but ultimately the focus is achievement. Not
only is achievement communicated verbally, but it is also displayed in some form of
reporting. In some cases, achievement results of individuals are posted on bulletin boards
and results are charted over time. Recognition of individuals achieving at high levels is
an ongoing practice and a climate is established within the schools that this recognition is
something to which everyone should aspire.

All successful leaders are adamant about the need to create and sustain a safe and
orderly school environment for all stakeholders, an environment that appeared different
in each of the schools observed in the study but nevertheless present and highly visible in
each. Students are expected to take pride in their appearance, yet they are given room for
individuality. Most students wear uniforms and are expected to tuck in their shirts and to
wear belts, and in some cases, ties and blazers. However, this is not a consistent variable
in any of the schools of successful leaders. The consistency amounted to the self-
discipline of the educators and students who take pride in what they are doing and have a
commitment to do their best and persevere until success is achieved.
Collaboration among educators is vital for school leaders. They recognize that everyone is instrumental in the education process and that the leaders could not stand alone. They speak of their educator colleagues as fellow soldiers in a battle and give great honor to them. Still, the leaders are also quick to recognize their need to be highly involved in the process daily as a means for sustaining this element of a culture. This theme is highly related to the shared mindset theme because the first step to building a collaborative team is to recruit staff members strategically and engage them in a process that eliminates those that do not share the vision and philosophy of the school. Among some of the common practices of the hiring practices of effective leaders are to explore the track record of the potential employee’s ability to exhibit problem solving skills and their track record of self discipline. In many cases, a new teacher entering the profession right out of college may not be able to handle the responsibilities of the role. They have to be able to be trusted with responsibility. This concept is explored further in the selection and development of people theme.

Successful leaders have developed ways to measure achievement and expected outcomes of all parties by creatively developing a variety of internal accountability systems. Measurement of just about everything deemed important exists and is communicated to all stakeholders, thus keeping accountability at high levels at all times. In some cases, educators who have a pattern of failing to be accountable are removed from the culture entirely. Leaders expressed that this removal is a rare occurrence but sometimes a necessary one in order to sustain the culture of achievement, discipline, collaboration, and accountability.
The family oriented relationships developed by the successful leaders within the organization are common in the schools of the study. This family atmosphere is surely present in the collaboration and overall climate of the school but becomes even more apparent with the leaders’ desire to see others succeed and achieve. The students are treated as if they were the actual children of the educators, which is present in the way that educators deeply care about successful outcomes for time and energy spent preparing and developing students. The educators also seem to treat each other like siblings in that even though there are occasional levels of strong disagreement in the collaboration process, in the end, a common direction is agreed upon so that everyone can move forward with little dissention.

The final common element of shaping and sustaining a culture is recognizing and intentionally celebrating success. Successful leaders have systems of recognition throughout the school year for all stakeholders. Areas of accomplishment are recognized and celebrated differently, yet they are visible in each environment. Student recognition ceremonies are common and a variety of celebration techniques are used to honor high achievers and others who have met goals in a variety of areas. In each of the environments, educators are also honored. In some situations, events are held specifically for the purpose of acknowledging fellow educators’ progress and accomplishments.

*Theme 7: Selection and Development of People*

Successful inner-city charter school leaders have extensive practices of selecting people to become staff members and a high level of commitment to developing them once these people become part of the team. Each leader implements a variety of hiring
practices, but commonalities exist in the hiring preconditions. Before being selected to
join the staff, or even to interview for a position on the staff, candidates are asked to
become informed about the mission and overall vision of the school, and then to observe
staff members in action to prepare potential candidate’s for daily realities of
responsibilities. The importance of this process is to provide an opportunity for the
candidate to observe the strong work ethic, high energy level, skill sets, and dedication
required of educators. Once the candidates are believed to have a clear understanding of
what is required, then they are asked to make a decision about whether or not they would
like to complete application requirements and get interviewed. The application
requirements in the interview process vary according to each leader, but the common
traits that exist are extensive questioning, finding out previous experience, and having a
trial run of some kind before receiving an employment contract. In some instances, after
an interview, candidates are required to teach a lesson that administrators observe and for
which the leaders provide feedback. Candidates are carefully monitored by administrators
for knowledge of instruction, interactions with the students, the ability to reflect on
practices, and ability to give and receive feedback.

In cases where new teachers were selected who had little to no previous teaching
experience outside of their teacher preparation programs, there are close examinations of
the young candidates’ ability to handle themselves and responsibilities independently.
For example, in cases in which young people are just out of college, had no employment
during that time, had no responsibilities to pay for school, or had low levels of
accountability, they would be considered high risk for failure and are not likely to be
selected. However, for new, young teachers just out of college who had work experience and exhibited strength to be able to handle large amounts of responsibility and had a track record of doing so, they are more likely to be hired but placed in a stringent new teacher induction program. This program is important because in the state of Ohio and other states that have only recently authorized charter schools as a public school option, most inner-city charter schools do not employ many veteran teachers. Most veteran teachers that become employed in charter schools can keep their retirement benefits as usual but lose their sick leave pay or other employment incentives related to accumulated leave days that translate to pay upon retirement. There are some veteran teachers with more than 10 years of teaching experience employed in each of the schools in the study, but in most cases had either already retired from other school districts and went back to work for a charter school or had obtained all their teaching experience in charter schools.

Once candidates are selected for staff positions, they participate in extensive professional development growth programs. All school leaders engage educators and pre-service training in which staff development is provided for at least one week prior to the beginning of the school year. In addition, throughout the year, regular training opportunities that are carefully selected are conducted, and then the outcome of this training is monitored for effective implementation. The types of professional development opportunities vary with each school leader but the processes are similar. Very little time is spent holding meetings in which large parts of the meeting are taken up with announcements or trivial tasks. Time to meet with fellow educators is used for
improving on what is called best practices and research-based methods to raise achievement.

Distinguished Actions or Conditions Leading to Themes

Specific characteristics and behaviors were present within successful leaders at high levels and absent or minimally present in comparison leaders. These characteristics and behaviors presented distinguishable actions or conditions existing at high levels in successful leaders that were absent or minimally present in comparison leaders. Identifying these actions and conditions led to the development of the 7 themes. These actions and conditions required the effective use of the characteristics and behaviors identified as having attributed to the leaders’ success.

*Action and Condition 1: Purposeful Platforms*

These successful school leaders used all platforms within the school to cast vision, set clear direction, and navigate the steps along the way to accomplishing goals. In some cases new platforms were created in order to enable the leader to have the ability to communicate to targeted groups. Successful school leaders conducted informal assessments to determine the needs of specific groups within the school and then create a platform to address those needs. Each time the leader met with the groups, a clear direction was set, goals were communicated, and specific data related to progress within those goals were present in some form. At times, the leader delegated meetings for training tasks within specific groups but expected the same process to happen whether or not the leader was the communicator.
Action and Condition 2: Proven Methods

All school leaders within the study were strong believers in professional development. The distinguishing factor between the leaders was the use of research-based methods related to instructional practices in curriculum implementation. The comparison leaders used these methods but at a minimal level. Successful school leaders had a system in place for monitoring the implementation of proven methods within all possible areas of the school.

Action and Condition 3: Maximum Use of Academic Time

All school leaders were careful about using their time within the school day but the successful leaders were exemplary in minimizing school transitions. Strong priority was placed upon the need to begin the teaching process immediately during the school day. Structured academic activities were present at times throughout the day when students are not receiving direct instruction such as lunch, riding the bus, switching classrooms, and waiting for the restroom. Students were expected to use time productively for learning and were encouraged to be engaged with fellow students in the process. These elements were part of the ability to create a culture of achievement and self-discipline in which the focus of the academic institution was to keep oneself focused on academic progress and to put forth one’s best efforts at all times.

In some situations, students and schools with comparison leaders had more than six classroom rotations and used up to 10 minutes at a time before beginning the next class, meaning there were potentially 30 minutes of lost instructional time per day for the students. Successful school leaders were able to minimize this loss. They each had
different strategies for doing so, but the results of the transitional time of students for successful leaders was significantly better than for comparison leaders, although all leaders recognized the need to continue to improve loss of academic time.

*Action and Condition 4: Relationship Capacity*

All school leaders within the study were relational in some form with all stakeholders but the successful leaders seemed to have a deeper capacity to develop relationships than those for comparison leaders. Successful leaders were aware to some degree of the personal interests and the backgrounds of staff members and their families. The leaders took time to listen to people along the way even though their time always seemed to be limited. Successful leaders seem to utilize this knowledge to motivate staff members to improved performance, to stretch themselves to experience new things, and to seize opportunities to contribute to the overall vision of the school. Comparison leaders did exhibit this knowledge and ability but at minimal levels.

*Action and Condition 5: Level of Expertise and Team Development*

The 5 leaders within the study all varied within the many facets of the organization in levels of expertise such as instructional leadership, communication skills, and overall school operations. There are so many different components to the demands of an inner-city charter school leader in which the expertise is difficult to measure. However, the significant difference between successful leaders and comparison leaders was the ability to have strengths present in all areas regardless of whether or not the strength resided within the leader. The successful leaders tended to operate from their strengths and delegate responsibilities according to their weaknesses to other team
members who exhibited strengths the leaders lacked. Successful leaders made a conscious effort to have diverse people with different abilities around them. These leaders were not afraid to admit weaknesses or to reveal a lack of ability in certain areas. Comparison leaders seem to be less aware of their strengths and weaknesses. In some cases, certain tasks or responsibilities should have been delegated, but for some reason inhibited the comparison leader’s ability to delegate a task. In some cases, the comparison leader was not aware of other team members who exhibited a needed capacity. In other cases, the comparison leader did not have a team member to delegate to who was believed to be able to handle the responsibility. When cases like this were present for successful leaders, they tended to research how they might obtain a partnership with someone who could handle the responsibility, or if appropriate, they sought to recruit a new staff member with this ability.

Discrepant or Nonconfirming Data

Any discrepant or non-confirming data in the study was not utilized in the development of the 7 themes. This decision was made by the researchers because of the limited number of subjects in the study. In order to qualify it as a variable attributing to the success of the leaders, the characteristic or behavior needed to be present at high levels in the successful leaders and absent or only minimally present in comparison leaders. Any data that did not meet this qualifier were not utilized in the study. The tabulations resulting in these 7 themes are illustrated in Table 1.
Nonsalient Data

There were many comments and points of discussion during the interview stage that did not render results or provide salient data and therefore are not commented on or utilized in the findings of this study. Still, it is important to note that both successful and comparison leaders in the study experienced common challenges that are ongoing points of needed resolution. One example was how a school manages funding issues. Another was the pressures of the district, state, and federal accountability laws especially related to funding and the lack of monies allocated to public schools for facilities not accessible to charter schools. These questions invoked much discussion but were not used in the study because they were not elements or variables leading to the leaders’ success.

Summary

This qualitative exploratory multiple case study searched for characteristics and behaviors of successful inner-city charter school leaders and comparison leaders. The criteria for selecting leaders for the study were based upon specific demographics from the Ohio Department of Education. Participants were leaders in schools with an enrollment of more than 200 students, including grades 4-8, with a 60% or higher poverty rate who sustained an effective school rating or better in the state of Ohio for more than 3 years.

The observations produced 27 identifiable actions and conditions present at high levels in successful leaders that were minimally present or absent in comparison leaders. The interviews produced 5 actions and conditions that were also present at high levels in successful leaders that were minimally present or absent in comparison leaders. The
findings of both sets of data were compared and the process of axial coding was used to identify 7 emerging themes. Although many themes existed among all leaders, there were 7 distinguishable characteristics and behaviors among successful leaders in the study that were absent or existed at minimal levels in comparison leaders. This researcher determined these characteristics and behaviors as themes from the results of data collection and analysis from interviews and observations of three successful inner-city charter school leaders and two comparison leaders. The 7 themes that emerged were salient concepts present at high levels from the results within the study of the three successful leaders, but minimally existed or were absent from those of the comparison leaders. Although the study was conducted in the state of Ohio, the results can be applied to any inner-city charter school leaders throughout the nation.

The 7 themes that emerged from the study were as follows: Theme 1: Consistent Navigation, Theme 2: Holistic Focus, Theme 3: Shared Mindset, Theme 4: Mission Alignment, Theme 5: Resourcefulness, Theme 6: Shaping and Sustaining Culture, and Theme 7: Selection and Development of People. The 7 themes represent the results of common characteristics and behaviors of each of the successful leaders that were minimal or completely absent in comparison leaders. Specific characteristics and behaviors were present within successful leaders at high levels and absent or minimally present in comparison leaders. These characteristics and behaviors presented distinguishable actions or conditions present at high levels in successful leaders that were absent or minimally present in comparison leaders. The identification of these actions and conditions led to the development of the 7 themes. The tabulations or characteristics and behaviors leading
to the 7 themes are illustrated in Table 1. These 7 themes were examined at the conclusion of the study for comparison with the background theoretical framework that served as the foundation for this study. The previous studies used were based upon results of Collins (2001) in the study of good-to-great companies and builds upon this with the Gray and Streshly (2008) study of characteristics of highly successful principals in good-to-great schools. The comparison of the outcomes of this study is illustrated in chapter 5 in the theoretical framework section.
CHAPTER 5:
SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Overview

The purpose of this study was to identify characteristics and behaviors of successful inner-city charter school leaders that are causes of their success with academic achievement by comparing them to leaders with like demographics that have not achieved the level of success based upon the criteria for success in the study. The criteria for selection in the study were based upon specific demographics from the Ohio Department of Education. Participants were leaders in schools in the state of Ohio with an enrollment of more than 200 students, including grades 4-8, with a 60% or higher poverty rate who sustained an effective school rating or better in the state of Ohio for more than 3 years. This study was conducted as a qualitative exploratory multiple case study with an inductive approach in which the researcher explored two research questions. These questions were targeted at identifying what characteristics and behaviors are exhibited in successful inner-city charter school leaders that relate specifically to student academic achievement and identifying what new characteristics and behaviors are exhibited that were not mentioned in the previous Gray and Streshly (2008) study on characteristics of highly successful school principals.

The outcome of the study produced 7 emerging themes, each of which was present at high levels in the three successful leaders of inner-city charter schools within the study. For the two comparison leaders in the study, these themes were absent or present at minimal levels. The themes that emerged related to the success of the school
leaders were as follows: Theme 1: Consistent Navigation; Theme 2: Holistic Focus; Theme 3: Shared Mindset; Theme 4: Mission Alignment; Theme 5: Resourcefulness; Theme 6: Shaping and Sustaining Culture; and Theme 7: Selection and Development of People.

The 7 themes that emerged from the study represent the results of common characteristics and behaviors of each of the successful leaders that were minimized or completely absent in comparison leaders. Specific characteristics and behaviors were present within successful leaders at high levels and absent of minimally present in comparison leaders. These characteristics and behaviors presented distinguishable actions or conditions existing at high levels in successful leaders that were absent or minimally present in comparison leaders. The identification of these actions and conditions led to the development of the 7 themes. The 7 themes are also compared in this chapter to previous studies used as a theoretical framework.

Interpretation of Findings

The effects of the leadership crisis existing in inner-city charter schools and the attitudes and perceptions of what has resulted in failed leadership were the guiding principles that led to conducting this study. Seven significant themes emerged from analyzing the data obtained from the 5 leaders of inner-city charter schools and are explained at length in chapter 4. Within the findings it was discovered that the characteristics and behaviors themselves in the individuals did not result in their success, but rather, the cause for success was in the way the leaders used their own characteristics and behaviors to achieve excellence. Within the findings, specific actions and conditions
present were identified that demonstrated significant differences between successful leaders and comparison leaders. There were 5 distinguishable actions and conditions present at high levels within successful leaders and absent or minimally present in comparison leaders. These actions and conditions were purposeful platforms, proven methods, maximum use of academic time, relationship capacity, level of expertise, and team development.

It was noted that many characteristics and behaviors were present within all leaders in the study but that the differences resided within the levels of activity in which the characteristics and behaviors were displayed. These actions were aligned with the noted characteristics and behaviors that caused the 7 themes to emerge. The tabulations resulting in the characteristics and behaviors that led to the 7 themes are illustrated in Table 1. These characteristics and behaviors presented distinguishable actions or conditions present at high levels in successful leaders that were absent or minimally present in comparison leaders. Identifying these actions and conditions led to the development of the 7 themes. The 7 themes and conclusions are summarized as follow.

Theme 1: Consistent Navigation

The theme of consistent navigation seemed to stand alone in some instances and to be integrated in the other themes in others. Navigation was at the forefront of each successful inner-city charter school leader’s mind at all times as he or she engaged in various activities throughout the day. Priorities were given to activities that would better serve the leader’s navigational goals. Navigating consistently and effectively depended upon the leader’s clear vision and understanding of current reality within the
organization. Successful leaders maintained the ability to know the facts of current conditions coupled with a vision of what needed to be accomplished and the steps to be taken to arrive at that destination. The characteristic of consistency, also categorized as perseverance, was integrated in other themes. In order to apply consistency properly, leaders needed the skills to develop genuine relationships in order to accomplish the outcomes related to these other themes.

*Theme 2: Holistic Focus*

The holistic focus theme required the integration of other themes. In order to become aware of the needs of students and fellow stakeholders, leaders needed to possess “people” skills to build genuine relationships. There was also a need to develop a variety of programs based upon the unique needs of the individuals in the organization. Programs within the schools in the study were different because the needs of the people varied. The common trait in all successful leaders related to holistic focus was the ability to meet individual needs by creating and maintaining programs that addressed those needs. In some instances, the programs revolved around health needs within the community; therefore, leaders initiated and sustained a community health program with nurses and health agency partners. In other instances, the programs consisted of a variety of academic plans added for the sole purpose of meeting specific needs of an individual or group. These programs were absent or present at minimal levels for comparison leaders. In many cases, these leaders were aware of the problems they faced but failed to address them and cited lack of resources as a reason. Successful leaders have a strategy for discovering needs within the organization and a plan for addressing each need. This
theme had a stark difference in the findings. Successful leaders prioritized knowing their school’s needs and addressing them, and comparison leaders seemed to lack awareness and problem solving skills when presented with situations they deemed outside of the realm of general education.

*Theme 3: Shared Mindset*

The shared mindset seemed to be difficult in many ways for successful leaders to detect until they had spent time with team members or fellow educators. They recruited who they believe to have a "shared mindset" (those exact words were used often), but in some cases they discovered later that they were wrong. This theme is a difficult tightrope for successful leaders to walk. On one hand, successful leaders needed to build strong relationships in which trust is integral. In the interviews, every one of the successful leaders talked about the challenges in selecting quality people, but the differences resided in their ability to take action when someone was not right for the environment. Successful leaders needed to be able to make the tough calls to remove people that have become what was described as "cancers to the organization." In these situations, successful leaders had a strategy of heightening communication to the remaining team members when one fellow team member or more had to be removed from the organization. All of the successful leaders were honest and open about the reasons for removal and involved committed team members in the decision and in the process for addressing issues along the way. Successful leaders described a period of healing in situations like these but stated that over time trust was built, and most people were found
in the study to be confident that their leaders would take the right action to benefit the entire organization.

Successful leaders also acknowledged that sometimes people who have a shared mindset experience something in their lives that changes them, and therefore, those changes within the individual can end up impacting the organization negatively. Cases like this are the most difficult for these accomplished leaders, who expressed that in order to be faithful to the mission and maintain a healthy climate where the shared mindset is truly representative of the overall school vision, action must be taken to try to correct a faulty mindset. If the action is not effective, then ultimately the individual must be removed from the organization.

Theme 4: Mission Alignment

The mission alignment theme was most effectively accomplished by leaders who had the most experience. In order to be effective in aligning all objectives and activities with school goals and ultimately the school mission, leaders needed to have years of experience and many opportunities with trial and error. Successful leaders did not experiment with anything that they were not sure would work or had worked in a previous instance. They believed in research based methods for just about every part of the school, utilizing instructional strategies, classroom and overall school management tactics, school design, and just about everything else based in research. The leaders’ creativity came within the holistic components of the organization. They carefully calculated types of programs that would accomplish their mission and yet meet the holistic needs of the students.
Successful inner-city charter school leaders acknowledged that in their early years of leadership, they would not have known the skills sets and knowledge base required to be truly effective in aligning with their mission. This element is unique to each environment and in order to be successful, leaders must be in the same environment for several years in order to understand how to align everything to accomplish the one big goal or mission. In each case of the successful leaders, they had been with the organization previously as teachers or as original founders of the school. The comparison leaders and the schools were hired to their position from outside and seem to have a larger learning curve for how to align objectives and activities to their mission.

Theme 5: Resourcefulness

The resourceful theme was the most disappointing one for this researcher. Somehow the successful leaders were able to do a lot with very little. They were happy with their facilities, with anything they were given, and complained little or not at all. These schools had an excellent curriculum, technology applications, and necessary supplies to provide quality education but in many cases, these leaders had to go outside of the bounds of their per-pupil allocations in order to be able to obtain these necessary resources. They saw themselves and their staffs as the most important resources in a child's education. They made themselves accountable and made no excuses in areas in which they were lacking. The leaders’ relationships with outside stakeholders were vital for providing ongoing resources. In order to maintain relationships with stakeholders, the leaders allowed access to students in order to build the necessary emotional hook.
Theme 6: Shaping and Sustaining School Culture

Being able to shape and sustain school culture was one of the first two factors mentioned by school leaders during each interview. The importance placed upon this theme was tremendous for growth of both successful and comparison leaders. The difference between the two was obviously that successful leaders had a strong ability to shape a strong positive school culture and comparison leaders did not. One of the factors that came to light was that in each of the situations of the successful leaders in the study, these leaders had grown up within the organization in some way. The successful leaders were either part of the original founding team, had a different position within the school and were later promoted to a leadership position, or had a certain connection to the school for some time prior to obtaining a leadership role. The comparison leaders in the study did not have a history with the school in which they were working prior to becoming a school leader. This situation seemed to cause a blind spot for these leaders and make them less effective in their positions even though they had been leaders of their school for the same amount of time the successful leaders had been.

Theme 7: Selection and Development of People

Selection and development of people was a constant theme of all leaders in the study. There was a stark difference also with this theme between the successful leaders and comparison leaders. Successful leaders seem to be choosier about who was selected to be part of the staff and comparison leaders were more willing to take a chance on people who at a first impression seemed to fit the teacher demographic. Another stark difference between successful and comparison leaders was in the development process.
Successful inner-city charter school leaders spent large amounts of time prior to the first day of school building culture and making sure all team members started with a specific knowledge base. Throughout the year, skill sets to accompany the knowledge base was developed within all staff members. Recognition was given that everyone would be at different levels, but emphasis for successful leaders was on the process of development. Comparison leaders also said they focused on development and spent time in meetings that they called staff development meetings, but the activities paled in comparison to those of successful leaders. Part of the reason for the lack of quality development for comparison leaders is that they seem to be less involved in staff development and delegated such a task to team members. Successful leaders were highly involved in executing development programs and more involved at high levels. Successful school leaders described the development of people as one of their top priorities and emphasized that nearly half of their time is spent developing others in some way.

Previous Studies Used as Theoretical Framework

The theoretical framework for this study began with a foundation based upon results of Collins (2001) in the study of good-to-great companies and builds upon this with the Gray and Streshly (2008) study of characteristics of highly successful principals in good-to-great schools. Gray and Streshly (2008) studied highly successful principals in order to identify certain characteristics and behaviors that cause schools to be very successful. This study built upon the research of Collins (2001) that sought to establish whether or not the qualities of CEOs in good-to-great companies were related to behaviors in highly successful public school principals. The results of the study indicated
leadership qualities exhibited by principals who have been very successful in increasing student academic achievement regardless of the obstacles they may have faced. The study also explored the similarities and differences between school principals and business leaders and identified universal leadership attributes applicable to the business and social sectors, both private and public. The outcomes of the study were designed for those who aspire to be successful school leaders while taking into consideration the needs of the 21st century.

Gray and Streshly (2008) discovered that successful school leaders exhibit a wide range of personalities that contain specific solid core leadership qualities and characteristics that attribute to the accomplishments of their schools. This qualitative study identified elements necessary to produce great schools and explored characteristics of the principals that can be correlated with long-term educational success. It also identified the absence of leadership characteristics that cause failure in accomplishing goals in low-performing schools of comparable demographics. The outcomes in the Gray and Streshly study revealed a close alignment of the results in the Collins (2001) study with one key distinction between CEOs and the highly successful school principal, which was that the highly successful school principal had the ability to build relationships among faculty.

Findings Compared to the Theoretical Framework

After illustrating the characteristics and behaviors of successful leaders that led to the findings of the 7 themes and identifying distinguishable actions or conditions present at high levels in successful leaders that were absent of minimally present in comparison
leaders, the second research question was able to be resolved: “What new characteristics and behaviors are exhibited that were not mentioned in the previous Gray and Streshly (2008) study?” In order to answer this research question, the data related to be successful school leaders needed to be analyzed. The findings of the characteristics and behaviors of successful school leaders and the themes that emerged along with the actions and conditions that led to the development of the themes needed closer examination for comparison with the findings in previous studies. The foundation of this study is based upon the results of Collins (2001) and the outcomes of Gray and Streshly (2008). Both of these studies identified leadership characteristics that can be attributed to sustained success. There are specific leadership characteristics for leaders of good-to-great companies that Collins described as level 5 qualities. The leaders who possess those characteristics can guide a business to sustained success. Specific leadership characteristics aligned with the outcomes of good-to-great companies are what Gray and Streshly discovered in good-to-great schools.

The outcomes in the Gray and Streshly (2008) study revealed a close alignment of the results in the Collins (2001) study with one key distinction between CEOs and the highly successful school principal, which was that the highly successful school principal had the ability to build relationships among faculty. The outcomes of this study also reveal alignment of the results in the Collins study and the Gray and Streshly study. The outcomes of the Collins (2001) study of executives of good-to-great companies are as follows: (a) exhibited hedgehog concept, (b) confronted the brutal facts, (c) had ambition for success of the school, (d) understood how to select people and put them in the right
positions, (e) exuded a culture of discipline, (f) exhibited duality of professional will and personal humility, (g) had compelling modesty, and (h) had unwavering resolve.

The findings in this study also exhibited the hedgehog concept. In a similar manner, the successful school leaders were passionate about student academic achievement, were clear about the strengths and the purpose of the school, and aligned behaviors to address a specific focus. The successful leaders in this study exhibited the ability to confront the brutal facts by obtaining real data including analyzing student academic achievement and demographics with a commitment to work through challenges regardless of the obstacles. As in the Collins (2001) and Gray and Streshly (2008) studies, the successful leaders in this study demonstrated their ambitions for school success by encouraging professionalism and leadership among staff, developing school leadership successors, and putting the school before personal ambitions. They also exhibited the ability to understand how to select people and put them in the right positions because they had the latitude to hire and fire staff. The successful leaders remained persistent in getting the right people even if they had to maintain less successful staff for a short period of time.

The results of the culture of discipline were also aligned with the findings in the previous studies even to the point of the lack of micromanagement tactics in which teacher responsibility was promoted in focusing on student academic achievement. The school leaders did exhibit the same duality of professional will and personal humility as in the previous studies as well. Also, as in previous studies, the successful leaders in this study demonstrated unwavering resolve by exhibiting relentlessness, aggressiveness,
persuasion, and continuous involvement in the primary operations. The distinguishing factor in highly successful school principals in the Gray and Streshly (2008) study was the ability to build relationships with staff members, and this ability was also a trait present in successful school leaders in this study.

The differences among the outcomes in this study and the previous studies were related to the nature of the work environment and the expertise required of successful leaders because of the unique characteristics of inner-city charter schools. The responsibilities of the leaders of inner-city charter schools are much more extensive than those of traditional school leaders and require strength in many diverse areas in order to be successful. However, the leadership process, mindset, and overall characteristics and behaviors of the leaders are very much aligned in the outcomes of this study to those of previous studies.

Diverse Expertise with Team Leadership

The essential difference between the findings of this study and those in the previous studies was the need for successful leaders of urban charter schools to have diverse expertise and a strong cohesive team of leaders around them. To address the vast areas of need in these settings effectively, a team of leaders is needed. Previous studies explored the themes related to developing others but not in this context. Urban charter school leaders are limited in the amount of success they can have without a team of leaders. Thus, much time and effort is spent on developing successors for areas of responsibility. Once a person is ready to assume responsibility and can be trusted to be a strong team player, the leader then concentrates on another area of need.
Implications for Social Change

According to Reed (2004), moments of sharp social change can condense abruptly, when least expected. This study has the potential to offer sharp social change. It is significant for scholarly research and literature in the education field because of the requirement for successful leadership in areas of high need. Many of the charter schools that exist are serving students living at high levels of poverty who had traditionally been low achieving. The results of this study can provide leaders of inner-city charter schools across the nation with the awareness of 7 needed areas of development within themselves and their leadership teams. The leaders involved in this study recognized the fact that this process is ongoing and their level of success was not reached until three or more years within a program. This point is stated to offer hope to those new school leaders of programs that have existed only for a few short years and to encourage them to go back and revisit the 7 themes to ensure them that the themes are embodied within all leaders as they build a school culture.

Recommendations for Action

The findings of this study should be communicated to all inner-city charter school leaders because these findings can be applied throughout the nation. Davis (2007) emphasized most credible research is subject to different interpretations and should be used as a road map. This researcher advises that the outcomes of this study be used as a road map but also as practical application. This researcher plans to simplify the findings of this study in the form of a publishable booklet and media presentation, which will
include key bullet points with the findings from this study and video segments illustrating the explanations of the results. The media presentation will be useful in allowing a visual representation for the characteristics and behaviors of successful leaders along with the actions and conditions created by the leaders. Media representation will minimize some elements of the study that a typical reader may miss. This researcher plans to request if she can present this study at the National Charter School Conference in June of 2009 in Washington, D.C. All stakeholders at charter schools will benefit from awareness of this study, especially those located in urban areas with similar demographics.

Recommendations for Future Research

Future studies relevant to inner-city charter schools are needed. Charter schools are still relatively new and still do not exist in 10 different states in the nation. Studies that have been done relating to urban issues and schools in general are limited. Whitsett (2007) argued that much has been written about leadership in business but very little research has been conducted on leadership and academic areas. Duke (2006) argued for the need of more research on both successful and unsuccessful efforts to turn around low-performing schools and emphasized the need to know why some turnaround efforts succeed and others do not. Stollar, Curtis, & Cohen (2006) highlighted a major disconnection between large bodies of research on effective educational practices and what is actually occurring in many schools.
There are even fewer studies involving charter schools. Future studies related to how urban charter schools address the issues of the urban including poverty, involvement of dysfunctional families, and how these schools break cycles of low academic achievement for these students would have many potential benefits. Studies addressing the achievement gap have been conducted, but more are needed about how charter schools are addressing this gap.

The internal workings of urban charter schools vary from school to school due to the diverse programming related to each school’s focus. Further study is needed about whether or not the different programming is meeting the needs of the students enrolled and whether or not the open enrollment mandate is conducive to specially designed charter schools targeted to students with particular needs, abilities, or interests. The question to be answered in a study such as this is whether or not it would be beneficial to have students demonstrate sincere interest and ability before being enrolled in a particular type of charter school. For example, if a school is a college preparatory school, then how different would the school’s success be if the student and the family had a sincere intent for their child to go to college? If a parent has no interest in the programming and no interest in the child going to college, what would happen to the rate of school success if this student was not permitted to enroll in this public program?

Further in-depth study is also needed within each of the 7 themes that emerged in the study individually in order to explore the content in depth for the full benefit of future school leaders. A study such as this would render detailed strategies in place for different successful school leaders that would allow other leaders to learn of a variety of methods
used within each theme. It would be interesting to discover the different ways other leaders across the nation who use the 7 themes effectively implement the themes and how they take their populations into consideration when making decisions. Further research is also needed on the actions and conditions leading up to the 7 themes. It would be of interest to other school leaders to determine how to create these conditions themselves within their organizations. This particular study identified the presence of the themes and the conditions under which they exist but did not identify how the leader specifically created them.

Additional research is also needed on the factors that can be attributed to increased challenges for inner-city charter school leaders such as the amount of funding or per pupil allocations for charter schools that is one-third less than their public-school counterparts. The successful leaders in this study were able to be resourceful in were able to meet the needs of the student populations but admitted that limited funding was an ongoing concern in that dependence upon community partners was something they wish they did not have to rely upon. Additional research is also needed on how to increase school facility purchases or new building opportunities. Many of the challenges faced by school leaders in this study were due to school facility issues and lack of funding. The successful leaders in this study were able to minimize the effects these obstacles had on the outcomes of student achievement, yet they were ever present challenges, which cause one to consider what the schools may be able to accomplish if these challenges were indeed minimized.
Reflection

During the entire study, this researcher's experience was life-changing. It was a great opportunity to be able to visit all of the schools and observe these leaders in their daily operations and in variety of activities. It was very difficult throughout the process to remove myself professionally when observing the leaders in their natural environment and listening to the answers to the interview questions in the dialog that transpired as a result. As a fellow charter school leader, I found myself comparing my own school environment to those that I observed, and thus had to discipline myself to keep that thinking completely separate.

I appreciated the extensive time all of the leaders involved in the study allowed me to take from them. It was difficult for me to leave my own work responsibilities and travel across the state for periods of time to conduct the observations, but it was well worth it and the best part of the entire research process for my research partner and me. Just as it seemed that this study was going to take a lot more time than I had allocated in the plan, I received an announcement that there would be a state charter school conference in the middle of the time that I was conducting the study. This opportunity allowed me to encourage all participants in the study to attend this conference so that I could schedule all of the interviews within a three-day time span. Although the process was exhausting, it was also very productive and beneficial. There was some value in the fact that I was able to conduct interviews with all participants within a short time frame. I think this variable a cause for improved questioning and better dialogue with each interviewee. In some circumstances, I could tell that the leaders were rushed for time and
had given me minimal pieces of information, but I realized they were doing the best that they could given the limited time that they had within their day to spend communicating with me and my research partner. If I had additional questions, I was able to locate the participant quickly at the conference, strike up a new dialogue, and obtain the needed information. The contributions of all these leaders demonstrated the sincere interest that school leaders have to improve the profession of education as a whole. Every one of the participants in the study looked forward to my sharing the results. In the future, if I am able to develop this study into a booklet or presentation, I believe that these leaders in particular would take this information and implement the findings immediately.

**Findings Compared to Previous Studies**

The main difference between the findings of this study and those in the previous studies was the need to have more varied expertise and the need to develop a strong cohesive team of leaders around the top leader in order to effectively address the vast areas of need in an urban setting. Expertise in many more areas is needed for charter school leaders’ success than for any traditional school leader, including the need to be effective with school business operations, organizational design and leadership, facilities, federal programs, transportation, human resources, and common school principal duties including instructional leaders.

The Gray and Steshly (2008) study was conducted in the state of California and utilized highly successful principals who had a much different demographic than the school leaders used in this study. All of the school leaders in this study are working within a demographic of high poverty conditions and low achievement and were given
the expectation to obtain an *effective* rating or better while combating the challenges of the inner-city and poverty with one third less funding than that of traditional public schools. While conducting the research, it became apparent that the amount of the effort and expertise to achieve success for inner-city charter schools would look much different than that of traditional leaders because of the very unique challenges these charter school leaders face. Still, the measurement of the leaders is the same: strictly by state achievement test data and overall school rating data mostly determined by testing outcomes.

**Conclusion**

This study explored the characteristics and behaviors of successful inner-city charter school leaders. The results produced 7 emerging themes that were present at high levels within the successful leaders and absent or minimally present within the comparison leaders. The sample size and the study were small and cannot be generalized throughout the whole population of inner-city charter school leaders; however, the researchers were successful in exploring each of the leaders and their roles in depth, and discovered from this study clear and distinct emerging themes that have resulted in the 7 themes of successful inner-city charter school leaders. There is much to gain from the findings of this study for inner-city charter school leaders and their stakeholders. This study demonstrates that effective implementation of the characteristics and behaviors identified in the findings along with the actions and conditions that led to the themes of these successful leaders will create success for inner-city charter school leaders in the 21st century.
REFERENCES


Henson, P., & Steele, G. (2007). South Dakota 2.0: You may still find the occasional barn raising in one room school house, but a plan for technologically advanced schools that first took root more than a decade ago has ushered the state into the digital age. *THE Journal (Technological Horizons In Education), 34* (7), 14+.


APPENDIX A:

OBSERVATION EXERCISES

The observation exercises will not be limited to the items listed in this appendix. The items included are examples of the types of observations that were conducted by two researchers simultaneously as described at length in the methodology located in chapter 3 within the instrumentation section. Types of observations will include the following:

1. Interactions with people throughout the day within the school organization including students, parents, teachers, and other stakeholders.

2. Reactions of people during interactions with the leader.

3. Roles the leader assumes and action the leader takes in different situations.

4. The amount of time the leader takes throughout the day engaging in various activities.

5. Decision-making processes.

6. Staff meetings

7. Small group meetings

8. Problem solving opportunities

9. Communication strategies

10. Leadership style and how others are impacted
APPENDIX B:

DEMOGRAPHIC QUESTIONNAIRE

1. Give me an overview of your work history.

2. Give me a brief description of the demographics of the school. Students?
   Teachers? Parents? Socio-economic levels? Percent of students living in poverty level? Enrollment?

3. What are the common issues you face as an urban charter school in your city and state?

4. How did you become the leader of the school?

5. What kind of leadership style do you think you have?

6. What kind of leadership style would your staff say that you have?

7. List certifications and administrative preparation courses you have taken. On a scale of one to 5 how would you rate them? (1: of value; 5: of great value.) If 3 or more: give me a few examples of elements of your coursework that you believe to be of value to the work you do as a school leader.

8. Whom do you consider to be your mentors? Talk to me about that person(s) and why he or she is your mentor.

9. Talk to me about some experiences related to work or your personal life or experience that you have had in the past you believe helped to shape your leadership.

10. When you leave your position is school leader, what do you want to be remembered for?
APPENDIX C:
INTERVIEW QUESTIONS

The following research questions are modified from the questions in the Gray and Streshly (2008) study and will guide the interview:

1. Take a minute to write down the top 5 factors that you think have contributed to school success in improving student academic achievement performance. When you think you have the top 5, number them in order of importance with one being the most important factor. Let me know what you have written beginning with number one.

2. Give some examples that illustrate the factors that you chose as the top 5 factors contributing to the school success.

3. What decision did the school make to initiate an increase in student academic achievement during the years prior to achieving success? What sparked that decision? What latitude did you have as the leader of the school to make the decisions you had to make? In what ways were you restricted?

4. What process did you and the school staff use to make key decisions and develop key strategies that led to the increase in student academic achievement performance at the school? (This is not what decisions the school made, but how you went about making them.)

5. On a scale of one to 10, what confidence did you have in the decisions at the time they were made before you knew their outcome? (10: you had great confidence that they were good decisions with a high probability of success; 1: you had little
confidence in the decisions; they seemed risky or chancy.) If the interviewee has confidence of 6 or greater, ask: What gave you such confidence in the decisions?

6. How did the school gain commitment in agreement with its decisions from everyone? Teachers, parents, students? Give me a specific example of how this took place.

7. How does your school manage the pressures of the district, state, and federal accountability law making these long-term changes for the future?

8. One of the remarkable aspects of your school’s transition is that it moved forward over several years, and was not just a short-term upswing. What makes your school different? What were the primary factors in maintaining the similar schools’ ranking over the years?

9. Tell me about one particularly powerful example or vignette from your experience or observation that, to you exemplifies the essence of the success at your school.

10. What did you do to ensure that teachers continue to focus on improving student test performance?

11. What do or did you want most for your school?

12. When you think about your work here, where you most proud of?

13. What efforts did you make to ensure that the school continued to sustain success?

14. What else would you like to tell me about the reasons for the success of your school and raising student academic achievement?
APPENDIX D:

CONSENT FORM

You are invited to take part in a research study of characteristics and behaviors of successful urban charter school leaders. You were chosen for the study because you are the leader of an urban charter school. Please read this form and ask any questions you have before agreeing to be part of the study. This study is being conducted by a researcher named Lisa Hamm, who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to identify characteristics and behaviors of urban charter school leaders that cause the increase of student academic achievement, and school success.

Procedures:
If you agree to be in this study, you will be asked to:

- Review a series of questions sent via email
- Share your point of view on the questions by participating in an informal interview via video conferencing, or other preferred method
- Be available for a follow up phone call if clarification or further explanation is needed

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at Walden University will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:
Your participation in this study presents little risk of problems. However, your participation may yield findings for this study that can be used to make select and develop inner-city charter school leaders to be successful, and to transform schools in need.

Compensation:
There is no compensation for participating in this study but as a gift for your participation, registration will be provided for the next National Charter School or State Charter School Conference of your choice. You may email the researcher the listing of the conference of your choosing and registration information completed according to the
expectation of the organization selected and the registration will be paid and a confirmation will be forwarded to you immediately.

Confidentiality:
Any information you provide will be anonymous. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study. If you consent to this study, please sign the consent form as “anonymous participant.”

Contacts and Questions:
The researcher’s name is Lisa Hamm. The researcher’s faculty advisor is Dr. Charles McElroy. You may ask any questions you have now. Or if you have questions later, you may email the researcher at lisahamm@zoomtown.com or the advisor at charles.mcelroy@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

The researcher will give you a copy of this form to keep.

Statement of Consent:

☐ I have read the above information. I have received answers to any questions I have at this time. I am 18 years of age or older, and I consent to participate in the study.

Printed Name of Participant

Participant’s Written or Electronic* Signature

Researcher’s Written or Electronic* Signature

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person’s typed name, their email address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.
### Table E.1
Primary Researcher: Observation of Successful Leader 1

Field notes of observation:

<table>
<thead>
<tr>
<th>Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m.</td>
<td>This school is in a building that appears to have been a former warehouse or a small factory that has been converted into a school. As we enter the first floor, we come to an office that houses at least three organizations, one of which is the school. The principal greets us and walks us down a long hallway. He tells us that there are a lot of steps and because we have so much to carry, i.e., our laptops and bags, we will take the elevator to the fourth floor. We start to tour the school and conduct our observations immediately.</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>I stand in the hallway of the school, and within minutes of a fairly quiet bell, students file out of their classrooms facing forward in straight quiet lines. The first student in the line stops at the end of the hallway and awaits instruction to move forward from the teacher. The students are wearing uniforms, neatly buttoned up with their shirts tucked in. The name of the school is embroidered on the jackets. Upon direction from the teacher, students file into the next classroom and sit down quietly the moment the bell rings for the beginning of class instruction.</td>
</tr>
<tr>
<td>9:03 a.m.</td>
<td>The teacher starts the class promptly by greeting the students and informing them of the day’s objectives.</td>
</tr>
</tbody>
</table>

Facility challenges
- Resourceful
- Thoughtful

Order
- Organized
- Disciplined
- Routines are established
- Students move quickly from one place to another
- Transition time is less than three minutes
- Noise level is low
- Everyone is acting according to expectations
- Academic time is maximized
- School culture of discipline and order

Culture of achievement
- Culture of high expectations
- Procedures and routines established
Field notes of observation:

| As I walk through the hallways, the bulletin boards are filled with charts and graphs displaying achievement progress of the students. The charts measure various school or teacher made exam outcomes. Some of them display school progress over the years on the state test. This particular board is located in an area where teachers work and hold meetings. Other boards indicating particular grade level progress are located outside of the classrooms and the hallways that the students frequent. On the walls there are also pictures of students with their names and the reason they are being honored listed under their names. In many cases, their grade point averages are listed along with the college they plan to attend. | Culture of achievement displayed  
Celebration of learning displayed  
Effective and ongoing use of data  
Celebration for Learning  
Vision for Students |
|---|---|
| I am sitting in a meeting right now, listening to a small group of staff members talking about curriculum and instruction. The principal is in the meeting, but one of the teachers is leading the meeting. The teacher not leading the meaning is talking about, lesson plans for writing instruction over the next two weeks. They are discussing the strengths and weaknesses of the students’ writing skills and strategies to improve. The teacher is running through examples of her lessons, and the other members in the room are per riding feedback and asking questions. | Collaborative culture  
Expertise on curriculum and instruction  
Focus on teacher growth  
Involvement in regular feedback on instructional practices  
Effective use of work samples and data |

(continued)
Field notes of observation:

| The principal is walking around the building and visiting every classroom for about three to five minutes at a time. The students appear to be used to his presence because, although some of them are greeting him, some do not draw their attention to him. So far, all of the teachers except for two have been providing direct instruction to the students in the front of the classroom. These two teachers are seated next to students, working with them independently, and the other students are working quietly. The principal spends 20 minutes in one particular classroom. Later, he tells me that this teacher is new, and that he is in the process of coaching her to keep student engagement high. When asked how he was doing that, he said that he has given examples of ways that could happen to her, given her articles to read, allowed her to visit other teachers’ classrooms, and provided development sessions on the issue. | Visibility  
Accessibility  
Principal and his staff developer  
Principal is mentor  
Awareness of overall school environment  
Able to prioritize  
Knowledgeable about curriculum and instruction throughout the school levels |
|---|---|
| The tone in the building is positive. There has not been anyone in the classroom raising his/her voice and no anger has been displayed. There have been several students that the principal has had to speak with regarding certain issues. Among the issues have been school absenteeism, discipline issues, and encouragement for homework and grades. | Positive attitude  
Good relationships with staff and students  
Has respectful students  
Addresses issues and problems with a sense of urgency, but balances according to priorities |

(continued)
Field notes of observation:

<table>
<thead>
<tr>
<th>Right now the principal is meeting with a parent in his office. The mood is somber. As the parent leaves the meeting, both parties are pleasant to each other and smiling. The parent is holding a datasheet of some kind that the principal gave her in the meaning. When the principal is asked about the parent meeting, he informs me that this child is struggling in class, and that they talked about tutoring in school and what changes need to happen in the home. He says that this particular child is staying up way too late by himself because the mother is working and there is no one to help him with homework. He tells us that the mother agreed to allow the student to stay late for tutoring and that she would try to make sure the child's grandmother make sure he gets in bed at a reasonable hour and checks his homework. The student has also seen the nurse frequently this year and has a high number of absences that need to be addressed. ——The approach with this student needs to be holistic, but incremental, so as not to overwhelm the parent,” the principal states.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High expectations of parents</td>
</tr>
<tr>
<td>Strong partnership with parents</td>
</tr>
<tr>
<td>Ongoing and effective use of the data</td>
</tr>
<tr>
<td>Addresses holistic needs</td>
</tr>
</tbody>
</table>

The right hand column above was developed and coded and then measured according to level. The category is present. The category ranges are as follows: present at high levels, present, president at minimal levels, or absent.
Table E.2  
Open Coding of Observation

<table>
<thead>
<tr>
<th>Categories of Topics</th>
<th>Codes Developed from Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility challenges</td>
<td>Resourceful = R</td>
</tr>
<tr>
<td>Resourceful</td>
<td>Thoughtful/relationship capacity = RC</td>
</tr>
<tr>
<td>Thoughtful</td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>Safe and orderly environment = S+OE</td>
</tr>
<tr>
<td>Organized</td>
<td>Culture of discipline = SC+ D</td>
</tr>
<tr>
<td>Disciplined</td>
<td>Culture of achievement = SC+A</td>
</tr>
<tr>
<td>Routines are established</td>
<td></td>
</tr>
<tr>
<td>Students move quickly from one place to another</td>
<td></td>
</tr>
<tr>
<td>Transition time is less than three minutes</td>
<td></td>
</tr>
<tr>
<td>Noise level is low</td>
<td></td>
</tr>
<tr>
<td>Everyone is doing what they are expected to do</td>
<td></td>
</tr>
<tr>
<td>Academic Time maximized</td>
<td></td>
</tr>
<tr>
<td>School culture of discipline and order</td>
<td></td>
</tr>
<tr>
<td>Culture of achievement</td>
<td>Culture of discipline = SC+ D</td>
</tr>
<tr>
<td>Culture of high expectations</td>
<td>Culture of achievement = SC+A</td>
</tr>
<tr>
<td>Procedures and routines established</td>
<td></td>
</tr>
<tr>
<td>Culture of achievement displayed</td>
<td></td>
</tr>
<tr>
<td>Celebration of learning displayed</td>
<td></td>
</tr>
<tr>
<td>Effective and ongoing use of data</td>
<td></td>
</tr>
<tr>
<td>Celebration for learning</td>
<td></td>
</tr>
<tr>
<td>Vision for students</td>
<td>Celebration of learning = Rec. &amp; CL</td>
</tr>
<tr>
<td></td>
<td>Vision for students = VS</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Categories of Topics</th>
<th>Codes Developed from Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative culture</td>
<td>Collaborative culture = SC+C</td>
</tr>
<tr>
<td>Expertise on curriculum and instruction</td>
<td>Instructional leader = IL</td>
</tr>
<tr>
<td>Focus on teacher growth</td>
<td>Staff developer = SD</td>
</tr>
<tr>
<td>Involvement in regular feedback on instructional practices</td>
<td>Ongoing and effective use of data = OD</td>
</tr>
<tr>
<td>Effective use of work samples and data</td>
<td></td>
</tr>
<tr>
<td>Visibility</td>
<td>Visibility = V</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Accessibility = ACC</td>
</tr>
<tr>
<td>Principal and his staff developer</td>
<td>Staff developer = SD</td>
</tr>
<tr>
<td>Principal is mentor</td>
<td>Mentor/coach = SD</td>
</tr>
<tr>
<td>Awareness of overall school environment</td>
<td>Awareness = AW</td>
</tr>
<tr>
<td>Able to prioritize</td>
<td>Priority/focus = F</td>
</tr>
<tr>
<td>Knowledgeable about curriculum and instruction throughout the school levels</td>
<td>Instructional leader = IL</td>
</tr>
<tr>
<td>Positive attitude</td>
<td>Relationship capacity = RC</td>
</tr>
<tr>
<td>Good relationships with staff and students</td>
<td>Holistic needs = HN</td>
</tr>
<tr>
<td>Has respectful students</td>
<td>Awareness = AW</td>
</tr>
<tr>
<td>Addresses issues and problems with a sense of urgency, but balances them according to priorities</td>
<td>Priority/focus = F</td>
</tr>
<tr>
<td>High expectations of parents</td>
<td>High expectations = HE</td>
</tr>
<tr>
<td>Strong partner with parents</td>
<td>Relationship capacity = RC</td>
</tr>
<tr>
<td>Ongoing and effective use of the data</td>
<td>Ongoing and effective use of data = OD</td>
</tr>
<tr>
<td>Addresses holistic needs</td>
<td>Holistic needs = HN</td>
</tr>
</tbody>
</table>

(continued)
Table E.3
Secondary Researcher and Primary Researcher Comparison

<table>
<thead>
<tr>
<th>Coding Characteristics of SL 1</th>
<th>Outcomes of Coding Comparisons of Both Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resourceful = R</td>
<td>Resourceful = R</td>
</tr>
<tr>
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<td></td>
</tr>
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</tr>
<tr>
<td>Ongoing and effective use of data = OD</td>
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</tr>
<tr>
<td>Celebration of learning = Rec. &amp; CL</td>
<td>Celebration of learning = Rec. &amp; CL</td>
</tr>
<tr>
<td>Vision for students = VS</td>
<td>Vision for students = VS</td>
</tr>
<tr>
<td>Collaborative culture = SC+C</td>
<td>Collaborative culture = SC+C</td>
</tr>
<tr>
<td>Instructional leader = IL</td>
<td>Instructional leader = IL</td>
</tr>
<tr>
<td>Staff developer = SD</td>
<td>Staff developer = SD</td>
</tr>
<tr>
<td>Ongoing and effective use of data = OD</td>
<td>Ongoing and effective use of data = OD</td>
</tr>
</tbody>
</table>

(continued)
An open coding process was used by both researchers at each stage of data collection and then compared. Characteristics remained only if both researchers indicated the same outcomes.
Table E.4
Interview of Successful Leader 2

Field Notes and Open Coding for Interview Sampling:

<table>
<thead>
<tr>
<th>A portion of scripted material taken from answers to interview question 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would say there is <em>academics</em> first...academics first, <em>parent connections</em> second, community outreach third...when it is <em>community outreach</em> it involves colleges as well because we are a college prep school... all of these are to educate students..it is definitely... <em>one-on-one guidance student and parent teacher interaction</em> that could be the fourth one, and the fifth one I would say <em>discipline</em>. But all of these are once you have a good environment and the students have the mindset that they are there to learn to secure their future career then it starts to make a big big difference... you do not start to discipline students until you have disciplined their minds. If they are there to learn every day that students show up and they come to school it is important how you meet them. There are certain expectations that are developed, nothing happens overnight; they need to get to know you and understand you as a school leader. And as a member of a team. You are not an individual but a member of the team... every single person... I do have regular assemblies and meetings, everyone gathers around, and we talk... I share my vision, and I say this is us; you are the ones who make the difference, not me... So believe in yourself...</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Culture of achievement = SC+A</td>
</tr>
<tr>
<td>Parent connections = PC</td>
</tr>
<tr>
<td>Relationship capacity = RC</td>
</tr>
<tr>
<td>Community outreach = CO</td>
</tr>
<tr>
<td>Culture of achievement = SC+A</td>
</tr>
<tr>
<td>Holistic needs = HN</td>
</tr>
<tr>
<td>Parent connections = PC</td>
</tr>
<tr>
<td>Culture of discipline = SC+ D</td>
</tr>
<tr>
<td>Vision for students = VS</td>
</tr>
<tr>
<td>Collaborative culture = SC+C</td>
</tr>
<tr>
<td>Instructional leader = IL</td>
</tr>
<tr>
<td>Purposeful Platforms = PP</td>
</tr>
<tr>
<td>Staff developer = SD</td>
</tr>
</tbody>
</table>

(continued)
Field Notes and Open Coding for Interview Sampling:

| They succeed because in our school tutoring is not an option it is a must. So if you they are failing you will take tutoring is a must to go to tutoring If I ask you to go to tutoring, you will go or if you ask for tutoring, we will offer it; this is how it works and we do not offer outside credit for other courses. You will come to school one through eight periods and listen to the teachers and respect what they have to say. And this is how it works in our school… | Ongoing and effective use of data = OD  
High expectations = HE  
Holistic needs = HN |
|---|---|
| But first it is the mindset you have to discipline the minds you have to discipline the minds it is the mindset… then it will be action… they will follow through, it will be the character…but if you try to discipline them…we are human beings, we have hearts, we have minds the combination of this will make better citizens is so…we do not punish… we do not discipline with punishment. We do not use metal detectors bodyguards or armed guards. When you walk into the school it is the school it is not the jail… We have disciplinary people, experience of dealing with students. There are certain things, you can't play with us, we are a school of choice, if you come here you will go by our rules... we stand strong but we are here to help every single student. We know them. They know us. They know the standards we raise the standards... everything is written out. | Culture of Discipline = SC+ D  
High expectations = HE  
Culture of Discipline = SC + D  
Safe and Orderly Environment = S+OE  
Clear Communication = CC |

(continued)
Table E.5
Secondary Researcher and Primary Researcher Comparison

<table>
<thead>
<tr>
<th>Coding Characteristics of SL 1</th>
<th>Outcomes of Coding Comparisons of Both Researchers</th>
</tr>
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<tbody>
<tr>
<td>Culture of achievement = SC+A</td>
<td>Culture of achievement = SC+A</td>
</tr>
<tr>
<td>Parent connections = PC</td>
<td>Parent Connections = PC</td>
</tr>
<tr>
<td>Relationship capacity = RC</td>
<td>Relationship capacity = RC</td>
</tr>
<tr>
<td>Community outreach = CO</td>
<td>Community outreach = CO</td>
</tr>
<tr>
<td>Culture of achievement = SC+A</td>
<td>Holistic needs = HN</td>
</tr>
<tr>
<td>Holistic needs = HN</td>
<td>Culture of discipline = SC+ D</td>
</tr>
<tr>
<td>Parent connections = PC</td>
<td>Vision for students = VS</td>
</tr>
<tr>
<td>Culture of discipline = SC+ D</td>
<td>Collaborative culture = SC+C</td>
</tr>
<tr>
<td>Vision for students = VS</td>
<td>Instructional leader = IL</td>
</tr>
<tr>
<td>Collaborative culture = SC+C</td>
<td>Staff developer = SD</td>
</tr>
<tr>
<td>Instructional leader = IL</td>
<td>Purposeful platforms = PP</td>
</tr>
<tr>
<td>Staff developer = SD</td>
<td></td>
</tr>
<tr>
<td>Purposeful platforms = PP</td>
<td></td>
</tr>
<tr>
<td>Ongoing and effective use of data = OD</td>
<td>Ongoing and effective use of data = OD</td>
</tr>
<tr>
<td>High expectations = HE</td>
<td>High expectations = HE</td>
</tr>
<tr>
<td>Holistic needs = HN</td>
<td>Holistic needs = HN</td>
</tr>
<tr>
<td>Culture of Discipline = SC+ D</td>
<td>Culture of Discipline = SC+ D</td>
</tr>
<tr>
<td>High expectations = HE</td>
<td>High expectations = HE</td>
</tr>
<tr>
<td>Culture of Discipline = SC+ D</td>
<td>Culture of Discipline = SC+ D</td>
</tr>
<tr>
<td>Safe and Orderly Environment = S+OE</td>
<td>Safe and Orderly Environment = S+OE</td>
</tr>
<tr>
<td>School Culture = SC</td>
<td>School Culture = SC</td>
</tr>
<tr>
<td>Clear Communication = CC</td>
<td></td>
</tr>
</tbody>
</table>

The process of open coding took place by both researchers at each stage of data collection and compared. In order to connect related concepts or themes, the two researchers used an axial coding process. Only high level characteristics were used for this sampling due to the elimination of nonsalient data.
Table E.6
Axial Coding of Outcomes

<table>
<thead>
<tr>
<th>SL observation codes alphabetized</th>
<th>SL interview codes alphabetized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolded items were observable but not revealed during the interview stage</td>
<td>Bolded items were revealed in the interview process but not observable during the observation stage</td>
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<tr>
<td>Accessibility = ACC-HL</td>
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</tr>
<tr>
<td>Assessments (Ongoing) = A-HL</td>
<td>Assessments (Ongoing) = A-HL</td>
</tr>
<tr>
<td>Awareness = AW-HL</td>
<td>Awareness = AW-HL</td>
</tr>
<tr>
<td>Clear Communication = CC-HL</td>
<td>Clear Communication = CC-HL</td>
</tr>
<tr>
<td>Collaborative Culture = SC+C-HL</td>
<td>Collaborative Culture = SC+C-HL</td>
</tr>
<tr>
<td>Community Outreach = CO-HL</td>
<td>Community Outreach = CO-HL</td>
</tr>
<tr>
<td>Culture of Achievement = SC+A-HL</td>
<td>Culture of Achievement = SC+A-HL</td>
</tr>
<tr>
<td>Culture of Discipline = SC+D-HL</td>
<td>Culture of Discipline = SC+D-HL</td>
</tr>
<tr>
<td>Expertise with Curriculum = EC</td>
<td>Expertise with Curriculum = EC-HL</td>
</tr>
<tr>
<td>Expertise with Instruction = EI-HL</td>
<td>Expertise with Instruction = EI-HL</td>
</tr>
<tr>
<td><strong>Expertise with Urban Students = EUS-HL</strong></td>
<td></td>
</tr>
<tr>
<td>Focused Direction = CFD-HL</td>
<td>Focused Direction = CFD-HL</td>
</tr>
<tr>
<td>Mission Clear = CM-HL</td>
<td></td>
</tr>
<tr>
<td>Mission Alignment = MA-HL</td>
<td>Mission Alignment = MA-HL</td>
</tr>
<tr>
<td>Monitoring of Goals = MG-HL</td>
<td>Monitoring of Goals = MG-HL</td>
</tr>
<tr>
<td>High Expectations = HE</td>
<td>High Expectations = HE</td>
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<tr>
<td>Holistic Needs = HN-HL</td>
<td>Holistic Needs = HN-HL</td>
</tr>
<tr>
<td>Instructional Leader = IL-HL</td>
<td>Instructional Leader = IL-HL</td>
</tr>
<tr>
<td>Ongoing and Effective Use of Data = OD-HL</td>
<td>Ongoing and Effective Use of Data = OD-HL</td>
</tr>
<tr>
<td>Parent Connections = PC-HL</td>
<td>Parent Connections = PC-HL</td>
</tr>
<tr>
<td>Problem Solving = PS-HL</td>
<td>Problem Solving = PS-HL</td>
</tr>
<tr>
<td>Proven Methods/Research Based = PM-HL</td>
<td>Proven Methods/Research Based = PM-HL</td>
</tr>
<tr>
<td>Purposeful Platforms = PP-HL</td>
<td>Purposeful Platforms = PP-HL</td>
</tr>
<tr>
<td>Relationship capacity = RC-HL</td>
<td>Relationship Capacity = RC-HL</td>
</tr>
<tr>
<td>Safe and Orderly Environment = S+OE-HL</td>
<td>Safe and Orderly Environment = S+OE-HL</td>
</tr>
<tr>
<td>School Culture = SC-HL</td>
<td>School Culture = SC-HL</td>
</tr>
<tr>
<td>Staff Developer = SD-HL</td>
<td>Staff Developer = SD-HL</td>
</tr>
<tr>
<td>Staff Utilization = SU-HL</td>
<td>Staff Utilization = SU-HL</td>
</tr>
<tr>
<td>Visibility = VB-HL</td>
<td>Visibility = VB-HL</td>
</tr>
<tr>
<td>Vision Casting = VC-HL</td>
<td>Vision Casting = VC-HL</td>
</tr>
<tr>
<td>Vision for Students = VS-HL</td>
<td>Vision for Students = VS-HL</td>
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</table>

Visionary = V-HL

(continued)
### CL Observation Codes Alphabetized

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
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<td>Accessibility = ACC- HL</td>
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<tr>
<td>Affirms Others = RC+A- HL</td>
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<tr>
<td>Assessments (Ongoing) = A- LL</td>
<td></td>
</tr>
<tr>
<td>Awareness = AW- HL</td>
<td></td>
</tr>
<tr>
<td>Collaborative Culture = SC+C-ML</td>
<td></td>
</tr>
<tr>
<td>Clear Communication = CC- HL</td>
<td></td>
</tr>
<tr>
<td>Community Outreach = CO-LL</td>
<td></td>
</tr>
<tr>
<td>Culture of Achievement = SC+A-ML</td>
<td></td>
</tr>
<tr>
<td>Culture of Discipline = SC+D-ML</td>
<td></td>
</tr>
<tr>
<td>Expertise with Curriculum = EC-ML</td>
<td></td>
</tr>
<tr>
<td>Expertise with Instruction = EI-ML</td>
<td></td>
</tr>
<tr>
<td>Expertise with Urban Students = EUS-HL</td>
<td></td>
</tr>
<tr>
<td>Flexibility = F-ML</td>
<td></td>
</tr>
<tr>
<td>Goal Setting = G-ML</td>
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</tr>
<tr>
<td>Mission Clear = CM-ML</td>
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<tr>
<td>Mission Alignment = MA-ML</td>
<td></td>
</tr>
<tr>
<td>Monitoring of Goals = MG-ML</td>
<td></td>
</tr>
<tr>
<td>High Expectations = HE-ML</td>
<td></td>
</tr>
<tr>
<td>Holistic Needs = HN-ML</td>
<td></td>
</tr>
<tr>
<td>Instructional Leader = IL-ML</td>
<td></td>
</tr>
<tr>
<td>Parent Connections = PC-HL</td>
<td></td>
</tr>
<tr>
<td>Problem Solving = PS-ML</td>
<td></td>
</tr>
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<td>Relationship capacity = RC-ML</td>
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</tr>
<tr>
<td>Resourceful = LL</td>
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<tr>
<td>Safe and Orderly Environment = S+OE-ML</td>
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<tr>
<td>School Culture = SC-ML</td>
<td></td>
</tr>
<tr>
<td>Staff Developer = SD-LL</td>
<td></td>
</tr>
<tr>
<td>Staff Utilization = SU-ML</td>
<td></td>
</tr>
<tr>
<td>Visibility = VB-ML</td>
<td></td>
</tr>
<tr>
<td>Vision Casting = VC-LL</td>
<td></td>
</tr>
<tr>
<td>Vision for Students = VS-ML</td>
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</tr>
</tbody>
</table>

### CL Interview Codes Alphabetized

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>Accessibility = ACC-HL</td>
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<tr>
<td>Change Agent = CA- LL</td>
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</tr>
<tr>
<td>Clear Communication = CC- HL</td>
<td></td>
</tr>
<tr>
<td>Collaborative Culture = SC+C-ML</td>
<td></td>
</tr>
<tr>
<td>Community Outreach = CO-ML</td>
<td></td>
</tr>
<tr>
<td>Culture of Achievement = SC+A-ML</td>
<td></td>
</tr>
<tr>
<td>Culture of Discipline = SC+D-ML</td>
<td></td>
</tr>
<tr>
<td>Expertise with Curriculum = EC-ML</td>
<td></td>
</tr>
<tr>
<td>Expertise with Instruction = EI-ML</td>
<td></td>
</tr>
<tr>
<td>Expertise with Urban Students = EUS-HL</td>
<td></td>
</tr>
<tr>
<td>Flexibility = F-ML</td>
<td></td>
</tr>
<tr>
<td>Goal Setting = G-ML</td>
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</tr>
<tr>
<td>Mission Clear = CM-ML</td>
<td></td>
</tr>
<tr>
<td>Mission Alignment = MA-LL</td>
<td></td>
</tr>
<tr>
<td>Monitoring of Goals = MG-ML</td>
<td></td>
</tr>
<tr>
<td>Holistic Needs = HN-ML</td>
<td></td>
</tr>
<tr>
<td>Instructional Leader = IL-ML</td>
<td></td>
</tr>
<tr>
<td>Parent Connections = PC-HL</td>
<td></td>
</tr>
<tr>
<td>Perseverance = P-ML</td>
<td></td>
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<tr>
<td>Problem Solving = PS-ML</td>
<td></td>
</tr>
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<td>Relationship Capacity = RC-ML</td>
<td></td>
</tr>
<tr>
<td>Safe and Orderly Environment = S+OE-ML</td>
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</tr>
<tr>
<td>School Culture = SC-ML</td>
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</tr>
<tr>
<td>Staff Developer = SD-LL</td>
<td></td>
</tr>
<tr>
<td>Staff Selection = SS-ML</td>
<td></td>
</tr>
<tr>
<td>Staff Utilization = SU-ML</td>
<td></td>
</tr>
<tr>
<td>Visibility = VB-ML</td>
<td></td>
</tr>
<tr>
<td>Vision Casting = VC-LL</td>
<td></td>
</tr>
<tr>
<td>Vision for Students = VS-ML</td>
<td></td>
</tr>
</tbody>
</table>

A description of characteristics and behaviors present at high levels in successful leaders and absent or moderately to minimally present in comparison leaders are noted in written form in Table 1: Tabulation of Findings in chapter 4.

After axial coding of the observation stage of data collection, the findings indicated 5 distinguishable actions and conditions that were present at high levels in successful leaders and absent or present at low to moderate levels in comparison leaders. After the process of axial coding, some items were grouped together to form one overarching category. A sampling of the process is included in the table below.
Table E.7
Items Present at Different Levels in Leaders

<table>
<thead>
<tr>
<th>List of Items Present at High Levels in Successful Leaders Yet Absent or Present at Moderate to Low Levels in Comparison Leaders Leading to 5 Distinguishable Actions or Conditions</th>
<th>List of Items Present at High Levels in Successful Leaders Yet Absent or Present at Moderate to Low Levels in Comparison Leaders Leading to 7 Themes of Successful Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring of Goals = MG</td>
<td>Level of Expertise and Team Development = LE</td>
</tr>
<tr>
<td>Parent Connections = PC</td>
<td>Clear Focused Direction = CFD</td>
</tr>
<tr>
<td>Problem Solving = PS</td>
<td>Communication Strategies = CS</td>
</tr>
<tr>
<td>Staff Development = SD</td>
<td>Vision Casting = VC</td>
</tr>
<tr>
<td>Team Meetings = TM</td>
<td>Mission Alignment = MA</td>
</tr>
<tr>
<td>Administrative Meetings = AM</td>
<td>Goal Setting = GS</td>
</tr>
<tr>
<td>Parent/Teacher Conferences = PTC</td>
<td>Monitoring of Goals = MS</td>
</tr>
<tr>
<td>Family Events = FE</td>
<td>Ongoing Effective Use of Data = OD</td>
</tr>
<tr>
<td>Assemblies = ASB</td>
<td>Purposeful Platforms = PP</td>
</tr>
<tr>
<td>Mentoring Sessions = M</td>
<td>= Consistent Navigation</td>
</tr>
<tr>
<td>Conferences = CF</td>
<td>Holistic Needs</td>
</tr>
<tr>
<td>Retreats = RT</td>
<td>Health Focus</td>
</tr>
<tr>
<td>Board Meetings = BM</td>
<td>Physical Education Focus</td>
</tr>
<tr>
<td>Community Meetings = CM</td>
<td>Extended Day Programming</td>
</tr>
<tr>
<td>= Purposeful Platforms</td>
<td>Variety of Opportunities to Learn in the Arts</td>
</tr>
<tr>
<td></td>
<td>Community Partnerships to Meet Targeted Needs</td>
</tr>
<tr>
<td>Expertise with Curriculum = EC</td>
<td>= Holistic Focus</td>
</tr>
<tr>
<td>Expertise with Instruction = EI</td>
<td>High Expectations</td>
</tr>
<tr>
<td>Focused Direction = CFD</td>
<td>Recruitment of Like-Minded Staff</td>
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<td>= Shared Mindset</td>
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<td>Holistic Needs = HN</td>
<td>Mission Alignment</td>
</tr>
<tr>
<td>Instructional Leader = IL</td>
<td>Goal Setting</td>
</tr>
<tr>
<td>Ongoing and Effective Use of Data = OD</td>
<td>Activities Match Objectives</td>
</tr>
<tr>
<td>High Expectations = HE</td>
<td>Objectives Match Mission</td>
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<td>Proven Methods/Research Based = PM</td>
<td>Actions are Monitored</td>
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<td>Ongoing Assessments to Measure Progress</td>
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<td>Creative Use of facility</td>
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<td>Effective Use of Technology</td>
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<td>Knowledge of Students = KS</td>
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<tr>
<td>Listens Well = L</td>
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<td>Social Time with Staff = SR</td>
<td></td>
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<tr>
<td>Celebrates Success of Others = CS</td>
<td></td>
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<tr>
<td>Positive Feeling Tone When Speaking = PFT</td>
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<td>Relationship Capacity</td>
<td>Utilization of Staff</td>
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<tr>
<td>-----------------------</td>
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</tr>
<tr>
<td>Culture of Achievement = CA</td>
<td>Selection of Staff for Multiple Roles</td>
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<tr>
<td>Culture of Discipline = CD</td>
<td>Leaders Assume Multiple Roles</td>
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</tr>
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</tr>
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<td>Community Outreach = CO</td>
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</tr>
<tr>
<td>Culture of Achievement = SC+A</td>
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<td>Culture of Discipline = SC+D</td>
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</tr>
<tr>
<td>Expertise with Curriculum = EC</td>
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<tr>
<td>Expertise with Instruction = EI</td>
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<td>Staff Developer = SD</td>
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<td>Staff Utilization = SU</td>
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</tr>
<tr>
<td>Visibility = VB</td>
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</tr>
<tr>
<td>Vision Casting = VC</td>
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<tr>
<td>Vision for Students = VS</td>
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</tr>
<tr>
<td>= Level of Expertise and Team Development</td>
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<td>Accountability of All Stakeholders</td>
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<th>Shaping and Sustaining School Culture</th>
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<td>A Minimum of One Week Spent before School Year in Training for All Staff</td>
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<td>School Conferences on Proven Methods for Targeted Purposes</td>
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<td>= Selection Development of People</td>
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Table E.8
Samples of Text Comparisons with Axial Coding of Outcomes

<table>
<thead>
<tr>
<th>Codes of salient data present alphabetized (bolded items are distinguished actions supported by other codes)</th>
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These successful school leaders used all platforms within the school to cast vision, set clear direction, and navigate the steps along the way to accomplishing goals. In some cases new platforms were created in order to enable the leader to have the ability to communicate to targeted groups. Successful school leaders conducted informal assessments to determine the needs of specific groups within the school and then create a platform to address those needs. Each time the leader met with the groups, a clear direction was set, goals were communicated, and specific data related to progress within those goals were present in some form. At times, the leader delegated meetings for training tasks within specific groups but expected the same process to happen whether or not the leader was the communicator.

### Action and Condition 1: Purposeful Platforms

These successful school leaders used all platforms within the school to cast vision, set clear direction, and navigate the steps along the way to accomplishing goals. In some cases new platforms were created in order to enable the leader to have the ability to communicate to targeted groups. Successful school leaders conducted informal assessments to determine the needs of specific groups within the school and then create a platform to address those needs. Each time the leader met with the groups, a clear direction was set, goals were communicated, and specific data related to progress within those goals were present in some form. At times, the leader delegated meetings for training tasks within specific groups but expected the same process to happen whether or not the leader was the communicator.

### Salient codes present

- Clear Communication = CC-HL
- Focused Direction = CFD-HL
- Goal Setting = G-HL
- Monitoring of Goals = MG-HL
- Ongoing and Effective Use of Data = OD-HL
- Purposeful Platforms = PP-HL
- Staff Developer = SD-HL
- Vision Casting = VC-HL

### Awareness = AW-HL
- Clear Communication = CC-HL
- Change Agent: CA
- Collaborative Culture = SC+C-HL
- Focused Direction = CFD-HL
- Goal Setting = G-HL
- High Expectations = HE-HL
- Holistic Needs = HN-HL
- Mission Clear = CM-HL
- Mission Alignment = MA-HL
- Monitoring of Goals = MG-HL
- Ongoing and Effective Use of Data = OD-HL
- Vision Casting = VC-HL

(continued)
Theme 4: Mission Alignment

Successful inner-city charter school leaders align everything they say and do with an underlying mission, a clear and direct one. All objectives, goals, and actions are set in place for the sole purpose of mission accomplishment. Curriculum selected for the educational program is research-based and proven to raise achievement and is specifically aligned with the mission of the school. Instructional strategies are also research-based and improved based upon achievement outcomes that result from having used the strategies. Courses, instructors, daily programming, staff development, parent communication, and community partnerships are all carefully calculated according to what will best help the school accomplish the main mission.

| Codes of salient data present alphabetized (bolded items are distinguished actions supported by other codes) |
| Assessments (Ongoing) = A-HL |
| Awareness = AW-HL |
| Clear Communication = CC-HL |
| Change Agent = CA-HL |
| Collaborative Culture = SC+C-HL |
| Community Outreach = CO-HL |
| Culture of Achievement = SC+A-HL |
| Expertise with Curriculum = EC |
| Expertise with Instruction = EI-HL |
| Focused Direction = CFD-HL |
| Goal Setting = G-HL |
| Mission Clear = CM-HL |
| Mission Alignment = MA-HL |
| Monitoring of Goals = MG-HL |
| High Expectations = HE-HL |
| Holistic Needs = HN-HL |
| Instructional Leader = IL-HL |
| Ongoing and Effective Use of Data = OD-HL |
| Perseverance = P-HL |
| Problem Solving = PS-HL |
| Proven Methods/Research Based = PM-HL |
| Purposeful Platforms = PP-HL |
| School Culture = SC-HL |
| Staff Developer = SD-HL |
| Staff Selection = SS-HL |
| Staff Utilization = SU-HL |
| Visibility = VB-HL |
| Vision Casting = VC-HL |

(Continued)
Theme 6: Shaping and Sustaining School Culture

Much emphasis was given by the successful school leaders upon the shaping and sustaining of school culture... the top elements existing within the cultures of these successful leaders are a culture of achievement, discipline, collaboration, accountability, family-oriented relationships among colleagues and stakeholders, and recognition and celebration of successes...

A culture of achievement was established among all stakeholders within all schools of the successful leaders. Successful leaders make a habit of collecting ongoing data and using these data to make decisions, a strategy known as data-driven decision-making. Individual needs are addressed, but ultimately the focus is achievement. Not only is achievement communicated verbally, but it is also displayed in some form of reporting. In some cases, achievement results of individuals are posted on bulletin boards and results are charted over time. Recognition of individuals achieving at high levels is an ongoing practice and a climate is established within the schools that this recognition is something to which everyone should aspire.

Codes of salient data present alphabetized (bolded items are distinguished actions supported by other codes)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Models</th>
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<tr>
<td>Assessments (Ongoing) = A- LL</td>
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<td>Clear Communication = CC- HL</td>
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<td>Culture of Achievement = SC+A- ML</td>
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<td>Culture of Discipline = SC+ D- ML</td>
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<td>Expertise with Curriculum = EC- ML</td>
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<td>Goal Setting = G-ML</td>
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<td>Instructional Leader = IL-ML</td>
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<td>Parent Connections = PC- HL</td>
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<td>Recognition= R</td>
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<td>Relationship capacity = RC-ML</td>
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<tr>
<td>School Culture = SC-ML</td>
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<tr>
<td>Staff Developer = SD-LL</td>
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<td>Staff Utilization = SU-ML</td>
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<tr>
<td>Visibility = VB-ML</td>
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<td>Vision Casting = VC-LL</td>
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<tr>
<td>Vision for Students = VS-ML</td>
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CURRICULUM VITAE

Education:

Post Graduate Principal and Superintendent Certification: 1996, Xavier University
Masters of Arts in Educational Administration: 1994, Xavier University
Bachelor of Science in Elementary Education: 1991, Northern Kentucky University

Employment History:

2003-Present, ROAR Education
President and Founder
• Developed a professional development organization to service school needs
• Consulted with an underperforming school in Ohio to raise school rating two levels

1999-Present, Cincinnati College Preparatory Academy
Superintendent and Founder
• Founded and developed an urban charter school serving 700 students K-12 with a 90% poverty rate
• Led school to effective rating status
• Led school to 0% drop out rate since 1999

1998, Cincinnati Public Schools
Hearing Officer
• Led expulsion hearings for the district

1995-1998, Cincinnati Public Schools
Assistant Principal
• Served in two different schools
• Partnered with community organizations to raise student academic achievement
• Served as discipline coordinator, instructional leader, and multiple assignments designated by the principal

1996-1998, Children’s Hospital
Mental Health Specialist
• Worked with children and adolescents in need of behavioral, emotional, and mental health intervention
1993-1995, Cincinnati Public Schools
Taft High School Head Volleyball Coach
  • Served as head coach
  • Advised more than 25 young women through the volleyball program in community building, goal setting, and perseverance

1991-1996 Cincinnati Public Schools
Classroom Teacher
  • Earned National Board Professional Teaching Standard Certification
  • Honored with the Governor’s Educational Leadership Award
  • Achieved 75% or more passing rates of state testing measurements each year for all classes
1. Title of Submission:
School improvement using Inquiry based planning - A framework for schools districts

2. Name:
Dr. Sharon Sola

3. Affiliation:
University of Calgary and School District 67 (Okanagan Skaha)

4. Address:
Carmi Elementary School 400 Carmi Avenue, Penticton BC V2A 3G5

5. Email Address:
ssola@summer.com

6. Abstract:
This session focuses on school improvement. Inquiry based planning is a shift from the traditional approach used where schools set goals for improvement. Inquiry-based planning is framed in a spirit of inquiry rather than through the adoption of specific programs or strategies. Inquiry-based planning begins with a powerful question. The question creates curiosity and builds commitment by those involved. We know that active, focused inquiry drives improved learning gains for all learners. This approach relies heavily on collaboration and will provide participants with a framework that school and district leaders could use with staffs who are considering an inquiry-based planning approach to school/district improvement. Participants will further their understanding of inquiry-based planning for school improvement, become familiar with a process that they could use with staff, consider the implications for the role of facilitator in an inquiry-based school improvement process, practice generating meaningful questions, reflect on and consider next steps in their own contexts.
SUBMISSION FOR 9TH ANNUAL
HAWAII INTERNATIONAL CONFERENCE ON EDUCATION

(a) Title of Submission - Using Collaborative Web-Based Documents to Instantly Collect and Analyze Whole-Class Data

(b) Topic area of Submission – Educational Technology

(c) Presentation Format - Workshop (90 minutes)

(d) Names of Authors – Norman Herr, Mike Rivas, Brian Foley, Virginia Vandergon, Gerry Simila

(e) Departments – Department of Secondary Education, California State University, Northridge (Norman Herr, Mike Rivas, Brian Foley). Department of Biology, California State University, Northridge (Virginia Vandergon). Department of Geological Sciences, California State University, Northridge (Gerry Simila)

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Gerry Simila 818-677-3543

(i) corresponding author – Norman Herr
Using Collaborative Web-Based Documents to Instantly Collect and Analyze Whole-Class Data

Norman Herr, Mike Rivas, Brian Foley
Department of Secondary Education
California State University, Northridge

Virginia Vandergon
Department of Biology
California State University, Northridge

Gerry Simila
Department of Geological Sciences
California State University, Northridge

Abstract: New collaborative web-based document technology provides the opportunity to instantly collect and analyze large sets of data from multiple lab groups and class sections with speed and accuracy. Curricular resources can be developed that employ this emerging technology to create a classroom environment that mirrors the collaborative environment of a professional scientific community. Students gain a better understanding of various aspects of the nature of science when they view their findings in the context of a larger set of data collected by their peers. By engaging in laboratory activities in which they analyze whole-class data using wikis and collaborative web-based documents, students gain an understanding that the scientific enterprise requires collaboration, independent verification, and peer review. In this workshop, participants are introduced to a range of collaborative web-based activities in which they collect and analyze data submitted by their colleagues.

Introduction

American science educators agree that that the purpose of the laboratory experience is to enhance mastery of science content, develop scientific reasoning, build practical skills, cultivate interest in science, develop teamwork abilities, and introduce students to the complexity and ambiguity of empirical research and the “nature of science.” Although there is strong consensus regarding these goals, it is clear that some goals are rarely realized. In particular, research shows that few laboratory activities provide attention to collaboration and the analysis and interpretation of data collected by others (National Research Council, 2006). Students generally work only with their own data and do not analyze it in context with data collected by their peers. Thus the opportunity to reach conclusions based on evidence is hampered by the quantity and quality of evidence at hand. Students will better develop teamwork abilities and am enhanced understand the complexity and ambiguity of empirical research by engaging in investigations that require collaboration, replication, and peer review. Laboratory activities that employ new collaborative web-based document technology to readily collect and analyze entire sets of data from multiple investigators can be used to provide students with a more accurate understanding of the collaborative nature of scientific investigation.

Rivas (2009), Lederman (2005), McComas (1998, 2005), McComas et al. (1998), Peters (2006), Bybee (2004), and others have described the nature of science and have encouraged its inclusion as a topic in the science curriculum. The following aspects of the nature of science are frequently mentioned in literature related to teaching the sciences. (1) Science involves the activity of explaining and predicting natural phenomenon. (2) Scientific knowledge is derived from evidence, and as a result our current understandings are durable but tentative. (3) Empirical evidence, accurate record keeping, and replication of experiments help validate scientific ideas. (4) The scientific enterprise requires collaboration, independent verification, and peer review. (5) Science is a creative endeavor, and there is no such thing as a single scientific method. (6) Science and technology are not the same, but they impact each other. (7) Because of social, historical, and cultural influences, science can be subjective and have bias. (8) There are realms of understanding, knowing, and belief that fall outside the scientific domain and thus science and its
methods cannot answer all questions.

Although much has been written on the need for laboratory experiences that give students an understanding and appreciation of the nature of science and scientific research, few practical solutions have been proposed. Laboratory activities are generally selected because they match the curriculum and are feasible given the constraints of time and resources, not because they help students understand the nature of science. Fortunately, recent advances in collaborative web-based document technologies now provide educators the opportunity to develop laboratory experiences that require contributions from all members of the class. Students publish their data to collaborative spreadsheets where it is visible to their peers, and thus are able to analyze their own findings in light of entire class data. Students thereby learn the collaborative nature of science and realize that researchers must view their findings in context with those published by their peers. In addition, they see how collaboration between many researchers provides the opportunity to see relationships and trends in data that would otherwise go unnoticed.

The science teacher education program at California State University, Northridge, has developed a curriculum that uses collaborative web-based documents (e.g. Google® documents, spreadsheets, forms, presentations, drawings, wikis, and websites available at docs.google.com and sites.google.com) to create a classroom-based research community that addresses the consensus goals specified in America’s Lab Report (National Research Council, 2006). In particular, the use of collaborative web-based documents to collect and analyze data, and to record and present findings, imitates the collaborative environment of a professional scientific community in which researchers develop hypotheses and explanations in light of their own findings and those of their colleagues.

Collaborative Web-Based Documents

Various science educators have advocated the use of spreadsheets and word processors in the writing of science lab reports to make comparisons, create graphs, sort data, draw conclusions and interpret data (Guglielmino, 1989; Kademan, 2005; Scribner-MacLean et al., 1989), and many teachers require their students to submit lab reports as word-processed documents with embedded tables and charts generated by spreadsheet programs such as Microsoft Excel®. Some instructors require each student to submit an individual lab report, while others require lab groups to collaborate and submit one report that represents the contributions of all on the team. In collaborative situations, students exchange data and versions of the lab report by exchanging files on flash drives or by email. If there are three people on a lab team, there can be three copies of each section of the lab report. Each time a student edits one of these copies, a new version is introduced. The simplest way to avoid confusion is for a lab team to designate one student to compile everyone’s work, but this works against the goal of developing teamwork through a cooperative, collaborative learning situation (Slavin, 1980). Fortunately, the introduction of interactive web-based document processing has created a new environment where all students in a lab group can work together simultaneously on the same version of the report.

In 2006 the information management giant Google acquired Upstartle, the software company which introduced the first web-based word processor, as well as the rights to the first web-based spreadsheet from 2Web Technologies (Google Press Center, 2006). In 2007, Google developed the first web-based presentation program (Bodis, 2007) and introduced all three as a free development suite known as Google Docs®. Any individual who opens a free Google account has an automatic link to Google Docs®. Users can develop documents, spreadsheets and presentations online using any modern browser, or can import them from OpenDocument files (.odt, .ods), common text file formats (.html, .txt, .csv, .rtf, .pdf), or proprietary formats such as Microsoft’s .doc, .xls, and .ppt. Google docs are automatically saved to Google servers, but can also be downloaded in all of the same formats from which they can be uploaded. As with related wiki technologies, a revision history is associated with each document so users can review, revise and/or reverse editorial changes.

Web-based documents like Google Docs (docs.google.com) offer teachers and students an environment in which they can work on the same file as they co-author lab reports and other projects. As students collaborate, each can see which revisions have been made by their colleagues, and can reverse or restore changes by selecting options in the revision history. Rather than working on original files and sending copies for peers to work on, all students work directly on the original so there is no confusion about the current status of the document. Such web-based development resources preclude the need for
Collecting and Analyzing Large Group Data with Collaborative Web-Based Documents

Web-based documents provide the opportunity for instructors to design lessons that meet many of the commonly held goals of science educators. Teachers agree that the science laboratory experience should help develop scientific reasoning and an understanding of the complexity and ambiguity of empirical work (National Research Council, 2006). In traditional laboratory experiments, students work individually or in lab teams, and write lab reports based solely upon their own data. Although such reports may be valuable educational activities, they do not give students an understanding of the collaborative nature of scientific research. Scientists recognize the complexity of the natural world and realize that experiments must be performed many times and by many researchers before assigning confidence to observations or hypotheses. Scientists examine large data sets using descriptive and inferential statistics to document relationships and propose explanations, and recognize the inherent tentativeness and ambiguity of empirical work. Researchers view their findings in light of those presented by their colleagues, and reserve judgment until a preponderance of studies confirm their findings.

Fortunately, web-based documents provide an opportunity for students to understand the complex and collaborative nature of empirical research as they collect and analyze data from multiple lab groups, classes, or schools. Data collection can be simplified by survey tools, such as Google Forms®, that link directly to online Google Spreadsheets®. Teachers or students can develop forms in an online work center and then invite students to input their findings. Spreadsheets are created from the data, with records (rows) representing the lab groups, and fields (columns) representing answers to specific questions. Links to survey forms and their associated spreadsheets can be provided by copying document addresses to email messages, blogs, newsgroups or websites. Students reply to the online forms, and together build a single spreadsheet file that is shared by all. Within a few moments, an entire class can input their data, generating a table with as many records as there are laboratory groups, and as many fields as there are questions on the form. These data sets can be analyzed with built-in online tools and “mashup gadgets” (web application hybrids), or downloaded to each group for analysis with traditional tools such as Microsoft Excel®.

As students analyze their own data in the context of a larger data set, they are better positioned to understand the collaborative nature of the scientific endeavor, and the need for independent verification and repeatability of findings. Numeric data can be graphed and charted directly in the web-based spreadsheet, or downloaded by each lab group for individualized analysis. Students can then upload class data sets into their private accounts where only their partners have editing privileges. Thus, each lab group can perform a collaborative analysis of the entire class data independently from the other groups. The resulting charts and tables can be linked to the lab report that is developed in the document editor, and the entire project shared with the class by posting a link on a class blog or newsgroup. Lab groups can thereby share their findings with other groups and compare their analyses and conclusions with those of their peers.

Many classroom experiments call for the measurement or calculation of specific values, such as the density of water, the molar volume of a gas, the wavelength of a laser’s light, or the percentage of root tip cells in mitosis. Students may notice that their values differ from those of other lab teams and thereby gain an understanding of the value of descriptive statistical measures, such as mean and standard deviation, when analyzing experimental data. As students graph class data using web-based spreadsheet tools, they may note bell-shaped distributions and gain a more intuitive understanding of the normal curve and basic descriptive statistics. Bimodal distributions may indicate the use of two different techniques while random distributions may indicate flaws in experimental design or implementation. By analyzing class data sets, students learn the complexity of the natural world and see the need for standardizing procedures and controlling for confounding variables.

Web-based documents can be employed to help students learn aspects of the nature of science and gain experience working in large teams. Scientists work in research laboratories that are part of larger networks and associations, and share their findings with their peers through journals and conferences. In the traditional college or school science classroom, only the instructor reviews student work. Web-based document technology provides students the opportunity to work cooperatively in the collection of data, and...
to electronically share their findings with their peers.

Teachers agree that a major function of the science laboratory experience is to help students develop teamwork abilities, but note that teamwork skills are rarely taught in schools and colleges (National Research Council, 2006). Dickinson and McIntyre developed a 7-factor model to define and teach effective teamwork. In their model, leadership and orientation (acceptance of team members, norms, and goals) are considered input components in team building. Monitoring, feedback, and back-up (assisting the performance of other members) are considered intermediate processes for ensuring effective teamwork behavior, while coordination is considered the output component because it defines the performance of the team. Communication is considered a transversal component because it links all of the other components (Dickinson et al., 1997). For many years, computer-supported collaborative learning studies have investigated the use of computer network systems to build collaborative teamwork environments, with most of the work focusing on distance learning efforts using tools such as email, video conferencing and electronic chat (Ellis et al., 1991, Silverman, 1995). More recently, researchers have found that wireless interconnected hand-held computing devices can be used to create environments that support face-to-face collaboration and the development of teamwork in traditional classrooms as defined by Dickinson (Cortez et al., 2009), but little has been written of the use of “Web 2.0” applications in the process of teambuilding.

Web 2.0 applications that are dynamic web-based resources designed to facilitate communication, interoperability, and collaboration on the World Wide Web. Interactive web-based document processors are Web 2.0 applications that provide an environment for collaboration, and educators can employ them to build teamwork skills that reflect the nature of science research.

Web-based document technologies (e.g. Google Documents, Spreadsheets, Forms, and Presentations®) provide an environment for collaboration, but teachers must develop appropriate activities and lessons if they plan to capitalize on the opportunities the technology affords. Virtually any inquiry-based inductive laboratory activity can be improved by the use of these tools. However, it is incumbent upon the instructor to develop effective lessons. For example, an investigation may ask students to find the relationship between mass, length, and the period of a pendulum. Relationships that are invisible with the few data points collected by a single lab group become clear with the addition of whole class data. If each group measures the period of a pendulum using different weights and lengths, then students will have large data sets to analyze. Using spreadsheet curve-fitting technology, students can find the equations that best fit the class data. By analyzing whole class data, students can determine that the period of pendulum is independent of mass, but directly dependent upon the square root of the length of the pendulum. Such conclusions can be made quickly when working with whole class data, but may take very long if each lab group must independently generate all of the necessary data.

Although web-based document technology is best suited for use with inductive laboratory investigations, it can also be employed in traditional deductive laboratory activities to collect whole class data and quickly acquire class means, medians, and standard deviations. Students will note that class average values are generally closer to accepted values than are their own. For example, when determining the molar volume of a gas, the lab group with the best data in the class might get 22.9 L/mole (2% error), while the class average of 22.5 L/mole (0.5% error) is closer to the accepted value of 22.4 L/mole. Teachers can capitalize on this phenomenon to show the value of collaboration in scientific research, and can illustrate the fact that “accepted values” (e.g., growth rates, germination percentages, melting points, mathematical constants, etc.) are “average values” representing the collective observations of many researchers.

The recent introduction of “mashup” technology introduces a host of new opportunities for science educators. A mashup is a Web application that combines data from one or more sources into a single integrated tool. For example, the mapping mashup gadget Map by Google® that is accessible in Google Docs®, integrates Google Spreadsheet® data with Google Map® data. Students can input their addresses into a form that creates a spreadsheet of street numbers, cities, and zip codes. The mashup then integrates this data with mapping applications to show on a map where everyone lives. Such data can be used not only to visualize distributions, but also calculate distances and other significant data. Mapping mashups are very useful for plotting fieldwork data, and one can expect an increasing number of mashup technologies to appear, making interactive web-based documents even more functional for use in the teaching of science.

Conclusion
Collaborative web-based document technologies provide educators an environment in which to foster the development of a community of researchers. Google Documents® (docs.google.com) is currently the best suite of development tools, and one can be confident that these tools will continue to improve even as new tools are introduced by Google and other parties. The list of tools and capabilities continues to grow, and the introduction of third-party “gadgets” will further increase options for lesson development. Students who collaborate using web-based documents have many opportunities to learn about the value and techniques of teamwork and collaboration in scientific research. As they work together with online data and analyses generated by their peers, they are more likely to understand the complexity and ambiguity of empirical work, as well as the need for accurate record keeping, replication, independent verification and peer review. Working in an online research community affords students the opportunity to better understand the nature of science and scientific research.

References


Using Collaborative Web-Based Documents to Instantly Collect and Analyze Whole-Class Data

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Abstract: New collaborative web-based document technology provides the opportunity to instantly collect and analyze large sets of data from multiple lab groups and class sections with speed and accuracy. Curricular resources can be developed that employ this technology to create a classroom environment that mirrors the collaborative environment of a professional scientific community. Students gain a better understanding of various aspects of the nature of science when they view their findings in the context of a larger set of data collected by their peers. By engaging in laboratory activities in which they analyze whole-class data using wikis and collaborative web-based documents, students gain an understanding that the scientific enterprise requires collaboration, independent verification, and peer review. In this best-practices session, participants are introduced to a range of collaborative web-based activities in which they collect and analyze data submitted by their colleagues.

Introduction

American science educators agree that that the purpose of the laboratory experience is to enhance mastery of science content, develop scientific reasoning, build practical skills, cultivate interest in science, develop teamwork abilities, and introduce students to the complexity and ambiguity of empirical research and the "nature of science." Although there is strong consensus regarding these goals, it is clear that some goals are rarely realized. In particular, research shows that few laboratory activities provide attention to collaboration and the analysis and interpretation of data collected by others (National Research Council, 2006). Students generally work only with their own data and do not analyze it in context with data collected by their peers. Thus the opportunity to reach conclusions based on evidence is hampered by the quantity and quality of evidence at hand. Students will better develop teamwork abilities and enhanced understand the complexity and ambiguity of empirical research by engaging in investigations that require collaboration, replication, and peer review. Laboratory activities that employ new collaborative web-based document technology to readily collect and analyze entire sets of data from multiple investigationalists can be used to provide students with a more accurate understanding of the collaborative nature of scientific investigation.

Rivas (2009), Lederman (2005), McComas (1998, 2005), McComas et al. (1998), Peters (2006), Bybee (2004), and others have described the nature of science and have encouraged its inclusion as a topic in the science curriculum. The following aspects of the nature of science are frequently mentioned in literature related to teaching the sciences. (1) Science involves the activity of explaining and predicting natural phenomenon. (2) Scientific knowledge is derived from evidence, and as a result our current understandings are durable but tentative. (3) Empirical evidence, accurate record keeping, and replication of experiments help validate scientific ideas. (4) The scientific enterprise requires collaboration, independent verification, and peer review. (5) Science is a creative endeavor, and there is no such thing as a single scientific method. (6) Science and technology are not the same, but they impact each other. (7) Because of social, historical, and cultural influences, science can be subjective and have bias. (8) There are realms of understanding, knowing, and belief that fall outside the scientific domain and thus science and its methods cannot answer all questions.

Although much has been written on the need for laboratory experiences that give students an understanding and appreciation of the nature of science and scientific research, few practical solutions have been proposed. Laboratory activities are generally selected because they match the curriculum and are feasible given the constraints of time and resources, not because they help students understand the nature of science. Fortunately, recent advances in collaborative web-based document technologies now provide educators the opportunity to develop laboratory experiences that require contributions from all members of the class. Students publish their data to collaborative spreadsheets where it is visible to their peers, and thus are able to analyze their own findings in light of entire class data. Students thereby learn the collaborative nature of science and realize that researchers must view their findings in context with those published by their peers. In addition, they see how collaboration between many providers makes the opportunity to see relationships and trends in data that would otherwise go unnoticed.

The science teacher education program at California State University, Northridge, has developed a curriculum that uses collaborative web-based documents (e.g. Google® documents, spreadsheets, forms, presentations, drawings, wikis, and websites available at docs.google.com and sites.google.com) to create a classroom-based research community that addresses the consensus goals specified in America’s Lab Report (National Research Council, 2006). In particular, the use of collaborative web-based documents to collect and analyze data, and to record and present findings, imitates the collaborative environment of a professional scientific community in which researchers develop hypotheses and explanations in light of their own findings and those of their colleagues.

Collaborative Web-Based Documents

Various science educators have advocated the use of spreadsheets and word processors in the writing of science lab reports to make comparisons, create graphs, sort data, draw conclusions and interpret data (Guglielminio, 1989; Kaderman, 2005; Scribner-MacLean et al., 1989), and many teachers require their students to submit lab reports as word-processed documents with embedded tables and charts generated by spreadsheet programs such as Microsoft Excel®. Some instructors require each student to submit an individual lab report, whereas others require lab groups to collaborate and submit one report that represents the contributions of all on the team. In collaborative situations, students exchange data and versions of the lab report by exchanging files on flash drives or by email. If there are three people on a lab team, there can be three copies of each section of the lab report. Each time a student edits one of these copies, a new version is introduced. The simplest way to avoid confusion is for a lab team to designate one student to compile everyone’s work, but this works against the goal of developing teamwork through a cooperative, collaborative learning situation (Slavin, 1980). Fortunately, the introduction of interactive web-based document processing has created a new environment where all students in a lab group can work together simultaneously on the same version of the report.

In 2006 the information management giant Google acquired Upstartle, the software company which introduced the first web-based word processor, as well as the rights to the first web-based spreadsheet from 2Web Technologies (Google Press Center, 2006). In 2007, Google developed the first web-based presentation program (Bodis, 2007) and introduced all three as a free development suite known as Google Docs®. Any individual who opens a free Google account has an automatic link to Google Docs®. Users can develop documents, spreadsheets and presentations online using any modern browser,
or can import them from OpenDocument files (.odt, .ods), common text file formats (.html, .txt, .csv, .rtf, .pdf), or proprietary formats such as Microsoft’s .doc, .xls, and .ppt. Google docs are automatically saved to Google servers, but can also be downloaded in all of the same formats from which they can be uploaded. As related wiki technologies, a revision history is associated with each document so users can review, revise and/or reverse editorial changes.

Web-based documents like Google Docs (docs.google.com) offer teachers and students an environment in which they can work on the same file as they co-author lab reports and other projects. As students collaborate, each can see which lab reports and other project by their colleagues, and can reverse or restore changes by selecting options in the revision history. Rather than working on original files and sending copies for peers to work on, all students work directly on the original so there is no confusion about the current status of the document. Such web-based development resources preclude the need for expensive software, since all one needs is a free downloadable browser such as Firefox®, Safari®, or Internet Explorer®.

Collecting and Analyzing Large Group Data with Collaborative Web-Based Documents

Web-based documents provide the opportunity for instructors to design lessons that meet many of the commonly held goals of science educators. Teachers agree that the science laboratory experience should help develop scientific reasoning and an understanding of the complexity and ambiguity of empirical work (National Research Council, 2006). In traditional laboratory experiments, students work individually or in lab teams, and write lab reports based solely upon their own data. Although such reports may be valuable educational activities, they do not give students an understanding of the collaborative nature of scientific research. Scientists recognize the complexity of the natural world and realize that experiments must be performed many times and by many researchers, assigning confidence to observations or hypotheses. Scientists examine large data sets using descriptive and inferential statistics to document relationships and propose explanations, and recognize the inherent tentativeness and ambiguity of empirical work.

Researchers view their findings in light of those presented by their colleagues, and reserve judgment until a preponderance of studies confirm their findings. Fortunately, web-based documents provide an opportunity for students to understand the complex and collaborative nature of empirical research as they collect and analyze data from multiple lab groups, classes, or schools. Data collection can be simplified by survey tools, such as Google Forms®, that link directly to online Google Spreadsheets®. Teachers or students can develop forms in an online work center and then invite students to input their findings. Spreadsheets are created from the data, with records (rows) representing the lab groups, and fields (columns) representing answers to specific questions. Links to survey forms and their associated spreadsheets can be provided by copying document addresses, blogs, newsgroups or websites. Students reply to the online forms, and together build a single spreadsheet file that is shared by all. Within a few moments, an entire class can input their data, generating a table with as many records as there are laboratory groups, and as many fields as there are questions on the form. These data sets can be analyzed with built-in online tools and “mashup gadgets” (web application hybrids), or downloaded to each group for analysis with traditional tools such as Microsoft Excel®.

As students analyze their own data in the context of a larger data set, they are better positioned to understand the collaborative nature of the scientific endeavor, and the need for independent verification and repeatability of findings. Numeric data can be graphed and charted directly in the web-based spreadsheet, or downloaded by each lab group for individualized analysis. Students can then upload class data sets into their private accounts where only their lab group has editing privileges. Thus, each lab group can perform a collaborative analysis of the entire class data independent of other groups. The resulting charts and tables can be linked to the lab report that is developed in the document editor, and the entire project shared with the class by posting a link on a class blog or newsgroup. Lab groups can thereby share their findings with other groups and compare their analyses and conclusions with those of their peers.

Many classroom experiments call for the measurement or calculation of specific values, such as the density of water, the molar volume of a gas, the wavelength of a laser’s light, or the percentage of root tip cells in mitosis. Students may notice that their values differ from those of other lab teams and thereby gain an understanding of the value of descriptive statistical measures, such as mean and standard deviation, when analyzing experimental data. As students graph class data using web-based spreadsheet tools, they may note bell-shaped distributions and gain a more intuitive understanding of the normal curve and basic descriptive statistics. Bimodal distributions may indicate the use of two different techniques while random distributions may indicate flaws in experiment design or implementation. By analyzing class data sets, students learn the complexity of the natural world and see the need for standardizing procedures and controlling for confounding variables.

Web-based documents can be employed to help students learn aspects of the nature of science and gain experience working in large teams. Scientists work in research laboratories that are part of larger networks and associations, and share their findings with their peers through journals and conferences. In the traditional college or school science classroom, only the instructor reviews student work. Web-based document technology provides students the opportunity to work cooperatively in the collection of data, and to electronically share their findings with their peers.

Teachers agree that a major function of the science laboratory experience is to help students develop teamwork abilities, but note that teamwork skills are rarely taught in schools and colleges (National Research Council, 2006). Dickinson and McIntyre developed a 7-factor model to define and teach teamwork in traditional classrooms as defined by Dickinson (Cortez et al., 2009), but little has been written of the use of “Web 2.0” technologies in the process of teambuilding.

Web 2.0 applications that are dynamic web-based resources designed to facilitate communication, interoperability, and collaboration on the World Wide Web. Interactive web-based document processors are Web 2.0 applications that provide an environment for collaboration, and educators can employ them to build teamwork skills that reflect the nature of science research. Web-based document technologies (e.g. Google Documents, Spreadsheets, Forms, and Presentations®) provide an environment for collaboration, but teachers must develop appropriate activities and lessons if they plan to capitalize on the opportunities the technology affords. Virtually any inquiry-based inductive laboratory activity can be improved by the use of these tools. However, it is incumbent upon the instructor to develop effective lessons. For example, an investigation may ask students to find the relationship between mass, length, and the period of a pendulum. Relationships that are invisible with the few data points collected by a single lab group become clear with the addition of whole class data. If each group measures the period of a pendulum using different weights and lengths, then students will have large data sets to analyze. Using spreadsheet curve-fitting technology, students can find the equations that best fit the class data. By analyzing whole class data, students can determine that the period of a pendulum is independent of mass, but directly dependent upon the square root of the length of the pendulum. Such conclusions can be made quickly when working with whole class data, but may take very long if each lab group must independently generate all of the necessary data.

Although web-based document technology is best suited for use with inductive laboratory investigations, it can also be employed in traditional deductive laboratory activities to collect whole class data and quickly acquire class means, medians, and standard deviations. Students will note that class average values are generally closer to accepted values than are their own. For example, when determining the molar volume of a gas, the lab group with the best data in the class might get 22.9 L/mole (0.5% error), while the class average would be 22.4 L/mole. Teachers can capitalize on this phenomenon to show the value of collaboration in scientific research, and can illustrate the fact that “accepted values” (e.g., growth rates, germination percentages, melting points, mathematical constants, etc.) are “average values” representing the collective observations of many researchers.
The recent introduction of "mashup" technology introduces a host of new opportunities for science educators. A mashup is a Web application that combines data from one or more sources into a single integrated tool. For example, the mapping mashup gadget Map by Google® that is accessible in Google Docs® integrates Google Spreadsheet® data with Google Map® data. Students can input their addresses into a form that creates a spreadsheet of street numbers, cities, and zip codes. The mashup then integrates this data with mapping applications to show on a map where everyone lives. Such data can be used not only to visualize distributions, but also calculate distances and other significant data. Mapping mashups are very useful for plotting fieldwork data, and one can expect an increasing number of mashup technologies to appear, making interactive web-based documents even more functional for use in the teaching of science.

Conclusion

Collaborative web-based document technologies provide educators an environment in which to foster the development of a community of researchers. Google Document® (docs.google.com) is currently the best suite of development tools, and one can be confident that these tools will continue to improve as new tools are introduced by Google and other parties. The list of tools and capabilities continues to grow, and the introduction of third-party "gadgets" will further increase options for lesson development. Students who collaborate using web-based documents have many opportunities to learn about the value and techniques of teamwork and collaboration in scientific research. As they work together with online data and analyses generated by their peers, they are more likely to understand the complexity and ambiguity of empirical work, as well as the need for accurate record keeping, replication, independent verification and peer review. Working in an online research community affords students the opportunity to better understand the nature of science and scientific research.

References


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Computer Supported Collaborative Education -
Strategies for Using Collaborative Web-Based
Technologies to Engage All Learners

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Abstract: In the summer of 2010, twenty secondary school science teachers participated
in an intensive eight-day institute to learn new teaching strategies developed by teacher
educators at California State University Northridge (CSUN). These techniques, known
collectively as Computer Supported Collaborative Science (CSCS), make use of new free
collaborative web-based document technologies to engage all learners in interactive
lecture and discussion. Electronic quick-writes provide instructors with richer
information than is afforded by audience response systems, and make possible detailed
formative assessments. In addition, CSCS techniques allow students to participate
synchronously in whole-class research projects by contributing their findings to
collaborative web-based documents that serve as databases for classroom research. All
teachers participated in classroom activities with middle school students who were
engaged in a CSCS-based inquiry science class taught in CSUN’s Summer Academic
Enrichment Program (SAEP). One hundred percent of institute participants
recommended CSCS “very enthusiastically”, and post-institute surveys showed
significant gains with respect to teachers’ intentions to incorporate activities that are
facilitated by CSCS, such as the analysis of whole-class data and the evaluation of large
data sets.

The objective of our current research is to study the effectiveness of CSCS as a technique
for engaging learners in secondary school science classrooms. CSCS-trained teachers
participate in periodic follow-up workshops to provide tools for implementing CSCS in
their classrooms. Although results from pre- and post-institute surveys indicate
significant transformations in teacher intentions, it is necessary to document actual trends
by collecting data regarding pedagogies actually employed by CSCS-trained teachers,
and their perceived influence on student engagement in learning. Researchers will
conduct additional surveys and interviews with CSCS-trained teachers to determine the
extent of CSCS implementation and its impact on student engagement and learning.
Although it is anticipated that teachers will encounter numerous technical constraints in
their implementation of CSCS, it is also anticipated that those who are successful in
implementation will see significant increases in student engagement in classroom lessons,
laboratories, and related activities.
INVESTIGATING THE TEACHING AND LEARNING CHALLENGES FOR MATHEMATICS EDUCATION IN RWANDA

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Abstract:
In this interactive workshop, I will share with participants and answer questions about my 6-month tenure as a Fulbright Scholar in Rwanda teaching and learning at some of the country’s leading universities. My Fulbright project focused on the needs of two particular universities: the Kigali Institute of Education (KIE) and the Kigali Institute of Science and Technology (KIST). At KIE, I was to help Rwanda reform their mathematics curriculum to make it more student-centered. At KIST, I was Director of E-Learning and was tasked with the development of their distance education program. I will explain the goals that I was able to accomplish and what challenges I encountered along the way. I will also share with you ideas and strategies that helped me adapt to challenges in the classroom (and that I think you can use as well). Finally, you will hear about the challenges and successes that this country is experiencing in terms of distance education.

Overview
In this proceedings file, I will describe my projects in particular and the Fulbright Program in general, discuss educational reform in Rwanda, especially in terms of teaching methodology and incorporating technology, describe teacher preparation in Rwanda, especially focusing on the effect of language, and discuss my international educational experience including the comparisons of the US and Rwandan educational systems and my experiences with Rwandan students.

Fulbright Program – General Information
What is the Fulbright Scholar program? "The traditional Fulbright Scholar Program sends 800 U.S. faculty and professionals abroad each year. Grantees lecture and conduct research in a wide variety of academic and professional fields. The Fulbright Program is sponsored by the United States Department of State, Bureau of Educational and Cultural Affairs. Under a cooperative agreement with the Bureau, the Council for International Exchange of Scholars (CIES) assists in the administration of the Fulbright Scholar Program for faculty and professionals." (quoted from http://www.cies.org/us_scholars/us_awards/).

Fulbright Projects - General Description
I was chosen as one of four 2009-2010 Fulbright Scholars to Rwanda, a small, landlocked country located in the southern half of the continent of Africa known as the sub-Saharan region. I was one of approximately 150 other Fulbright Scholars selected to serve various countries in sub-Saharan Africa. I lived and worked in Kigali (the capital city of Rwanda) for six months (January through June). I worked at two universities: the Kigali Institute of Education (KIE), which is the premier university for teacher training country-wide, and the Kigali Institute of Science and Technology (KIST), “the first public technological institute of higher learning in Rwanda” (quoted from http://www.kist.ac.rw/about/about.html). My project was to assist KIE in achieving three goals: design an appropriate mathematics curriculum for pre-service teachers, create student-centered methodology in teaching mathematics, and enhance teacher training using effective pedagogy. I taught courses that conveyed mathematics content while illustrating inquiry-based, hands-on learning using appropriate manipulatives and technology. In addition, I assisted in curriculum development, materials selection, and staff development necessary to achieve long-
term success. In my project at KIST, I served as their Director of E-Learning, conducted hands-on workshops, and helped the faculty develop their course material for online-delivery.

**Educational Reform & Teacher Preparation in Rwanda**

In order for the reader to understand some of the educational challenges that I faced, it would be prudent for me to give a little background information about the educational system in Rwanda and describe some of the recent changes and reform efforts that are ongoing. First, the system consists of primary and lower and upper secondary schools. Until recently, mandatory education stopped at grade 6 (primary); it now continues until grade 9 (lower secondary). The secondary teachers, like my students from KIE, are also the ‘teacher trainers’ and the ones responsible for training the primary teachers in their school systems. Also, just this year the primary and secondary schools made the switch from education being conducted in French (as it has been since colonization) to English. The previous year, the University system made the language switch (and I can tell you that, even now, when you walk by a classroom at a university, you will hear French, English, and Kinyarwanda being spoken, often all in the same sentence). It was so abrupt and so challenging that school, which normally starts in January, had to be delayed until February to allow the teachers to be somewhat ready for it. Large numbers of Peace Corps volunteers arrived en masse to the country to assist in this huge undertaking. Now, a Rwandan child begins his / her education in primary school and, until grade 4, is taught exclusively in Kinyarwanda. Then, in 4th grade, they begin learning exclusively in English and that continues throughout their educational experience. Keep in mind that most of these students come from homes where either Kinyarwanda or French is the primary language spoken (and is the primary language of their parents).

To address the his / her usage in the previous paragraph, I would like to mention that education for girls rarely continues past the mandatory limit. This seems to be due to a variety of factors; however, chief among them is, I believe, is that the girls / women do everything in the country. They are responsible for the plowing, planting, harvesting, cooking, cleaning, water-gathering (a full-time job all by itself), and in general “taking care of” the rest of the household. Also, girls have traditionally been viewed as “less than” boys. This is particularly fascinating from a gender and women’s issues viewpoint when you realize that Rwanda has the highest percentage of women in government (Parliament) than any other country (over 50%). Contrast this with any other group and the numbers differ greatly. In my class of 16 at KIE, for example, there were three women. In the meeting regarding the Rwanda Open Learning project (which I will describe in greater detail later in this paper), there were 5 women (including myself and another American) in the group of 33 in attendance. However, the emphasis on girls’ education is an important part of President Kagame’s plan for the country so these numbers are better than they were and expected to continue to improve.

Additionally, the entire country has been very enthusiastic about transitioning from traditional lecture to a more student-centered methodology. Though Rwandans want this change and welcome it, they really have no resources, examples, or training on how to make it a reality. When one considers the existing physical and material challenges in the schools, the task of this transition seems almost overwhelming. As my KIE students are constantly asking me, “How do you teach when you have nothing?” (“Nothing”, by the way, can include no chalkboards, books, paper, chairs, desks, a building, electricity, chalk, computers, internet, water, etc.) At the University level I saw that no one (not even faculty) had books. Couple that with the fact that I couldn’t even get two copies of a handout made nor could I expect to make it through an entire class period with fully functional electricity, I realized that it would be even more challenging to institute the required changes throughout the rest of the nation.

The statistics regarding level of education here in Rwanda are disturbing yet fascinating. The country has a population of about 10 million people (of which close to 1 million live in Kigali) and the number of students that finish secondary school is around 30,000. The total number of students that are enrolled in all tertiary institutions is about 40,000. That works out to 0.004 of the population or less than one-half of one percent. This tremendous need to provide education to their people is one of the main reasons that Rwanda is so interested in distance education – it is the most viable solution to their problem. Lack of education is not the only problem, of course. Life expectancy is in the mid-forties (for both men and women), the GDP per capita is less than $250, and the unemployment rate is about 33% in the city, higher in the country.

The incredible shortage of books or other written material was amazing to me as a woman who, at any given time, is reading 3-7 books. On the other hand, when one realizes that a written language was not even introduced to Rwanda until the late 19th century, it sort of makes sense. There is a wonderful oral tradition and the country is filled with
fabulous storytellers; however, there is not a culture of reading. There are no libraries and there is a complete lack of awareness of how a book can be appealing in its ability to take you away. Given all that, I suppose it’s not shocking that when I met my KIE class on the first day and gave them each their very own copy of an NCTM (National Council of Teachers of Mathematics) educational journal they looked at me with adoration and gratefulness. Like the issues with gender equality, though, this one is also being addressed and showing improvement. For example, despite the country’s late start with a written language, the literacy rate in Rwanda is about 70% nationwide (higher for men than for women) and there are many projects that focus on reading, literature, and other written forms of communication.

The appropriate use of technology in teaching is a major focus of the National Council of Teachers of Mathematics (NCTM) (see Masalski & Elliot 2005 and NCTM 2000). In our country, the technology used in our classrooms takes three primary forms: web-based platforms and LMS (Learning Management Systems) like Blackboard and My Math Lab, graphing calculators (in the case of my classes at home, the TI83+, TI73, or NSpire), and computer software like Microsoft Excel and Minitab. In Rwanda, however, those types of technology are generally not available, and, when they are, unable to be used effectively due to the limitations presented by unreliable electricity and slow (or non-existent) Internet access. Instead, the technology in Rwanda that is established, reliable, and used in everyday life consists of mobile phones and radio. Interestingly, although the cell phone and the radio are integral parts of a Rwandan’s life, they have not really been put to educational use. Instead, the efforts (all coming from outside sources and other countries like the US and UK) focus on trying to establish web-based footholds for the country to begin using. In the next few paragraphs, I will describe three particular efforts that I was involved with as Director of E-Learning at KIST.

I was invited to a meeting with Dr. Stephen Swithenby from the Open University in the UK and, because of that initial contact, became involved in the nationwide “Rwanda Open Learning” (ROL) project being developed to utilize distance education as a means by which to increase those percentages that I mentioned earlier. One major goal of the ROL project is to “double engagement in higher education (i.e. to 6%) in the next 8 years”. Stephen and his colleague, Jerry, were invited by the government of Rwanda to analyze the current status of E-Learning in the country and present a proposal for how to move forward from here in order to achieve the nation’s very ambitious educational goals. I was asked to join them in this endeavor and assisted in creating the one-page executive summary and description of the task force that was presented to the Ministry of Education. The Ministry accepted this proposal and the project is in the initial stages (creation of the task force, etc.) at the time of this writing.

I hosted a meeting with the members of the KIST ICT Strategy Group (of which I was chosen as Vice-Chair) and we had a good discussion about what has been done on campus regarding E-Learning and what remained to be accomplished to start seeing results. They already had a head start in this effort: a group from Tulane University (which has a campus in Rwanda as well) came and did a few weeks’ training on using Moodle and various Web 2.0 tools for delivery of online educational materials. There is a core group of interested and dedicated faculty who had begun putting their syllabi online for student access. The short-term goal is for each department to have their course syllabi available for online access by the end of the year.

I gave a Public Seminar in the boardroom (“penthouse” floor of KIST 3, the math building) on the topic of LMS (Learning Management Systems) and E-Learning. It was well attended (over 75 people including faculty, administration, and students) and everyone participated and asked very thoughtful questions. During the seminar, I showed a few of my BB (Blackboard) courses that I taught last semester at my home university and discussed how “blended” or “hybrid” classes (those that meet both F2F – ‘face to face’ – and have online components) work and how I balanced the blend. At KIST, they will likely use Moodle as their LMS rather than BB since they have already received training on that platform, plus it is open source and has roughly the same capabilities as BB.

To close this discussion on E-Learning and technology in education, I will share two of my personal stories and try to paint a picture of some of the challenges that I saw and experienced.

As I mentioned before, several of the faculty at KIST had completed training on distance education, specifically on using Moodle, and the campus had a Moodle site set up. However, there are two major problems that had not been adequately addressed and are the primary reason why, when I asked the six HODs (Head of Department) present at my meeting how many of them had faculty who at least had their course syllabi available online, their response was one out of the six. Those two problems are bandwidth / speed / reliability of the Internet connection on campus and...
access to the computer labs (both by faculty and by students). The “ethernet connection” on campus is basically like what I have at home (high speed DSL) except that the one line is shared between everyone on campus – imagine your home line being shared among 1600 people. As a result, when I did speedtest.com the results said, “Ouch, are you on dialup or something? You’re connection ranks 0.5 stars out of 5.” A small Javascript applet that took 15 seconds to download from an Internet connection at the US Embassy in Rwanda was going to take 3 hours to download from my office at KIST. The multiple computer labs are only open and staffed when a class is being held in them. Otherwise they are closed and locked. In other words, if a student or faculty member wants to use a computer / have Internet access, they cannot because the labs aren’t open.

When I went to the boardroom (at 1pm) to get ready for my public seminar (at 3pm), I especially wanted to set up the projector with my laptop (since I have a Mac, I anticipated some additional problems) and to test the Internet connection to make sure I could login to BB and access my course materials. Of course, things did not go smoothly. First, there are lots of windows and that day the torrential downpours continued throughout the morning so, by the time I walked into the room in early afternoon, there was about 3 inches of standing water on the floor the cleaning staff was busily trying to mop up. Ignoring the pool, I hooked up the projector to my MacBook Pro only to discover that the projector did not recognize any signal coming from the computer. Then, I plugged in the Ethernet cable and saw that, unlike every other time with my Mac, it did not automatically connect to the Internet and kept telling me a cable was unplugged. In the beginning I tried getting the people (department head, technician, lab manager, etc.) to help me. In the end (when they’d all left, ostensibly to find help / get other equipment), I fixed it all myself (thank goodness for previous experience as a tech!). What was funny, though, was when my department head introduced me, he included my amazing abilities with technology (as demonstrated by the fact that I got it all to work in time for my seminar). ;-)

**Conclusion**

In conclusion, I would like to share some of my personal stories, especially from the classroom as illustration of both what I gained and what I learned. What follows are a few such examples from my experiences teaching students at KIE.

I had been assisting Faustin, a Physics educator, with developing their Mathematics Education program, conducting seminars with his class of 250 students on “micro-lessons” (writing and teaching mini lessons), and teaching my own wonderful group of 16 senior-level “teacher trainers” various mathematics and mathematics education topics (including history of mathematics, problem solving, technology, lesson planning, assessment, and number theory). It has been fantastic! The campus, like the city (and, perhaps, the country) in general, has a crazy mix of modern and broken. For example, the huge room where Faustin’s class meets has a collection of desks, some of which are broken, and a pitiful excuse of a chalkboard (where it’s not even real slate but some type of adhesive material that’s all warped from humidity) but it is equipped with a “sound system” and microphone for lecturing.

I was able to do lessons for the entirety of one week with my class using my laptop and their projector, but the week before I had to end class early because the electricity went out (my classes are in the evenings) and the generator (though it exists) is not hooked up to my building (because it’s too new).

There are so many interesting stories to share but there is a special one that comes to mind. My students had just finished the “Chipton” activity. For those of you who aren’t my students, in this activity I explained that, when they entered the classroom, they went through a portal and are now in a different world. In this new place, called “Chipton”, they have been brought to interview for a job as an accountant. You see, the Queen of Chipton is making so much money she has to hire new people all the time just to keep up with it all. I asked the students to get into pairs then have one come up and get a bag of “stuff” consisting of white, blue, red, and yellow poker chips and a die. They each have a trading mat where they can put their chips in the appropriate column. I explained that in Chipton the white poker chip is the unit of currency and that the magic number is 3. Whenever you get three of something, you can trade them for one of the next biggest something. In this case, three white chips can be traded for one red chip; three red chips can be traded for one blue chip; and, finally, three blue chips can be traded for one yellow chip. The activity involves each pair taking turns rolling the die and earning a set number of white chips, which they then put on their recording mat. Whenever they can make a trade, they must because, as I explained it, the Queen hates the sound of chips jangling together and has made a law that, in Chipton, one is not allowed to have more coins than necessary for the value. In other words, if you have four white chips you are ‘illegal’ because, for
that value, you could just have one white and one red chip (less noise). I informed the whole class that they are honorary “coin cops” (as am I) and that, if they catch someone in violation, then they may confiscate that person’s money and add it to their own mat. We practice the “official” statement: “I hereby confiscate your coins in the name of the Queen!” (Preferably stated very loudly and formally and with some type of accent.) Anyway, the pairs all compete, trying to be the first to get to a yellow chip (where you “win” the interview and earn the job) and everyone has a blast. Then, the “math” comes in when we discuss trading and connections to numeration systems and, specifically, place value and base. We compare Chipton, a base 3 world, with ours, a base 10 world, and convert numbers from one base to another by answering questions like “how many white chips are in one blue chip?” and “how many red chips are in one yellow chip?”

Right about here in the lesson my students are just getting the idea that this whole game / activity / thing was all a sneaky way to teach conversion of bases without lecturing and we’re recording all of our patterns / connections to exponents / etc. on a table on the board and then, just like that, the power goes out all over campus. Several of us were in mid-sentence and one of my students was in mid-writing (recording our data on the board) when the electricity went off and we were all plunged into total darkness. I finished my sentence and waited a second for the power to return (as the electricity goes off regularly in Kigali) because most public places (schools, hotels, restaurants, etc.) have generators that come on automatically when the power goes off. Then I realized that the building next to ours was illuminated while we all sat in darkness (later I discovered that our building, because it is so new, is not yet connected to the generator). Before I could decide what to do next, almost as one, each of my students got out their cell phone and turned on the flashlight (all cell phones in Rwanda have a flashlight feature) and aimed them at the board so the student could finish recording the data and we could finish our discussion! Isn’t that simply amazing! It was such a we-are-the-world moment!

There was not even a suggestion of simply stopping and going home. They are just so eager for knowledge and they will go through extraordinary lengths to achieve it. It’s a very pleasant change from some of the attitudes I’ve seen in students in the US (no offense students in the US, you know I love you guys!) – it’s just so obvious that education is valued here in a way we do not at home. For students to even get into KIE they must earn a almost impossibly high score on the country’s mandatory examination, then they have the added challenge of trying to finding funds. There are no opportunities like we have in America for things like scholarships, loans, or even part-time work (the unemployment rate in Kigali is about 33%, higher outside of the city). So when a student gets in and has the funds to go to school, you better believe s/he wants to get the most out of it.

My class at KIE was literally a dream class: they are excited, motivated, interested, fun, I mean, you can’t ask for more than that! My second story involves another memorable lesson involving a lesson that I call “handshake problem” with this class. It’s just a fun way to teach problem solving by having students act out the situation, look for a pattern, and figure out the formula to answer the question “There are 25 people at a party. Everyone shakes hands with everyone else. How many total handshakes happen at the party?” Of course the excitement was palpable when I whipped out my iPod and mini-speaker, turned on my “party” playlist, and had them get up and “party around the room” shaking hands in groups of 3, 4, 5, etc. people. So, here is the scenario in my class: my students are “partying” around the room, shaking hands, laughing, and recording their data; the iPod is blaring music; and, here’s the best part, it attracted a crowd! The windows in my classroom are filled with students watching from the outside – I had 75 people outside watching my lessons every day after the handshake lesson! It was so fun to teach in a place where not only your students are insanely interested but also the rest of students on campus are too!

I hope that hearing and reading about my experience as a Fulbright Scholar will awaken you to the potentials in your own students, motivate you to expand your own horizons, and inspire you to go beyond your initial limitations. I can honestly say that applying to become a Fulbright Scholar was one of the best decisions I’ve ever made and my experiences in Rwanda changed me and made me a better teacher and a better person.
References:


http://www.cies.org/us_scholars/us_awards/

http://www.kist.ac.rw/about/about.html
(Mis)perception of change: Education opportunities at the Toronto District School Board 40 years later

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Abstract
In this study, we explored the educational opportunities available to secondary students in the Toronto District School Board using both Board and Ministry of Education data. The student demographic variables of special education, family income and parent education were correlated with services and programs provided (Gifted, French Immersion, full-course offerings, OSSLT opportunity, OYAP, and SHSMP). Overall, each of the demographic variables showed significance for multiple programs. Using binary logistic regression, we were able to show students attending special/vocational/basic education schools were almost five times as likely to come from the lowest income quartile as compared to students that offer elite programming. Work place programs were more likely to be situated in the lowest income neighbourhoods.

- This article is an abridged draft version of a revision for journal resubmission.
For some time now, Canadian researchers (see Curtis, Livingstone, & Smaller, 1992; Martell, 2009) have been arguing that public school systems are structured to replicate the social stratification experienced by students who are poor, who are from minority groups, or who have disabilities. Not only does the evidence support that these students are being systematically streamed away from academic opportunities, but the bar for ‘academic success’ is continually on the rise. Research in Canada on equity issues related to secondary school opportunities and social economic status, disability, parent education and disproportionate representation is limited. Education at the elementary, secondary and post-secondary level is governed provincially/territorially. Consequently, available research is generally locally focused. The Toronto District School Board (TDSB), the largest in Canada and the fourth largest in North America (www.tdsb.on.ca/aboutus), is an excellent source of data. The student sample is large (~250,000) and it has, in the past (and again just recently) had data on student demographics, programs and achievement levels available for analysis.

In the following study, we examine educational opportunities available in public secondary schools and their relationship with student demographics such as students coming from low-income households, students who are using special education services and students whose parents have had the opportunity to acquire some university education. Poverty, disability and lack of parental education have long been viewed as traits that diminish a student’s perceived academic potential (Wright, 1970). Our study investigates whether there is a relationship between the number of students who fall into these demographic categories and the available programming at their secondary school. We also explore which demographics are more strongly represented in schools offering selected programming such as French Immersion, Advanced Placement and certain vocational programs.
**History of Inequity within Ontario Schools**

Inequitable education opportunities for certain social groups have been woven into the fabric of Ontario’s education systems since their inception in the 1850’s (Curtis et al., 1992). There is significant evidence that demonstrates how students from particular social groups continued to be denied access to academic opportunities. Research shows that poor, minority, and special education students were among those most likely to be streamed out of academic education and into lower performing-lower paying and precarious jobs (Curtis et al., 1992).

Wright (1970) conducted a study based on demographic information from eight schools in Toronto, collected through the *Every Student Survey*. He looked specifically at immigration status, first-language, and parental occupation effects on representation of students within various educational programs. Wright’s study (1970) determined that children whose parents were professionals were most likely to be found enrolled within the academic 5-year programs and least likely to be representative of over-age students or students within special or vocational classes. Wright (1970) also demonstrated a strong relationship between students whose parents were unemployed, receiving welfare or were single mothers as having the greater likelihood of being enrolled within “opportunity or special vocational” classes. Parental occupation and enrolment within vocational classes had a strong correlation. In vocational programs, there was a higher representation of children of labourers and a lower representation of children of professionals (Wright, 1970).

A further study, conducted by Deosaran and Wright based upon the 1975 *Every Student Survey* for the Toronto School System, showed the same stratification of class and parental occupation and their relation to program designation (Deosaran & Wright, 1976). The results of
the 1975 Survey also revealed a sharp increase in the percentage of students enrolled within special education and vocational classes (Deosaran & Wright, 1976). According to a search conducted within the Ontario Institute for Studies in Education library, it appears the final *Every Student Survey* was conducted in 1997 – the year before the amalgamation of the Toronto School Boards into one Toronto District School Board. There had been a long gap in the administration of these types of surveys but in 2006 the TDSB completed a student census (grades 7 through 12). A parent census (kindergarten through grade 6) was conducted in 2008. The grade 9-10 achievement results, based on student demographic characteristics from 2006-7, were released in April 2008. The data shows a large discrepancy by family socioeconomic status of students who were successful at the Ontario Secondary School Literacy Test (OSSLT) on their first try (i.e. 89% of professional/senior management; 84% of semi-professional; 74% of skilled/semi-skilled clerical and trades; 66% for unskilled clerical and 54% of non-remunerative) (TDSB, 2008). Without passing this test, or an equivalent course, students are unable to graduate from high school.

In terms of academic preparedness for post-secondary education for poor students in particular, “...[I]t is reported that of the 17-20 year olds (from the lowest 10% of income areas) who were in the TDSB in March 2004 only 13.4% registered at university and only 6.5% registered at community college” (Martell, 2009, para. 25). Figures for 2003 demonstrate an overall registration rate for TDSB graduates of 26% in university and 5% in community college (TDSB, Student Success: Pathways, 2004-2005). A recent report shows that 54% of students go on to postsecondary school in Ontario (King et al., 2009). Close to 80% of students from Toronto’s poorest neighbourhoods are not pursuing post-secondary education (Martell, 2009). Martell (2009) explains this outcome as a result of the lack of preparation these students have
received due to the effects of bottom streaming (the act of placing students into groups that are
directed to specific programming opportunities based on perceived ability), compounded by the
high costs associated with post-secondary education. According to the TDSB report released in
2008, there is an extreme disparity between levels of achievement and students considered at-risk
in the three academic streams (academic, applied and essential) (TDSB, 2008). The report states
that while only 6% of grade 9 students in the academic stream are considered ‘at-risk’, 31% of
students in applied and 48% of students in the essential stream are considered to be ‘at-risk’
(TDSB, 2008, p. 50). In terms of achievement for first time eligible students taking the OSSLT,
the results are even starker. While 87% of students from the academic stream pass on their first
attempt, that number drops considerably to 38% of students in the applied stream to a staggering
8% of students in the essential or workplace stream successfully (TDSB, 2008, p. 51). In
conclusion to these dramatic findings, the TDSB research report (2008) acknowledges the
presence of a continued if not widened gap in achievement between academic and non-academic
streams by stating “the gap in achievement of university courses and non-university courses was
observed a generation ago; it is still a key characteristic in the TDSB secondary panel” (Brown &
Sinay, 2008, p. 50). The TDSB report also maintains that despite these findings, according to the
Ministry of Education, streaming does not officially exist (TDSB, 2008, p.50). When post-
secondary options are limited, graduating students are largely employed in dead-end, mindless
jobs, precarious employment or filling up the lines at the unemployment office (Martell, 2009).

Methods

This study was designed to explore the current educational opportunities available within
the TDSB secondary panel for students with disabilities, students from lower income families,
and students whose parents have some university education. We examined the stratification of
students from various backgrounds in secondary school programs and services within the Toronto District School Board. Specifically, we looked at a) the relationship between student demographic variables as well as their relationship with available programs and services offered within the selected TDSB secondary schools; b) trends of overrepresentation of student demographics within specific school types as determined through binary logistic regression; and c) location trends in schools offering the Specialist High Skills Major Program (SHSMP), the Ontario Youth Apprenticeship Program (OYAP), complete course loads, and French Immersion opportunities.

School Selection

Schools for this study were selected based on the following criteria. Each school was a secondary school within the TDSB. Adult education centres, alternative schools, junior high schools, or language focused schools (ESL) were excluded from this study. A total of 85 schools met the criteria and were included.

Program and Service Selection

All information regarding programs and services was drawn from the Toronto District School Board’s website (www.tdsb.on.ca) for the school year 2008-2009. Information on OSSLT, Academic course offerings, gifted programming, Advanced Placement and OYAP was pulled from individual school profile available through the TDSB website listed above. The information for the SHSMP programs was retrieved from the Ministry of Education’s website http://www.edu.gov.on.ca/morestudentsuccess/SHSMresult.asp.

Programs and services selected for the study included the following:
1. **Opportunity to participate in the Ontario Secondary School Literacy Test (OSSLT):** The OSSLT is a test that is administered across the province targeting grade 10 students. A passing grade on this test or equivalent course (if test has already been failed) is required in order to achieve an Ontario Secondary School Diploma (OSSD).

2. **Full Academic Course Offering:** Schools that were deemed to offer a full academic course load had to meet the requirement of offering university level courses in grades 11 and 12 for English, Math and Science. It is important to note that all courses listed on Secondary School profiles were included, however, if student demand falls beneath the quota, not all courses will be offered.

3. **Gifted Program:** The gifted program is a specialized program to meet the needs of students who have been formally identified as gifted through an Identification, Placement, and Review Committee (IPRC).

4. **French Immersion:** Completion of requirements for French Immersion curricula at the secondary school level provides the opportunity for students to graduate, along with their OSSD, with a certificate of Bilingual Studies in French Immersion from the TDSB as well as the opportunity to achieve an Honours Certificate in Bilingual Studies in French Immersion from the TDSB (TDSB, French Immersion, current website).

5. **The Advanced Placement Program:** The Advanced Placement program offers students the opportunity to achieve university level accreditation while in high school. Exams are marked externally and participating universities are able to grant first year level credits in specified subject areas (Advanced Placements, current website).

6. **Ontario Youth Apprenticeship Program (OYAP):** OYAP is a school-to-work (vocational focused) program offered to students interested in pursuing employment in the following
trade sectors: motive power, construction, industrial and services. The OYAP courses and program provide students with apprenticeship opportunities while they are working towards their OSSD (OYAP, 2009). For this study, schools reported to host the OYAP program were schools that identified OYAP within their list of programs and services offered at their school on each individual 2008-2009 TDSB profile.

7. Specialist High Skills Major Program (SHSMP) - The SHSMP is a career path focused program intended to aid students in pursuing interests in various fields such as agriculture, business, construction, environment, forestry, and transportation (Ministry of Education, 2010 current website).

Student demographic variables: All demographic information was taken from the Ontario Ministry of Education School Information Finder Website - http://www.edu.gov.on.ca/eng/sift/ Demographic information from October 2009 was used.

The selected demographic variables were the following:

- Percentage of students who live in lower-income households. This is defined by the Ministry of Education as “[t]he estimated percentage of children who attend the school and whose families devote a larger share of income to the necessities of food, shelter and clothing than the average family”. The Ministry of Education states that the percentage is tabulated by students’ postal code and then cross-referenced with relevant data from the 2006 Census. Low income measures determined through the LICO (low income cut off measure).
- Percentage of students who receive special education services: This percentage relates to the number of students in the school “who are in special education programs or receive special education services. This includes students with identified
and non-identified exceptionalities, but excludes students identified as gifted” (Ministry of Education, 2009b definitions).

- Percentage of students whose parents have some university education: This percentage relates to the number of students who have at least one parent who has achieved a university degree, certificate or diploma. The Ministry states that this percentage is tabulated using student postal code information and cross-referenced with relevant data from the 2006 Census. It is isn’t clear by this definition if the Ministry is actually referring to any post-secondary education since universities don’t typically give diplomas and certificates but we will use the wording as given by the Ministry and assume it means University.

Student demographic variables were also tested for correlation against themselves using a t-distribution analysis to determine statistical significance (p<0.05). For example, percentage of students living in lower-income households was tested for correlation with percentage of students whose parents have some university education and percentage of students who use special education services. Following the above analysis, a multifactorial ANOVA was run for each program/service using the student demographic variables as dependent variables and each program as a factor (e.g. student demographic variables grouped to run against French Immersion).

Binary Logistic Regression was performed to explore the impact of student demographic variables (low income, parental education levels, and special education) on education opportunities available at students’ schools. To prepare data for the regression analysis, the student demographic variables were divided into equivalent quartiles. To calculate quartiles, student demographic percentage values from each secondary school were grouped together and
the total was divided into four equal quarters. Dividing demographics into equivalent quartiles allowed for assessment as to which school categories fell within the top 25% of student demographic variables (e.g. schools falling into the top low income quartile would indicate that they had the highest percentage of students coming from low income households). In order to facilitate interpretation, schools were categorized by which programs/services they offered. Initially, a criterion was created to ensure that each school could only fit within one specific category with no overlapping characteristics. A chart of criterion selection and school placement can be found below. Vocational programming includes the SHSMP and OYAP programs, Elite programming includes French Immersion, Gifted and Advanced Placement programming, and Uniprep includes schools that state they offer a full course load that allows students to become eligible for university admission.

*Table 1: School Category Criteria*

<table>
<thead>
<tr>
<th>School Category</th>
<th>Special School</th>
<th>Vocational Only</th>
<th>Basic Education only</th>
<th>Elite Academic and Vocational</th>
<th>Elite and other academic</th>
<th>Uniprep Vocational</th>
<th>Uniprep only (no voc, no elite)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Special Education</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Only vocational programming</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>No uniprep, elite or vocational programming</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Elite and vocational programming</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
However, due to the high number of categories, n values became extremely small limiting any possibility for determining significance through a regression analysis. The previous seven school categories were then collapsed into four groups based upon intuitive sense. The four new categories were determined as follows:

*Table 2: New School Category Breakdown*

<table>
<thead>
<tr>
<th>New School Category</th>
<th>Previous School Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCL, VOC, Basic only</td>
<td>Special schools, vocational only and basic education only schools</td>
</tr>
<tr>
<td>Uniprep and vocational</td>
<td>University Preparation and vocational</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>University Preparation only (no voc, no elite)</td>
</tr>
<tr>
<td>Elite</td>
<td>Elite Academic (French Immersion, AP, Gifted)</td>
</tr>
</tbody>
</table>

*Note: Uniprep schools have indicated that there are enough available courses possibly offered throughout the year to ensure that a student has the eligibility to apply for Post-Secondary Education. However, our data could not substantiate if all the listed were actually offered.*

Using the four school categories, a binary logistic regression was performed to determine the impact of the percentage of students who came from low income households, had parents who had gone to university, and students using special education services and supports on overall programs offered within schools. The binary logistic regression categories greatly
reduced the \( n \), therefore a crosstabs analysis was run to further explore how many schools had the highest percentages of highest low income, parent education and special education quartiles across the board.

Lastly, schools hosting vocational-focused programs such as the SHSMP or OYAP programs were plotted on separate 2001 Low Income Neighbourhoods maps of Toronto (Social Policy Analysis & Research, 2003) to determine which neighbourhoods and income demographics vocational programs were targeting. Secondary schools that did not offer full academic course selections were also plotted, as were schools that offered French Immersion.

**Results**

Results for this study demonstrated significant disparity of education opportunities for students from low-income households, for students using special education services, and for students whose parents have not acquired some university education. There is a demonstrated variance in demographics at schools offering programs such as French Immersion and Advanced Placement as well as schools hosting vocational programs such as the OYAP and who do not offer a Full Academic Course Offering or the opportunity to take the OSSLT. Location trends reveal that both lower and higher income areas around the Greater Toronto Area offer significantly different programming opportunities. Most notably, vocational focused programs operate primarily in Toronto’s lowest income neighborhoods whereas French Immersion programming is more likely to be offered in more affluent areas.

*The Intersection of Low Income, Special Education and Parental Education*

Each student demographic variable was tested for correlation to determine whether there was an inherent relationship between students from low income households and their use of
special education services as well as their relationship with parental education levels. The correlation between students using special education services and parental education levels was also explored. When correlated, each variable of low income, special education and parental education demonstrated a significant relationship with the variable to which it was correlated. The percentage of students who live in lower-income households and the percentage of students whose parents had some university education had a significant negative correlation $r=-0.498, (t=-5.96, p=<.0001)$. The percentage of students who live in lower-income households also had a significant positive correlation with the percentage of students using special education services $r=0.214 (t=2.844, p<0.01)$. The percentage of students using special education services and percentage of students whose parents had some university education had a significant negative correlation $r=-0.298 (t=-4.044, p<0.0001)$. Based on these findings, a significant relationship between the three selected student demographic (low-income, special education and parental education) has been determined.

**Means and ANOVA**

The mean for each student demographic variable was tabulated by program and service offered. Mean values are listed in the table below. A Multivariate ANOVA was used to explore significance of the relationships between the student demographic variables and their representation within each program and service. Each student demographic variable was selected as a dependent variable and each program and service was individually calculated as the independent factor. Significance was determined and is indicated according to asterisk within the means table below.
Using the four school categories, a binary logistic regression was performed to determine the impact of the percentage of students who came from low income households on overall programs and services offered within schools. The model contained four covariates (school categories) and one dependent factor: low income. The model demonstrated to be statistically significant, $x^2 (3, N=85)=8.871$, $p<0.05$. The model explained between 9.9% (Cox and Snell R Square) and 14.2% (Nagelkerke R Square) of the variance. As shown in table 4, for the case of low income, only one independent variable demonstrated significance (Special, Vocational and Basic Education only). The strongest predictor of low income was the school category Special, Vocational and Basic Education only schools which had an Odds Ratio of 4.6. This indicates that Special, Vocational and Basic Education only Schools were almost 5 times more likely to fall within the income quartile representing the highest percentages of students from low income households as compared to Elite schools. Schools offering both University Prep + Vocational programming had an Odds Ratio of 2.654 indicating that these schools were almost 3 times as likely to fall within the income quartile representing the highest percentage of students from low income households as compared to Elite schools. However, this was not shown to be statistically significant.
Table 4: Binary Logistic Regression – Low Income

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite</td>
<td></td>
<td></td>
<td>8.158</td>
<td>3</td>
<td>.043</td>
<td></td>
</tr>
<tr>
<td>SPCL, VOC, Basic</td>
<td>1.526</td>
<td>.759</td>
<td>4.037</td>
<td>1</td>
<td>.045</td>
<td>4.600</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>.976</td>
<td>.631</td>
<td>2.392</td>
<td>1</td>
<td>.122</td>
<td>2.654</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>-.553</td>
<td>.770</td>
<td>.516</td>
<td>1</td>
<td>.473</td>
<td>.575</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.344</td>
<td>.458</td>
<td>8.592</td>
<td>1</td>
<td>.003</td>
<td>.261</td>
</tr>
</tbody>
</table>

A second binary logistic regression was performed to determine the impact of the percentage of students whose parents had some university education on overall programs and services offered within schools. The model demonstrated to be statistically significant, $x^2 (3, N=85)=20.34, p .001$ and explained between 21.3% (Cox and Snell R Square) and 31.6% (Nagelkerke R Square) of the variance. As shown in Table 5 for the case of parent education, only one independent variable demonstrated significance (University Prep + Vocational programming). Schools offering both University Prep + Vocational programming had an Odds Ratio of 0.051 indicating that these schools had a .05 chance of falling into the highest parent education quartile compared to Elite schools.

Table 5: Binary Logistic Regression – Parental Education

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite</td>
<td></td>
<td></td>
<td>8.594</td>
<td>3</td>
<td>.035</td>
<td></td>
</tr>
<tr>
<td>SPCL, VOC, Basic</td>
<td>-21.134</td>
<td>12118.636</td>
<td>.000</td>
<td>1</td>
<td>.999</td>
<td>.000</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>-2.976</td>
<td>1.089</td>
<td>7.467</td>
<td>1</td>
<td>.006</td>
<td>.051</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>-.972</td>
<td>.603</td>
<td>2.601</td>
<td>1</td>
<td>.107</td>
<td>.378</td>
</tr>
<tr>
<td>Constant</td>
<td>-.069</td>
<td>.372</td>
<td>.034</td>
<td>1</td>
<td>.853</td>
<td>.933</td>
</tr>
</tbody>
</table>
A third binary logistic regression was performed to determine the impact of the percentage of students using special education services on overall programs and services offered within schools. Again, the model demonstrated to be statistically significant, $x^2 (3, N=85)=34.59, p \leq 0.001$ and explained between 33.4% (Cox and Snell R Square) and 48.5 % (Nagelkerke R Square) of the variance. As shown in table 6 for the case of special education, none of the independent variables demonstrated significance. However, students who attended schools that offered special, vocational and basic education programming had an Odds Ratio of 1.010E10 indicating that these schools were most likely to be found within the highest special education quartile as compared to Elite schools. Similarly, schools offering University Prep and Vocational programming were almost 2 times as likely to fall within the highest special education quartile as compared to Elite schools. However, due to the miniscule numbers within each independent category, statistical significance was not achieved.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite</td>
<td>.962</td>
<td>.382</td>
<td>.810</td>
<td>1</td>
<td>.998</td>
<td>1.010E10</td>
</tr>
<tr>
<td>SPCL, VOC, Basic</td>
<td>23.035</td>
<td>12118.637</td>
<td>.000</td>
<td>1</td>
<td>.998</td>
<td>1.010E10</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>.609</td>
<td>.741</td>
<td>.675</td>
<td>1</td>
<td>.411</td>
<td>1.838</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>-.065</td>
<td>.821</td>
<td>.006</td>
<td>1</td>
<td>.937</td>
<td>.937</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.833</td>
<td>.539</td>
<td>11.581</td>
<td>1</td>
<td>.001</td>
<td>.160</td>
</tr>
</tbody>
</table>
Table 6: Binary Logistic Regression – Special Education

<table>
<thead>
<tr>
<th>School Categories</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite</td>
<td>.962</td>
<td>.810</td>
<td>.000</td>
<td>1</td>
<td>.998</td>
<td>1.010E10</td>
</tr>
<tr>
<td>SPCL, VOC, Basic</td>
<td>23.035</td>
<td>12118.637</td>
<td>.000</td>
<td>1</td>
<td>.998</td>
<td>1.010E10</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>.609</td>
<td>.741</td>
<td>.675</td>
<td>1</td>
<td>.411</td>
<td>1.838</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>-.065</td>
<td>.821</td>
<td>.006</td>
<td>1</td>
<td>.937</td>
<td>.937</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.833</td>
<td>.539</td>
<td>11.581</td>
<td>1</td>
<td>.001</td>
<td>.160</td>
</tr>
</tbody>
</table>

Due to the small n limiting the ability of reaching significance, a crosstabs analysis was run to further explore how many schools fell within the highest low income quartile across the board (how many schools had the highest incidence of low income). The results demonstrated that 54.5% of special, vocational and basic education only schools fell within the highest low income quartile as compared to 40.9% of Uniprep and vocational schools, 13% of Uniprep only schools and 20.7% of schools offering Elite programming.

Table 7: Low Income – Cross-tabulations

<table>
<thead>
<tr>
<th>School Categories</th>
<th>Number of schools within lowest 3 percentages quartiles</th>
<th>Number of schools within the highest percentages quartile</th>
<th>Total</th>
<th>Percentage of schools within the highest percentages quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCL, VOC, Basic Only</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>54.5%</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>13</td>
<td>9</td>
<td>22</td>
<td>40.9%</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>20</td>
<td>3</td>
<td>23</td>
<td>13.0%</td>
</tr>
<tr>
<td>Elite</td>
<td>23</td>
<td>6</td>
<td>29</td>
<td>20.7%</td>
</tr>
</tbody>
</table>
Crosstabs was repeated for the percentage of students whose parents had some university education. Looking at how many schools from each school category fell within the highest quartile of parent education (highest incidence of parents having been to university), none of the Special, Vocational and Basic education schools could be included. Only 4.5% of schools offering Uniprep and vocational programming fell within the highest parent education quartile as compared to 26.1% of Uniprep only schools and 48.3% of schools offering Elite programming.

Table 8: Parental Education – Cross-tabulations

<table>
<thead>
<tr>
<th>School Categories</th>
<th>Number of schools within lowest 3 percentages quartiles</th>
<th>Number of schools within the highest percentages quartile</th>
<th>Total</th>
<th>Percentage of schools within the highest percentages quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCL, VOC, Basic Only</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>0%</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>21</td>
<td>1</td>
<td>22</td>
<td>4.5%</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>17</td>
<td>6</td>
<td>23</td>
<td>26.1%</td>
</tr>
<tr>
<td>Elite</td>
<td>15</td>
<td>14</td>
<td>29</td>
<td>48.3%</td>
</tr>
</tbody>
</table>

A third crosstabs was performed to determine how many of the schools within the selected school categories fell within the highest quartile of students who used special education services. The highest quartile for special education indicated the highest incidence of students within the school using special education programming or services. 100% of Special, Vocational and Basic only schools fell within the highest quartile for special education. 22.7% of schools offering Uniprep and vocational programming fell within the highest quartile for special education as compared to 13% of schools offering only Uniprep and 13.7% of schools offering Elite programming.
### Table 9: Special Education – Cross-tabulations

<table>
<thead>
<tr>
<th>School Categories</th>
<th>Number of schools within lowest 3 percentages quartiles</th>
<th>Number of schools within highest special education quartile</th>
<th>Total</th>
<th>Percentage of schools within the highest percentages quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCL, VOC, Basic Only</td>
<td>0</td>
<td>11</td>
<td>11</td>
<td>100%</td>
</tr>
<tr>
<td>Uniprep and Voc</td>
<td>17</td>
<td>5</td>
<td>22</td>
<td>22.7%</td>
</tr>
<tr>
<td>Uniprep only</td>
<td>20</td>
<td>3</td>
<td>23</td>
<td>13.0%</td>
</tr>
<tr>
<td>Elite</td>
<td>25</td>
<td>4</td>
<td>29</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

### Location Trends of Programs

To further explore the established disparity in academic/vocational programming and demographics, schools hosting the OYAP, SHSMP, and French Immersion programs as well as schools that do not offer full academic course loads were plotted on Poverty Maps (Social Policy Analysis and Research, 2003). The poverty maps demonstrate areas of affluence and low income in the Greater Toronto Area. The current study was able to determine that the majority of schools offering vocational programs, such as the SHSMP or the OYAP, were located within or bordering neighbourhoods with higher incidences of poverty. For example, of the 22 schools offering the OYAP program all but 7 (68%) were located in neighborhoods identified as having the highest or second highest incidence of low income in Toronto. This trend was also observed for schools offering the SHSMP and schools that did not offer full academic course loads. Schools offering French Immersion programs were plotted and revealed a distinctly different pattern. Conversely, half of schools offering the French Immersion program are found within
Toronto’s neighborhoods with the highest and second highest degree of affluence. Only 30% were found to be located in the two lowest income areas.

Discussion

Low Income

This study found a significant positive correlation between the percentage of students who are from lower income households and the percentage of students using special education services. This suggests that there is an overrepresentation of poor students being identified as requiring specialized education services. Wright (1970), Curtis, et al. (1992), and Martell (2009) claim that the trend of separating and streaming poor students has long been embedded within Ontario school systems. There was also a significant negative correlation between the percentage of students from lower income households and percentage of students whose parents had some university education, which suggests a strong relationship between the acquisition of higher education with the successful navigation of the market (e.g. monetary remuneration). Denying access to select social groups (students from lower income households and students using special education services) as found within this study, is evidence of a marketized system that is reproducing the embedded inequities present in Ontario’s society as a whole; a system that apportions resources to students who already mirror the identity of those with economic power.

Curtis et al., (1992) also discuss similar findings for the French Immersion programs. French Immersion was introduced to Toronto Boards in the mid 1970’s, and has always been representative of the middle and upper class ‘with rare exception’ (Curtis et. al, 1992, p. 68). In the current study, trends show that schools hosting French Immersion programs have a statistically significant lower incidence of students from lower-income when compared to
schools hosting the OYAP and those not offering full academic course loads. A binary logistic regression demonstrated with statistical significance that students attending SPCL, VOC, Basic Schools have almost 5 times as likely be from the lowest income quartile as compared to students attending Elite Schools which often include French Immersion. A crosstabs revealed that over half of students from SPCL, VOC, Basic Schools are from the lowest income quartiles as compared to 13% of students attending Uniprep Schools only and 20.7% of students attending Elite Schools.

These findings are particularly concerning as it appears that a divide has been drawn between programs geared towards students coming from higher and lower income households. There is a significant overrepresentation of poorer students within programs that offer little option for post-secondary education and a significant underrepresentation of poor students within schools offering French Immersion. These trends have been clearly recognized (see for example Curtis et al., 1992; Martell, 2009) and have been supported through the current study. These findings suggest that there are structural conditions within the school system that maintain these economic divides. Opportunities to develop more marketable skills as a student and as a future economic contributor appear to be reserved for those students who already come from a certain level of financial advantage or socio-economic status.

Parental Education

Percentages of students whose parents have some university education was statistically significantly higher for schools hosting the French Immersion and Advanced Placement programs when compared to schools hosting the OYAP. The binary logistic regression demonstrated with statistical significance that students attending Uniprep and Voc Schools had
only a 0.05 chance of having parents as educated as students attending the Elite schools. A crosstabs revealed that 0% of students attending SPCL, VOC, Basic Only had parents coming from the highest education quartile as compared to 48.3% of students from the Elite schools. As previously suspected, education levels and class status maintained by students’ parents had an enormous impact on education programming options. The current study has demonstrated that the students whose parents have higher levels of education are more often found within programs that increase their future eligibility for university such as the French Immersion and Advanced Placement programs. This study has also reinforced that children of people who have not gone to university are more likely to be found within vocational programs or schools that limit their opportunity to advance to post-secondary education if they so desire. For example, students who participate in the OYAP program are less likely to have met the minimum college entrance requirements (King, et al., 2009). These findings reinforce the notion that the education system is structured to socially reproduce the stratification of previous generations and that greater academic opportunity is afforded to those students whose parents have already successfully acquired post-secondary education.

Special Education

Percentages of students using special education services was significantly higher within schools who did not offer full academic course loads or the OSSLT as compared to the rest of the programs in the study. Due to such small \( n \), a binary logistic regression did not reveal a statistically significant result when investigated across the various school groupings. However, a crosstabs revealed an overrepresentation of students using special education programs within SPCL, VOC, Basic Only Schools (100%) and an underrepresentation for both Uniprep only and Elite Schools.
**Location trends of Schools Offering the SHSMP and OYAP (Vocational) Programs**

In Ontario during the 1970’s, vocational programs consisted

almost entirely of students from working-class, ethnic/racial-minority and single-parent families. The survey found that a working-class child ran a ten times greater chance of ending up in a vocational programme than did a child of the professional or managerial class. Similarly, over one-third of all children from unemployed families, and over half of those from families on welfare, ended up in these schools.” (Curtis, et.al, 1992, p. 89)

As demonstrated by the plotting of programs offered on the Low Income Neighbourhoods map, most of the school-to-work programs are located in the lowest income neighbourhoods. If, as many argue, these are “opportunities”, one must question why they are not distributed more evenly throughout all income brackets. The statistics clearly show that it is not by chance that these programs are offered where they are.

**Conclusion**

This study has demonstrated that after 40 years not much has changed. There continues to be significant inequity in programs offered by the Toronto District School Board. These inequities, which have been shown to be highly relevant to student demographics (special education, parent education, socioeconomic status), lead to which ‘types’ of students are granted access to future and more marketable education opportunities and which ‘types’ of students are denied access. The results of this study suggest that the structure of the TDSB continues to require further reform to ensure that all students have equitable program opportunities. Currently, students deemed as less able to meet academic expectations are met with a reduction in access to
resources and services that will provide them with greater career options. The Toronto District
School Board has the opportunity to serve as an organization that reduces social inequities but
only if it chooses to prioritize equitable education opportunities for students experiencing
poverty, disability and academic disadvantage.

References


Bartlett, L., Frederick, M., Gulbrandson, T., & Murillo, Enrique. (2002) The
Marketization of Education: Public Schools for Private Ends. Anthropology and
Education Quarterly. Retrieved on May 22, 2009 from
http://www.tc.columbia.edu/faculty/bartlett/publications/pdf/33_1AEQ.pdf


Brown, R. & Sinay, E. (2008) 2006 Student Census: Linking Student Demographic Data with
Student Achievement. Toronto District School Board, Research Report

of Working Class Kids in Ontario Schools. James Lorimer & Company

Deosaran, R. A. & Wright, E.N., (1976) The 1975 Every Student Survey; Student's
Background & Its Relationship to Program Placement. Research Service No. 138.
Toronto Board of Education: Research Department. Retrieved on August 17, 2009 from 


http://educationactiontoronto.com/discussions/it-s-the-bottom-streaming-that-matters-most


Retrieved on January 1, 2010 from

http://www.edu.gov.on.ca/morestudentsuccess/SHSMresult.asp

Ontario Youth Apprenticeship Program (2009) Welcome to the Ontario Youth Apprenticeship Program (OYAP). Retrieved on August 1, 2009 from


Retrieved on August 1, 2009 from


Retrieved August 31, 2009 from


Toronto District School Board (current website) Gifted Program Differentiation.

Retrieved on August 2, 2009

from http://schools.tdsb.on.ca/donmillsci/dept/social_global/gifted/diff.htm


Toronto District School Board (November 5, 2009). Grade 9-10 Achievement Results by Student Demographic Characteristics, 2006-07. Organizational Development. Information presented at the 2nd Annual Equity Representative’s Symposium: Building Equitable and Inclusive School Communications.

An integrated approach towards establishing Industry Institutes that models Techno-education & Training in order to shape Zimbabwean youths who are the future of a high technology economy

1Ngoni Chirinda

2Elangovan Gowdhaman

Abstract

Exciting technological education programs, also termed techno-education in this paper, are being developed and implemented across the globe. The paper advocates state-wide establishment of Industry Institutes that models techno-education for shaping our Zimbabwean youths who are the future of a high technology economy from an integrated approach. Techno-education has enthused extensive interest in the study of technology and has contributed to the rapid growth of contemporary or modern-day curriculum materials worldwide. The process of harnessing techno-education curricula is a complex undertaking that requires an adaptation of philosophy, curriculum, and instructional practices. However,
this study reviews and suggests a fine tune integrated approach towards Techno-education in active participation of Industry Institutes with efforts to achieve a high technology economy. It will also address the need for social relevance in building Technical Literacy for the betterment of a prospective society. The youths are the future of the likely Zimbabwean economy. Thus they are today’s concern as beneficiaries of this research conception.

**Key Words:** Techno-education, Industry-Institute, Social Reconstruction, high technology economy

1.0 **Introduction**

An Industry Institute harmonizes industry needs through Institute involvement, operationally and technically. Industry Institutes are the nucleus of expert human capital sharpening, advanced research & development practices and high technology generation & transfer. The concept of Industry Institute is a cooperative model between industry and institutes. It has globally taken different models at different times over years. Historically, it started with simple interaction as in industrial visits/walk-through by students in industry and gradually evolved to very close strategic interactions overtime. There has been a wide variety of interactions practiced among industries and institutes which includes problem solving, curriculum development, study visits, scholarships, apprenticeship training and incubation center.

Professor Shyamal Majumdar, Ph.D. *et al.*, (2010), however articulated that, ‘until the time that the concept of public private partnership has evolved, industry, has, by far, not been involved in taking sustainable financial, technical and operational risks in the design, financing and
building and operation of educational projects’. Therefore, public-private partnerships has been regarded as a natural progression of relationship from interaction elevated to structural partnership where the private sector assumes substantial operational risks in the design and implementation of educational projects.

The same has been so in Zimbabwe to date where Industry-Institute Interactions are not strong. From a mini survey, it has shown that some local companies are now even rejecting tertiary students applying for internship because they are not value adding to the organizations. However, in recent years technical trainers/educators across the globe are setting out to reform education by calling for a social reconstruction, advocating a restructuring of training/education.

2.0 The technical curriculum

The ever changing perception of the roll of technology in our society provides educators with a myriad of challenges and problems for the technical curriculum. Technology is alternately seen as a major source of society's problems, or as the salvation of society. People become slaves of technology. This confused role, compounded with the current trend of life-long learning, and the need for future citizens who can function effectively in a modern technological society, provides educators with innumerable opportunities for integrating realistic problem solving techniques into the teaching environment. This leads us to the purpose of this article which is to provide practical suggestions on how a technological problem solving environment can be created and used by educators in any area of study to help prepare youthful students for living in our modern society through Industry-institute Interaction as our future for a high technology economy.
3.0 The current Zimbabwean Industry Institute Interaction

All the Institutes in the country are practicing problem solving, curriculum development, study visits, scholarships, and apprenticeship training as a form of Industry Institute Interaction. There are merely two Institutes that went an extra mile and envisaged the Incubation Center and Science Park approaches namely National University of Science of Technology and Harare Institute of Technology. That said the tertiary institutions are categorized into Universities, Polytechnic colleges, Teachers’ colleges, Vocational Training colleges, and Specialist schools/colleges under the hospices of the Ministry of Higher and Tertiary Education. Their endeavor to fulfill their mandate for manpower development has been a success story before our recent ten year economic downfall. This is the opportune time when survival strategies have to be exploited in order to revive our economy when resources have become extremely scarce for nonproductive centers that used to depend wholly on Government support such as Institutions.

Close analysis by the researcher\(^1\) has drawn the following model, Figure 3.1, to address the short falling link from a football pitch standpoint. The model is a real eleven member team determined for attack and winning. There is no football team that determines to win in the second half round match when players are fully aware that player, position number six, has weakened. Chinese Military Strategist, Sun Tzu c. 490 BC, declared that, “Do not repeat the tactics which have gained you one victory, but let your methods be regulated by the infinite variety of circumstances”.

The 4-1-5 formation in this model of Figure 3.1 appreciates well the value chain of the Zimbabwean education system. It stretches from the Pre-school level up until tertiary
education then links to industry. The challenge is in the midfielder’s position six highlighted in red. The player seems to be becoming unfashionable or tiring with age. How can you make sure that team nine will be well supplied and given several opportunities to score goals? Football coaches have the answer to this question. The least suggestion you can ever find is to leave the struggling player in the game. Substitution is not a threat but a survival strategy.

![Diagram](image)

**Figure 3.1** Football pitch approach (4-1-5 formation) - Substitute critical position 6

The Zimbabwean technical education curriculum is due for review and substitution. There is a very big gap between Institutes and Industry. Moreover, the global economy has since shifted from being Labor-intensive or Industry-based to knowledge-based. The Zimbabwean technical education curriculum is to pursue the virtue of Institute Industry Interactions. The researcher calls this ‘the midfielder position substitute strategy’. Developed nations have
structured their curriculum so well that students have become the backbone of Industrial
development. Microsoft and Nokia international companies are achieving their global
competitiveness by virtue of a Science Park vis-à-vis Industry Institute Interaction. High
technology economy has become possible in their locality, regionally.

4.0 Objectives of Industry-Institute Interaction

Close interaction between the Institute and the Industry is seen as the platform for showcasing
best practices, latest technological advancements and their implementation and impact on the
Industry. Industry will certainly yield positive results proceeding discussions from section 3.0.
It surely scores goals of success when backed by the Industry Institute Interaction. It is
basically considered to improve the quality of techno-education adequately to meet the needs
of the industry and the technology economy. Having a close interaction in place, industries
are able to vividly participate in techno-education programs, with the goal of cross-fertilizing
ideas for systems improvement. To integrate industrial training and other inputs from the
industry with the teaching-learning processes, interaction is necessary as it develops students’
awareness on job functions in the industry, attitudes to adapt to industrial environment, proper
practical and relevant knowledge, skills and competencies in preparation to becoming self
employed. Industry expectations are also echoed through sound interaction, particularly the
requirements from new recruits who are expected to be orientated to industrial disciplines, job
descriptions within the workplace with industrial practices.

Mutual benefit is derived from the shared expertise and experiences between the industry and
the institute. In addition, operating within the framework of a specific cooperative program is
an essential outcome of having both industries and institute agree on specific skills training for some specific jobs vis-à-vis customized programs.

5.0 The nature of Interaction

As the social and economic structures of various countries in the globe move from labor-intensive and industrial-based to knowledge-based and globalized economy, the role of academic institutes has been intensified more than ever. Institutes possess the optimum resource base to supply new ideas, innovations and analysis of the trends in the labor market in a holistic and pedagogic approach. This is the new concept of techno-education.

There are different forms of Industry-Institute linkages that have been started in various countries globally. These have likewise provided value-added approaches for Institutions to offer technical education and facilitate smooth decision making and reconciliation of different interests from the various sectors. These are enumerated below:

5.1 Problem Solving Interaction

The need for assimilating the latest technologies and technical capabilities to employ in the industrial work systems necessitates a strong and continuing process of reviewing the landscape of greater productivity through research and development (R&D) approaches. Industries are heavily oriented towards raising competitiveness. By saying this, there is a felt need to continuously study how best technologies can be optimized to achieve productivity. The role of the industries here becomes collaborative and oriented to provide avenues for undertaking collaborative industrial projects, contract research or technology transfer
initiatives and to solve intricate problems through R&D. Institutes, which possess vast intellectual resources base, particularly those with strong research and development cells, are in the best position to provide the intellectual augmentation and innovations that serves industry purpose. The identification of industrial problems and discovery of the ways to solve them are also good motivations for industries.

For mutual benefits to be achieved, institutes draw their motivations in industry interaction from the potential of getting relevant exposures to real industry problems, engaging into intellectually challenging research for professional achievements, augmenting professional income sources and obtaining support from research and development infrastructures/equipment. All these may be extended by industries in aid of the benefits derived, i.e. design tests, process optimization tests etc. in the case of telecommunication industries.

5.2 Curriculum development and teaching and learning system

Mechanisms to involve industry representatives in formulating the curriculum and teaching and learning systems do open productive platforms for industry-institute interaction. Collaboration, discussion and decision-making processes produce mutual agreements and understanding of the real conditions in the work place, the systemic functioning of industries and industry expectations. To some extent, such kind of interaction provides a highly effective mechanism to generate feedback based on employer demands to meet half-way in the design of academically-sound and industry-oriented curricula. This kind of interaction has resulted in the creation of such opportunities like offering of sandwich courses, development of courses jointly developed and certified under Institute - Industry tie up, joint continuing courses and periodic curricula update in relation to industrial trends and projections.
Suffice it to say, there is a need to review and modify curricula and teaching and learning styles of various disciplines to accommodate technological changes, management practices and needs of the labor market that is the Industry.

5.3 Scholarship and Internship

The introduction of development funds in the form of scholarships, stipends, insurance and even sponsorships by the industry encourages students to continue embarking on study and training programs. This also proved to be effective in drawing the best talent for the industry. In countries where effective industry support mechanisms are in place, companies sponsoring graduate scholarships have the privilege for the right-of-first-refusal in employing new graduates. For example, major telecommunication companies with business in the Philippines provide scholarships to graduate and undergraduate students under specific arrangements with universities/institutes.

Through a well-established industry-institute interaction, job fairs, placement activities and similar career orientation programs can lead to systematic recruitment of the right people for the right job, thereby aiding skills-matching that is highly required in some high technology sectors.

5.4 Industrial Tour and Study Visits

Exposing the future workforce to the actual field work, industrial environment, state-of-the-art science and technology adapted in machineries and equipment operations and industrial
practices provide ways to relate classroom theories with actual industrial experiences at the
cognitive level of the students. The visits to the industry broadens the mental orientation of
the students and also give the true picture of the on-going work.

One of the strengths and attractions of academic and vocational institutions to prospective
students is their ability to link with important industries, derive mutual support and later
access employment opportunities for school pass outs. Familiarity to industrial process, close
coordination and linkages form solid grounds for the industry to rely heavily on educational
institutes with which they have ongoing linkages with to supply the manpower needed under
any given circumstances. Employment prospects amongst students, in turn, are heightened by
deeper familiarity with existing industrial systems.

5.5 Faculty and Staff exchange

One of the known motivations of industries to step up efforts to linkage with academic
institutions is the access to well-trained students and faculty. Staff exchange between the
industry and the institutes is one of the keys to make Industry-Institute interaction successful.
The acquisition of actual field experiences by technical teachers aids in skills formation and
facilitation of the learning process. These are gained through available forms of interaction
such as industrial attachments, industry secondment to universities/institutes. Industry-
institute interaction also paves the way for co-planning of the training needs of teachers and
meeting them in close coordination with industries.

One of the best practices derived from South Korean Industry - Institute interaction system is
the recruitment by vocational training institutes and polytechnics of professional staff with
significant industry experiences and actual industry training throughout their career. This is one way effectively translating technical skills and knowledge to students enrolled in technical education and vocational programs.

On the other hand, people from the industry also benefit from the exchange through their increased access and exposure in applied research, academic and management approach by teachers and institutes which provide new ideas for product innovations.

5.6 Industrial apprenticeship

The importance of education as a strategy in skilling the future workforce for industries is vital, as industry training is inextricably linked to industry practices, Fien, et al, (2008). Historically, the private sector has played pro-actively in the training for productive employment. Individuals learned new skills through training provisions such as the apprenticeship or on-the-job training, with systematic financing schemes. Industrial revolution in the 19th century changed the employment structure and demanded high level industrial discipline with specialized skills sets. At the turn of the 20th century, vocational schools were introduced, a practice that spread in Europe, and has set the agenda of governments to increase investments in vocational skills training.

Zimbabwe has an apprenticeship model adopted from Europe. The Asian Pacific region adopted the distinct apprenticeship models from different countries and has utilized industry-institute interaction and linkages in various forms and commitment. The German model, for example, one of the most widely adopted models across regions, provides dual apprenticeship training which combines institute-based training and enterprise-based training; and are
strongly oriented to the demand of the labor market. Theoretical training is provided about one day per week by vocational training centers, while practical training is provided in-enterprise in longer period during the week. An apprenticeship model that emanated from Japan focuses on enterprise-based training among employees in needed skills. The hallmark of the Japanese skills formation system is training by large corporations which make provision for in-service training throughout the life of the workers. Unregulated apprenticeship training, as another form of apprenticeship training, on the other hand, consists of observing and imitating the master and caters to individuals who lack the educational requirements for formal training, serves important target groups and is generally cost-effective.

Apprenticeship training has become an effective industry-institute interaction scheme and is governed by certain government policies that mandate industries in cooperation with government agencies, to share the cost on trainings. Sandwich diploma programs in some countries like India has facilitated the integration of industrial training into educational program.

5.7 Incubation center

Countries all over the world have started establishing incubation centers which allows for the shared access to infrastructures, practices, venture capitals and market information. In the context of technical and vocational education, business development or Information Technology-oriented ventures, incubation centers allows for the development of a product of the academia for practical application. Incubation, as in technical development, facilitates concepts, research or laboratory process, practical application towards introduction for
commercial purposes or release. Industry-institute cooperation at this level increases opportunities for hatching new innovations for the creation of new products.

The same concept is also applied in cultivating technology-entrepreneurial skills, now termed Technopreneurship. In some countries, government-sponsored sector-specific incubators are set up to take 15 to 20 small and medium enterprises, which provide opportunities for credit, access to technology, vocational and management training, and extensive consulting facilities. The incubator effectively chaperones SMEs during their initial growth stage. Industry interaction and support in these kinds of initiatives are of paramount importance to guide potential entrepreneurial activities with the trends in the labor market, skill development, other types of support such as access to credits, technology, and market information on a shared scheme between government institutions and training providers to encourage Technopreneurship.

5.8 Science Park

A Science Park is a concept from academic institutes in their effort to fulfill industrial development. A Science Park or Science & Technology Park is an area with a collection of buildings dedicated to scientific research on a business footing – Electronic Wikipedia (2010). There are many approximate synonyms for "Science Park", including Research Park, Techno Park, Techno Polis and Biomedical Park. The appropriate term typically depends on the type of science and research in which the park's entities engage, but many of these developments are named according to which term gives the park the best profitability and naming advantages. Often, science parks are associated with or operated by institutions of higher education such as colleges and universities.
Science Parks are more organized, planned, and managed. They are concerned with future developments in Science and Technology. Typically businesses and organizations in the parks focus on product advancement and innovation as opposed to industrial parks that focus on manufacturing and business parks that focus on administration. Besides building area, these parks offer a number of shared resources, such as uninterruptible power supply, telecommunications hubs, reception and security, management offices, restaurants, bank offices, convention center, parking, internal transportation, entertainment and sports facilities, etc. In this way, the park offers considerable advantages to hosted companies, by reducing overhead costs with these facilities.

Science and technology parks are encouraged by local governments, in order to attract new companies to towns, and to expand their tax base and employment opportunities to citizens. Land and other taxes are usually waived off or reduced along a number of years, in order to attract new companies for the science and technological parks. The world's first science park started in the early 1950s and foreshadowed the community known today as Silicon Valley. The companies in a typical science park are primarily private sector, but the science park is also home to university and government facilities.

5.8 Evaluation system

Industry-institute interaction in student evaluation has been regarded to give progressive benefit to the institutes as a way of providing technical guidance on the skills and competency levels of students. For example, practicing technical professionals in the field may be engaged in the assessment process to identify possible technical skills gaps, inadequacies in training
focus, and competency matching with the kinds of work available in the industries. These are facilitated through industry involvement in the various stages of evaluation of students through interviews, seminar and projects.

6.0 The criticality of Industry Institute Interaction

The global economy has shifted to a new paradigm called the knowledge era. It is the complexities at the work place that brought about rapid technological changes, paradigm shifts in education and training and the growing demand for skills training, call for harmonized efforts to reverse the acute skills shortage in many developing countries. Industry-institute interaction allows exploring endless possibilities in working in synergy and derives a new focus to address socio-economic and technology-driven challenges.

One of the challenges in the present times is the rapid pace of technology which makes skills obsolete at greater pace before everyone else could learn from them. The excessive pace of technological changes has emphasized the need to integrate technological knowledge and skills in education and training to expand lifelong capabilities of a knowledge-based worker. It has been observed that the economic pace of technological change makes 50 percent (50%) of computer knowledge irrelevant within one year, technological knowledge in three years, specialized vocational knowledge in five years and higher education knowledge in 10 years. Another serious challenge is the increasing complexities at work, which lead to the growing need to adapt to new innovations in the market and adopt the technologies that provide utmost efficiency in machine operations. As a result, complex procedures are borne. An example of this is the transformation of automobile repair and operations manual from simple to complex piece of multiple-paged document that require skills cluster and know-how to perform them.
Considering that people and institutions are not always interested in getting involved, partnerships through industry-institute interaction can only be achieved by finding out strategies to draw relevant stakeholders into systematic and reciprocal interaction to address such workplace trends and technology emancipation.

7.0 Curriculum development

The systematic design of technical instruction based on competencies has a rich tradition in the academic circles. Charles Allen's influential work 'The Instructor, the Man and the Job', published in 1919, demonstrated the usefulness of organizing instruction into logical units which could be standardized among different training locations. The effectiveness of instruction was no longer based solely on the ability of the individual instructor, but was also due to the quality of the design itself, which served to guide the instructor and provided the basis for planning, conducting and evaluating instruction.

Subsequent work by W. W. Charters (1923), Robert Selvidge (1923; 1926), Selvidge and Fryklund (1930) and others helped to develop a framework for the systematic analysis of instructional content and the design of instructional materials. These early efforts were applied during World War II to the training of military personnel and production workers. The effectiveness of deliberately planned and systematically organized training was clearly demonstrated. Following the war, government groups and private industry convinced that quality and productivity could be improved through systematic training, invested in research and development. This work established the foundation for contemporary instructional design practice. Theoretical designs were formulated along with practical procedures which helped to guide instructional development and implementation.
In India, the Govt. introduced the Craftsmen Training Scheme by 1950 in order to ensure a steady flow of skilled workers. The scope of activity also expanded significantly. At least the following four lines of research, which impacted on instructional design, were pursued by different researchers.

- Attention was focused on the need to clearly specify objectives in observable and measurable terms;
- Measurement and evaluation concepts were advanced, making it possible not only to directly measure learning outcomes but also to assess the efficiency of the various instructional components;
- Learning theory was merged with instructional design theory;
- Advances were made in the use of instructional materials and educational technology; and by the 1970s sufficient theory and practice existed to build well-conceived, efficient, integrated systems of instruction.

Instructional development evolved into a large enterprise serving government and military groups, private industry, public education and related professions. The 1990s have seen additional instructional system refinement, particularly in the application of learning theory and the use of educational technology. Computer technology especially is a current focus. Present models for the design of technical instruction build from a rich body of knowledge, and draw concepts and practices from a diverse stream of influence, including industrial psychology, skills analysis, programmed learning, measurement and evaluation, media design and learning theory.
The Zimbabwean needs the attention of Social Reconstructionism in order to afford successful Industry Institute Interaction. Observations have shown that academic students in Zimbabwe are becoming rich with textbook knowledge. They are limited in knowledge application and innovation. Since the 80’s, embracing technological advancement by Zimbabweans as well as being involved in modern innovative research & development has been constrained with resource unavailability. It is high time we break the ceiling or takeoff in order to explore the new free space of technology economy. No wonder why third world countries take time to develop. It is the lake of an appropriate strategy towards industry technological literacy. Social Reconstructionism is a pedagogic approach that adds value to the technical curriculum. It is a philosophy currently being used to design models for the technical education curriculum.

8.0 Social Reconstructionism

Social Reconstruction as a stream of thought or “official program” is often synonymous with Depression-era Progressivism. But, Social Reconstruction, unlike progressivism, enjoyed political prominence. The spirit of progressivism, at least in terms of education, found a home in those enthusiasts who supported a child-centered perspective of education. Others, such as the essentialists viewed their progressive role as one that advanced the view of essential or basic education as the most sound approach to curriculum and teaching. Still others, more radical in their outlook, believed that progress should be framed with questions about social justice and equity. Proponents of social reconstruction included Harold Rugg and George Counts, although the “movement” was rich with supporters. To date, social reconstruction is only a by word in most texts that deal with the Progressive Era or progressive education, perhaps, because Rugg and Counts, the two most visible proponents, sought and received the
political limelight, no matter how glaring. In any event, the depths of social reconstruction have yet to be plumbed. Hence, the first book in this series will offer a comprehensive treatment of Social Reconstruction, which includes chapters that examine its proponents, political nature, and social justice programs born of and within the tumultuous context of progressive politics.

8.1 Restructuring of Training/Education

Within the epistemological frame that focuses on the nature of knowledge and how we come to know, there are four major educational philosophies, each related to one or more of the general or world philosophies just discussed. These educational philosophical approaches are currently used in classrooms the world over. They are Perennialism, Essentialism, Progressivism, Reconstructionism and Critical theory. These educational philosophies focus heavily on WHAT we should teach on the curriculum aspect.

8.2 Educational Philosophies

The following sub-sections describe the five educational philosophies in question.

8.2.1 Perennialism

For Perennialists, the aim of education is to ensure that students acquire understandings about the great ideas of Western civilization. These ideas have the potential for solving problems in any era. The focus is to teach ideas that are everlasting, to seek enduring truths which are constant, not changing, as the natural and human worlds at their most essential level, do not
change. Teaching these unchanging principles is critical. Humans are rational beings, and their minds need to be developed. Thus, cultivation of the intellect is the highest priority in a worthwhile education. The demanding curriculum focuses on attaining cultural literacy, stressing students' growth in enduring disciplines. The loftiest accomplishments of humankind are emphasized – the great works of literature and art, the laws or principles of science. Advocates of this educational philosophy are Robert Maynard Hutchins who developed a Great Books program in 1963 and Mortimer Adler, who further developed this curriculum based on 100 great books of western civilization.

8.2.2 Essentialism

Essentialists believe that there is a common core of knowledge that needs to be transmitted to students in a systematic, disciplined way. The emphasis in this conservative perspective is on intellectual and moral standards that schools should teach. The core of the curriculum is essential knowledge and skills and academic rigor. Although this educational philosophy is similar in some ways to Perennialism, Essentialists accept the idea that this core curriculum may change. Schooling should be practical, preparing students to become valuable members of society. It should focus on facts, “the objective reality out there”, and "the basics," training students to read, write, speak, and compute clearly and logically. Schools should not try to set or influence policies. Students should be taught hard work, respect for authority, and discipline. Teachers are to help students keep their non-productive instincts in check, such as aggression or mindlessness. This approach was in reaction to progressivism approaches prevalent in the 1920s and 30s. William Bagley took progressivism approaches to task in the journal he formed in 1934. Other proponents of Essentialism are: James D. Koerner (1959), H. G. Rickover (1959), Paul Copperman (1978), and Theodore Sizer (1985).
8.2.3 Progressivism

Progressivists believe that education should focus on the whole child, rather than on the content or the teacher. This educational philosophy stresses that students should test ideas by active experimentation. Learning is rooted in the questions of learners that arise through experiencing the world. It is active, not passive. The learner is a problem solver and thinker who makes meaning through his or her individual experience in the physical and cultural context. Effective teachers provide experiences so that students can learn by doing. Curriculum content is derived from student interests and questions. The scientific method is used by progressivist educators so that students can study matter and events systematically and first hand. The emphasis is on the process, how one comes to know. The Progressive education philosophy was established in America from the mid 1920s through the mid 1950s. John Dewey was its foremost proponent. One of his tenets was that the school should improve the way of life of our citizens through experiencing freedom and democracy in schools. Shared decision making, planning of teachers with students, student-selected topics are all aspects. Books are tools, rather than authority.

8.2.4 Reconstructionism

Social reconstructionism is a philosophy that emphasizes the addressing of social questions and a quest to create a better society and worldwide democracy. Reconstructionist educators focus on a curriculum that highlights social reform as the aim of education. Theodore Brameld (1904-1987) was the founder of social reconstructionism, in reaction against the realities of World War II. He recognized the potential for either human annihilation through
technology and human cruelty or the capacity to create a beneficent society using technology and human compassion. George Counts (1889-1974) recognized that education was the means of preparing people for creating this new social order.

8.2.5 Critical theory

Critical theorists, like social reconstructionists, believe that systems must be changed to overcome oppression and improve human conditions. Paulo Freire (1921-1997) was a Brazilian whose experiences living in poverty led him to champion education and literacy as the vehicle for social change. In his view, humans must learn to resist oppression and not become its victims, nor oppress others. To do so requires dialog and critical consciousness, the development of awareness to overcome domination and oppression. Rather than "teaching as banking," in which the educator deposits information into students' heads, Freire saw teaching and learning as a process of inquiry in which the child must invent and reinvent the world.

For social reconstructionists and critical theorists, curriculum focuses on student experience and taking social action on real problems, such as violence, hunger, international terrorism, inflation, and inequality. Strategies for dealing with controversial issues (particularly in social studies and literature), inquiry, dialogue, and multiple perspectives are the focus. Community-based learning and bringing the world into the classroom are also strategies.
9.0 Towards Social Relevance in Techno-education

Photo 9.1

Slowly and painfully, Zimbabwe is becoming aware of newer challenges as a population such as, the environment, employment, health, psychological issues of individuals and meaningful education of youth, which are not being met by the mere accumulation of more data or expenditure of more years, energy, and money. There is need to shape the experiences of the youth so that instead of reproducing current habits, better habits shall be formed, and thus the future adult society can be an improvement on their own. The photo of Photo 9.1 depicts empowered youths towards Industrial development by Harare Institute of Technology through offering customized course curricula.

In recent years in India educators of Tool Room Trainers are setting to reform education by calling for a social reconstruction, advocating a restructuring of education and training. Artificial environment of the schools was not educative in the youth of the country. They were not prepared to see and understand the values and issues which would confront them as they become adults, said researchers Dewey and Childs. There should be a creation of a new social order that creates a new environment in the Technical colleges by ‘reconstructing’ the existing environment towards Industry-to-institute setup.
9.1 Creating a Social Relevance Curriculum for Technology Education

Many Educationalists have relied upon technical processes as a means of generating curriculum content. But Teaching about technical processes is essential in a technical program. A social reconstruction curriculum orientation would be ‘hands on’ or adequate hands on as well as allowing for progressivism. It is the way in which the technical processes are organized that distinguishes the curriculum orientation.

Several purposes of education are prominent in this country since the beginning of public education. Social reconstruction is one of the unique categories of purpose which has helped to shape educators’ thought about curriculum. Social relevance program tries to involve students in technical school and community life in order to help them to become adults who can reconstruct or shape and improve society. Globally, many technology educators have tried activities with students which were motivated by a social reconstruction perspective, but few have implemented a complete program.

10.0 Specialized Technology Education Programs – the case of India

One of the major targets of technological Training is to promote technological literacy of a broad and encompassing nature. To achieve this goal, the students are prepared to understand, control, and use technology. Students are learning how to adapt to technological change and how to deal with forces that influence their lives and potentially control their future. The paradigms for teaching technology education are changed in this direction in order to harness Industry Institute Interaction.
India has changed in the same direction through establishment of Tool Room Training centers across the country as well as Service Institutes. It is realizing a breakthrough increase in technology economy through these facilities which are strongly empowering youths as well as the SMEs. The Tool Rooms are specialized academic Institutes and Production Industries in one. Students will no longer go to Industry in order to get internship because they have a form of on-the-job training. They imparted the same approach to other nation through the support of the World Bank. Amongst beneficiaries, they saw the establishment of the Indo-Danish, Indo-Germany, Indo-Canada, and Indo-Zim projects of Tool Room Training centers, which are going a long way empowering the youths and the SMEs who are the future of a successful technology economy.

Technology education teachers and curriculum experts recommend a variety of differing instructional approaches such as self-paced modules, interdisciplinary methodology, and problem solving to inform students about technology and its effects on society. These instructional approaches all have their advantages and disadvantages. The instructional approaches typically used in technology education are defined as follows.

10.1 **Industrial Arts Approach**

A body of related subject matter, or related courses, organized for the development of understanding about all aspects of industry and technology, including learning experiences involving activities such as experimenting, designing, constructing, evaluating, and using tools, machines, materials, and processes, (America Council on Industrial Arts Teacher Education, 1979).
10.2 Integrated Approach

Instruction that incorporates other disciplines such as English, math, science, and social studies to show how technology is an integral part of other disciplines and vice versa. It also emphasizes the need for humans to apply knowledge from other disciplines to solve technological problems.

10.3 Modular Approach

It is an individualized, self-paced, and action-based units of instruction that allow students to use current technologies to learn independently. The modular approach provides students with problems and activities that encourage them to use critical, higher-level thinking skills to solve problems and make value decisions.

10.4 Problem Solving Approach

It is an instructional approach that emphasizes critical thinking and is centered on students using a problem solving process in order to find creative solutions to problems.

11.0 Industry Technological Literacy

In a study in United States, the following definition of technological literacy was used: ‘technological literacy is having the knowledge and ability to select, properly apply, then monitor and evaluate appropriate technology given in the given context’.
Several reports on education have addressed the technological literacy issue and have all called for an increase in the level of technological literacy exhibited. They voice of an opinion similar to Mr. Ley (1987), namely, “The level of technological literacy to which educators and others are able to bring the general population will determine the future world in which humankind will exist”. It is also true with the future of Zimbabwe.

Here the term “General Population” is keenly to be watched. Very rich technology Institute is not reached to the general public. It has been giving benefits to very selective group of students. Though this is important, for third world countries like Zimbabwe there should be more programs specifically designed for the very average students, which address “General Population” with given opportunity for active participation to Industry - Institute Sandwiched program. Figure 11.1 demonstrates the model for prospective society through technology education.

![To Achieve a Prospective society
A Model](image)

![Figure 11.1](image)

**Figure 11.1** Prospective Society through technology education ‘A’ model
12.0 Preparing Students for Living in a Technological Society

National Science Board Commission on Pre-College Education in Mathematics, Science and Technology (US 1983) noted the effects of technological changes in its report. We must return to basics, but the basics of the 21st century are not only reading, writing, and arithmetic says Prof James Braukmann (2001) of Eastern Washington University and Prof Melvin Padras (2001) of Industrial Technology Education Department, University of Idaho, Moscow. They include communication and higher problem solving skills, and scientific and technological literacy. In Technical Training, development of students’ capacities for problem solving and critical thinking in all areas of learning is presented as a fundamental goal.

Problem solving as a Teaching Method can cluster the skills into two general categories namely group dynamics and problem solving strategies. Group dynamics includes leadership, communication, presentation, and persuasion skills. These skills are vital in business or academia, in industry or politics, from committee work to designing. We should force students to use them. For example, if a group of students will be evaluated on a final cooperative product, and no one member can manage all the work, persuasion, communication, and cooperation will develop. The group must find ways to organize and communicate internally and externally to accomplish a common goal. The second category, problem solving strategies, includes the design process, information management, and learning skills.
13.0 Conclusion

It is now drawn that Industry-Institute Interaction can empower the Zimbabwean youth through techno-education for the betterment of a high technology economy. The following is the challenge for this duo interaction that builds a prospective society through social reconstruction of the technical curriculum.

All forms of public technical education design pattern and its application, however, is less sophisticated than is found in military and Industrial applications due to the large gap between Institutes and Industries. Industries should come forward to deliver the latest Technologies to the Technological Institutions. Most of the conferences in Institution are with very less participation of Industries or it might not be sufficient.

Many Industries keep technologies as a secret and do make great setbacks for the technical Institution. The industry and institute alumni must come forward to give seminars through their motivated industrial team to boost future technologist and or technical teachers. This creates a smooth relationship between Technical teachers-students-professionals-Industries.

Remember the ‘midfielder position substitute strategy’. If you are determined to attack and win, replace the failing player especially the one by the critical position. Industry and Institutes in Zimbabwe will certainly prosper, so is the high technology economy, when technical curriculum is reconstructed with social relevance for a prospective society. The youths will significantly benefit from the developed curriculum, econometrically, since they are the future drivers of a high technology economy.
References


- Photo Courtesy of Indo-Zim project production, Harare, Zimbabwe


- Journals of Technology Selective vol. & ed.


- James R. Braukmann, Melvin J. Pedras (1990), ‘Preparing Students for Living in a Technological Society: A Problem Solving Approach to Teaching,’ Journal of Technology Education, Volume 1, Number 2, Virginia, USA
Title: Don’t Waste Your Time Teaching in an Online Environment

Topic: This workshop will offer for review a set of ten instructional design templates, or models of instruction, each designed to build a sense of community among students and between students and teacher.

Workshop: A work in progress, this information is part of a manuscript that I intended to be published as a book.

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Workshop Summary:

This workshop is designed for architects of learning experiences, educators whose courses are in whole or in part written for an online learning environment.

In this workshop I will present ten models for possible use regarding instructional design, specifically for designers of instruction who work with computer mediated courses. Universities and colleges, businesses and technical training institutions employ instructional designers specifically to design courses for delivery to students, directly to the student in some computer mediated way. In addition, professors at universities and colleges, and trainers and instructors in technical institutions and businesses are being asked more frequently to design their particular courses to fit into a template in an online environment. In other cases the design of instruction is blended and includes some face to face session, usually delivered at the beginning of a course or program, then followed by learning experiences designed in an online environment. Finally, more and more teachers in K-12 education regularly include some form of online learning experiences, from homework and other assignments nested into an online environment for students to access to full courses delivered entirely in an online environment.

In particular this workshop addresses one question asked by many online architects of learning experiences, “How can I build a sense of community among my learners in my class?” This workshop provides ten instructional design methodologies, theoretical based approaches to guide architects of learning in designing courses that develop a sense of community among learners in a course. A methodology is a theoretical construct. A theory is a plausible explanation based upon observable evidence. The evidence this book draws from includes learning theory and what is known today about how people learn, community and theories drawn from anthropology, psychology and sociology in particular, about how community is developed and nurtured and finally from the analyses of experience of professors and teachers who have been architects of learning for computer mediated courses.

Each methodology will ring true for the experienced educator. The instructional designer with limited teaching experience may need to suspend disbelief regarding a methodology until tried and tested in
the heat of instructional battle. Both the experienced educator and experienced designer of instruction will be able to give that “phenomenological nod” to what is presented in each methodology, and why each methodology as designed can develop community among learners.

In addition to ten methodologies this book provides ten instructional design templates. Once upon a time, a long time ago and far, far way, we called these templates “lesson plans.” Finally, this book provides a set of tried and true methods and strategies used by the author and other professors to build community in learners.

This workshop is a work in progress and my hope is that a community of scholars and educators would join in with me to evaluate my ideas and offer constructive feedback.
Title:
Effects of Japanese mothers’ various views and values on potentially bilingual children’s language

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Abstract
In order to explore Japanese mothers’ views and values regarding their children’s bilingualism, questionnaires that inquired about mothers’ desires, methods, beliefs, and attitudes toward bilingualism as well as their cultural values were filled out by 33 participant mothers. This paper presents the mothers’ questionnaire responses and their analyses. Results indicate that Japanese mothers differ in their ideas toward
bilingualism for their children, at least in degree, and that these differences exert a certain amount of influence on their children’s language, particularly language exposure. Suggestions are proffered for mothers who wish to promote their children’s bilingualism as well as for mothers who, for whatever reason, do not seek such language learning for their children. The paper concludes with a call for further research, particularly studies comparing Japanese living in Japan with those living in foreign countries and comparing mothers from various nations and different ethnic backgrounds.
Effects of Japanese mothers’ various views and values on potentially bilingual children’s language

Kayoko Ishikawa, M.A.T.

In his book, Hakuta (1986) mentions that he is frequently asked if being bilingual is a good or bad thing for children. I have also quite unexpectedly been asked the same question by Japanese acquaintances. As was often the case, those friends who are mothers and who have kindergarten children would discover that I was involved in English education, and they considered me to be a reliable source on English language learning. They knew that I would not steer them toward a certain set of language courses or textbooks like some people with profit as their motive or as people with their own language schools are wont to do. According to those mothers, several English and early education companies had called them to try to sell them their expensive educational materials, and they had been wondering if they should invest a fortune in their children’s English education from such an early age. When asked, I was unable to answer their questions very well simply because at that time I lacked knowledge on bilingualism and bilingual education.

The present study, part of which was conducted for my Master’s thesis, was carried out in the hope that I would be able to answer Japanese mothers’ questions about this topic in the future by presenting them some suggestions and/or results deduced from this research. The other trigger for this study was meeting mothers from other countries in the U.S while studying for my Master’s degree and noticing that those
mothers have different values, views, and implementation methods for their children’s bilingualism. This caused me to wonder what the case is for Japanese mothers. A further impetus for this research was my raising my own children as bilinguals, as I constantly strive to seek the best language learning route for them.

The Literature

Studies on bilingualism from the 1920s to 1960s claimed that bilingualism was harmful to children. For instance, Thompson (1952, cited in Hakuta, 1986) stated that there is little doubt that children raised in bilingual environments are handicapped with regard to their language growth. Yet, later studies like the one by Peal and Lambert (1962, cited in Hakuta, 1986) showed the possibility of cognitive benefit for bilinguals. They asserted that young people with multiple language systems have superior mental flexibility and concept formation as well as more diversified mental abilities.

If being a bilingual is truly beneficial for children, then when is the best time to start exposing them to another language? The literature argues a variety of theoretical claims, but whether or not mothers should encourage bilingualism in their children and, for instance, purchase English educational materials ultimately depends on how mothers view bilingualism for their children. If they are serious about raising their children to be bilingual, they should start from an early age. Shichida (1995) asserts that language education should start from the fetal stage or by the age of six at the latest because of the indefinite capacity of their right-brain hemisphere. Yet, at the same time, once they start, they should continue their education, since it is easy to lose a language unless one keeps using it. Karachi (1980, cited in Nakajima, 1998) also states that it is well known that bilingual children in the environment of two languages easily lose one language
immediately after they are placed in an environment with the other language. Losing one language in this way is one of the characteristics of the child’s brain. Harley and Wang (1995, cited in Nakajima, 1998) also mention that even though children by age seven or eight acquire two languages and two cultures easily, it is extremely hard to maintain them. Harding and Riley (1986) conducted interviews with sixteen bilingual families and found that one of the families moved quite often from one country to the next while their two children were still very young. These children were exposed to different languages in various countries but only retained English, which was the language they used at home. They acquired but soon forgot the other languages.

The Research

In order to explore Japanese mothers’ views and values toward raising their children bilingual, a set of research questions were constructed. The research questions were:

1. Are Japanese mothers different in their desires, methods, beliefs, and attitudes toward bilingualism and their cultural values, and if so, how?
2. If there are differences, how do these differences (i.e., in their desires, methods, beliefs and attitudes toward bilingualism and their cultural values) affect their children’s language learning?

Procedure

A two-page questionnaire written in Japanese was constructed and distributed by mail to Japanese mothers. 33 questionnaires were ultimately returned. The questionnaire questions were open-ended, as unbiased, free opinions on bilingualism
and bi-culture were sought.

The questions in the questionnaire (which were translated from Japanese and revised from my previous study on international mothers) were as follows:

Topic 1: mothers’ desires
(1a) Would you like to raise your child(ren) to be bilingual? (Please note that bilingual in this questionnaire is defined as a person who controls the use of two languages freely. It does not necessarily mean that their pronunciation is the same as that of a native-speaker.)
(1b) Why or why not?
(1c) If your child(ren) is/are bilingual, is being Japanese-English bilingual desirable? If not, is Japanese and another foreign language desirable (and if so, what other language)?
(1d) Why do you think so?

Topic 2: mothers’ methods of dealing with a language(s)
(2a) Do you currently do anything for your child(ren) regarding English/foreign language education now (whether or not you wish your children to become bilingual)?
(2b) What do you think you should do as a mother for your child(ren)’s bilingual, English, Japanese, or foreign language education?

Topic 3: mothers’ beliefs about bilingualism
(3a) What method do you believe is the best in order to make your child(ren) bilingual? (When is it best to start? Do you think teaching two languages simultaneously from birth will confuse children?)
(3b) Do you think so according to your intuition, or did you receive that information from somewhere, for example, books or magazines?
Topic 4: mothers’ attitudes toward English

(4a) Do you have a positive attitude toward English? (Did you like English in school?)
(4b) Would you like to be able to speak English or improve your English?

Topic 5: mothers’ cultural values

(5a) Do you think learning the target culture should occur simultaneously alongside learning a foreign language?
(5b) What do you think would be the best possible way to learn the target culture?

The reason the bilingual definition was added to this questionnaire is that it seems that the Japanese people have a tendency to have a relatively strict definition of what it means to be bilingual. In general, Japanese regard bilingual as Bloomfield (1933) long ago defined it: a person who has native-like control of two languages. His definition is considered rather extreme and maximalist among the numerous definitions on bilinguals. With this narrow definition, there are probably an extremely small number of bilinguals in the world, and my participants would most likely think that raising their child(ren) bilingual would be impossible. Considering the other end of the spectrum (i.e., Diebold’s (1964) definition of a bilingual as a person with minimal competence of a few phrases and greetings in two or more languages), in this study, I set up the definition to lie near the middle of the continuum, with the definition of bilingual being “a person who controls the use of two languages freely.” More commonly, since Japanese also believe that a bilingual’s pronunciation should be the same as a native-speaker’s pronunciation when speaking a particular language, I added the extra comment regarding pronunciation: “It does not necessarily mean that their pronunciation is the same as that of a native-speaker.”
Subjects

The subjects in the present study were 33 Japanese mothers ranging in age from 31 to 42 years old. They had children ranging from 11 months to nine years of age. Except for three mothers who were living in the U.S., all of the other mothers were living in Japan at the time of questionnaire completion. Considering the mothers’ backgrounds, 4 categories were created to describe the mothers: U.S. Life Experience Mothers, International Mothers, Language Teacher Mothers, and Mothers with no Profound Relation with Languages. These categories, which were created to better understand who the participants were, were constructed by looking at the background information of only 22 mothers, as the background of the other 11 mothers was never provided to the researcher.

U.S. Life Experience Mothers

A mother lived in the U.S. with her American husband (his mother was Japanese, but he could not speak any Japanese), one stepdaughter, and one biological son.

B mother lived in the U.S. with her American husband and one son.

C mother lived in the U.S. because of her Japanese husband’s job. She had two daughters who went to the local school. They had lived in the U.S. for almost five years and had planned to return to Japan soon.

D mother lived in the U.S. for a total of five years because of her Japanese husband’s job but had since returned to Japan. She had two sons. One boy had experienced life in the U.S. from the age of 8 months to 4 years. The other boy was born and raised only in Japan.
International Mothers

E mother lived in China and the Philippines approximately six years in total because her husband was a member of the Japan Overseas Cooperation Volunteers. Even though the whole family was living in Japan at the time of the study, they planned to return to China. She had one son and one daughter.

F mother lived in Japan her whole life, but her husband grew and sold orchids internationally. Guests from all over the world visited their house frequently. She had two sons.

Language Teacher Mothers

English Teacher Mothers

G mother was a full-time English teacher in a private junior high school. At the time she was taking graduate-level linguistics courses. Presumably, her knowledge in linguistics was the deepest among the study’s 33 participants. She had one daughter and one son.

H mother was a part-time English teacher in a private junior high school. She had not studied in an English-speaking country for an extensive period of time, but she endeavored to improve her English in order to compensate. She had two sons.

I mother was an English home teacher employed by one of the major English conversation schools in Japan. She had two daughters and one son. She often accepted guests as part of a home stay program.

J mother was a former part-time English teacher at an English conversation school in Japan but had quit temporarily to take care of her baby girl.

K mother was a former school manager at the same conversation school and also taught English as a part of her school manager job. At the time of questionnaire completion, she was a full-time mother to her son and daughter.

Multilanguage Teacher Mother

L mother was head in her area of the multilingual teaching nationwide group. Essentially, she was a coordinator for teachers of different languages, and yet she taught
only a little. Since she majored in French as an undergraduate, she was supposedly teaching mainly French. She had one daughter and one son.

**Japanese Teacher Mother**

M mother was a former Japanese teacher for foreign students in the language division of one of the major cram schools in Japan. She quit her job to take care of her son and daughter.

**Mothers with no Profound Relation with Languages**

**Mothers Who Like English and Traveling**

N mother was a full-time mother who had one daughter. She had traveled abroad numerous times with her husband.

O mother was a full-time mother with three children. The countries she had traveled to were all English-speaking countries.

**Mothers Who Like English Now but Disliked it in School**

P mother was a full-time mother with two sons.

Q mother was a full-time mother with three children.

**Mothers Who Dislike English but Love Traveling**

R mother was a working mother with one son.

S mother was a part-time mother and a part-time swimming instructor. She had three daughters.

T mother was a full-time mother with one daughter and one son.

**Mothers Who Dislike English**

U mother was a full-time mother with one daughter and one son.

V mother was a full-time mother with one daughter and one son. Even though she did
not have any deep relation with English (which was a subject she hated at school), her mother-in-law had been teaching English to children in the neighborhood her whole life. This mother’s children went to her classes from time to time.

**Results and discussion**

First of all, Tables 1 through 4, along with Graph 1, present the results of the first four questions, Questions (1a), (1b), (1c), and (1d), which were asked in order to investigate the mothers’ desire toward bilingualism for their children.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>18</td>
</tr>
<tr>
<td>Yes, if possible</td>
<td>4</td>
</tr>
<tr>
<td>I do not want to force my child(ren), but it would be great if they could speak English well</td>
<td>3</td>
</tr>
<tr>
<td>Yes, if the child(ren) desire it</td>
<td>1</td>
</tr>
<tr>
<td>Yes, but it is extremely difficult and almost impossible if both parents are Japanese who are non-native speakers of English</td>
<td>1</td>
</tr>
<tr>
<td>Yes, I thought so, but I feel that my children are already too old to acquire another language</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
</tr>
</tbody>
</table>

As can be seen from Table 1, 18 mothers simply answered “yes” and five mothers simply answered “no.” The other 10 mothers put some additional statements on the “yes” answer, yet from their statements, their desire for their children to become bilingual can be observed. 28 mothers (85%) answered positively and indicated a desire to raise their children as bilinguals.

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1 Please note that questionnaire responses were not translated word-for-word, and that some amount of response interpretation was necessary for categorization purposes.
The three mothers who wrote that “I do not want to force my child(ren), but it would be great if they could speak English well” appeared to not want to become like the so-called “education mothers,” or mothers who are overly concerned about their children’s education, yet the three mothers admitted their desire to raise their children as bilinguals even though they were a bit reserved with their answers. Two mothers indicated their feelings of limitations in raising children to be bilingual. One of these two mothers, M mother, who was a Japanese teacher, answered “it is extremely difficult and almost impossible if both parents are Japanese who are non-native speakers of English.” Since her husband was also Japanese and did not speak English, she was the one to speak English to her children, and she felt that this kind of method limits the raising of bilinguals. The other mother (G mother in the English Teacher Mother category) commented that she thought she wanted to but felt that her children were already too old to acquire another language. This is because she thought that the critical period hypothesis fits about eighty percent of the people and that at the age of six there is a boundary in acquiring another language. Since two of her children were already past the age of six, she had given up on raising them to be bilingual.

Interestingly, C mother and D mother, both of whom had experienced living in the U.S., answered “no,” even though their children were likely to be farther ahead in understanding and using English than typical children in Japan in regard to the English language due to their having lived in the U.S. D mother mentioned that her elder son’s English was good enough to correct her English and he was an English-dominant bilingual when living in the U.S. Nevertheless, immediately after they returned to Japan and he started going to the local kindergarten, he lost almost all the English he had acquired, even spontaneous expressions such as “Oops.” She likely gave up trying to
maintain his English by experiencing the reality of “children forget easily,” which was explained in detail in Harding and Riley’s (1986) research.

Table 2 deals with the reasons for the positive answers for the mothers’ desire to raise children bilingually. Table 3 deals with the reasons for the negative answers for their desire.

**Table 2. Reasons for mothers’ desire to raise children to be bilingual**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be able to communicate with people from all over the world</td>
<td>8</td>
</tr>
<tr>
<td>Because English will be indispensable in the future when their children become adults</td>
<td>6</td>
</tr>
<tr>
<td>Because their children’s view and their world will be broadened</td>
<td>5</td>
</tr>
<tr>
<td>To survive in an internationalized society in the future</td>
<td>3</td>
</tr>
<tr>
<td>Because it will be useful in their future</td>
<td>3</td>
</tr>
<tr>
<td>To be able to communicate with relatives in her home country</td>
<td>2</td>
</tr>
<tr>
<td>Because it will help when job-hunting</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 3. Reasons for mothers having no desire to raise children to be bilingual**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because it definitely depends on the children’s will. I do not want to force them.</td>
<td>3</td>
</tr>
<tr>
<td>Because Japanese, our native language, is more important</td>
<td>1</td>
</tr>
<tr>
<td>Because I am not interested in foreign languages at all</td>
<td>1</td>
</tr>
</tbody>
</table>

As Table 2 illustrates, the comments of the mothers who answered “because English will be indispensable in the future when their children become adults,” “to survive in an internationalized society in the future,” “because it will be useful for their future,” or “because it will help when job-hunting” are very future-oriented. They
foresee the global importance of the English language and expect the coming and/or expanding of an internationalized society. Some mothers mentioned that their children should prepare for an information-oriented society, which can be seen through the diffusion of the Internet that requires the ability to manipulate both English and computers.

Eight mothers answered the reason for their desire is that their children will be able to communicate with people from all over the world. Moreover, some of them added the comment that through English as a communication tool they can make more friends from many different countries. For instance, E mother in the International Mothers category indicated that, due to her own experience living in China and the Philippines, children can make friends with others who speak a different language through their “telepathy.” Notwithstanding, if children can speak other children’s native language, their attitude toward them changes for the better. Take V mother’s statement as another example: English helps children become more active in the world. H mother in the English Teacher Mothers category also commented that through communication with not only people in their own nation but also people in foreign countries, we become able to better absorb more in order to live in our current internationalized and information-oriented society. Her additional comment is that since nowadays we can associate with each other “border-freely,” we can make international friends more easily. In this current situation, the more languages their children can speak, the better. Hence, several mothers appeared to value the importance of communicating with people with different nationalities, ideas, and backgrounds.

Five mothers answered that their children’s view and their world will be broadened. According to N mother, who is in the Mothers with no Profound Relation
with Languages category and who loves traveling, being multilingual can widen children’s views, that is, by allowing them to read books in the original language and listen to a variety of people’s ideas. It can also let us better enjoy foreign countries since she felt very inconvenienced with her limited foreign language ability when traveling abroad. A mother and B mother, both of whom desired their children to become bilingual, answered with “to be able to communicate with relatives in her home country, Japan.” Because of their American husbands, they planned to live in the U.S. forever, but would likely return to Japan for occasional visits. Yet, their parents spoke no English, and also their nieces and nephews, who were around their children’s age, spoke no English, either. They hoped their children would keep a good relationship with them, and thus did not want linguistic problems to arise between them.

Now, let us examine the reasons for no desire in raising children as bilinguals, which are shown in Table 3. Three mothers answered that “it definitely depends on the children’s will. I do not want to force them.” Interestingly, even though the same reason of “it depends on the children’s will” was described in Table 1, some mothers took this to be positive while others took it to be negative. C mother and D mother, who had experienced American life and later returned to Japan, answered with this reason. Their children happened to be exposed to English and became bilingual in English and Japanese, but they were certain their families would return to Japan at some point in the future. After going back, the decision to maintain their English would ultimately lie with their children. Other mothers might envy those children who can be considered lucky enough to have lived in an English-speaking country, but in fact, later efforts would be necessary to maintain their English. At least at the time of questionnaire completion they had a choice as to whether they would like to maintain their English
ability or not, although they did not have the original choice of being exposed to English in the U.S.

Besides these mothers, the other mother who indicated no desire also thought that it all depends on her children’s will because that is their own life. If they wanted to study English, she would expect them to find a way to continue their English studies. Additionally, one mother answered that one’s native language is more important. One mother answered this way: “I am not interested in foreign languages at all.” This answer explains why she had no desire for her child to learn a foreign language.

Graph 1 shows the mothers’ language preferences for their children’s bilingualism or multilingualism, and Table 4 shows the reasons for their preferred languages.
Table 4. Reasons for the language preferences

<table>
<thead>
<tr>
<th>Responses</th>
<th>Target language(s)</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because English is a lingua franca</td>
<td>English</td>
<td>10</td>
</tr>
<tr>
<td>Because English can be a communication tool in the greatest number of countries</td>
<td>English</td>
<td>9</td>
</tr>
<tr>
<td>Because we learn English in school and I feel the closest to English</td>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Because we understand each other far better in each person’s native language</td>
<td>Multilingual</td>
<td>2</td>
</tr>
<tr>
<td>Because the economic development in China can be expected</td>
<td>Chinese</td>
<td>2</td>
</tr>
<tr>
<td>In order to communicate with people in the home country</td>
<td>Japanese</td>
<td>2</td>
</tr>
<tr>
<td>For business</td>
<td>English</td>
<td>1</td>
</tr>
<tr>
<td>Because learning foreign languages is fun</td>
<td>Multilingual</td>
<td>1</td>
</tr>
<tr>
<td>Answers are unrelated</td>
<td>N/A</td>
<td>2</td>
</tr>
</tbody>
</table>

As Graph 1 reveals, all 33 participants mentioned and admitted the significance of English. 21 mothers chose it as a definite single preferable language, and others chose it as the core preferable language or choice. Ten mothers reasoned that their language preference is English because it “is a lingua franca,” and nine mothers reasoned that “English can be a communication tool in the greatest number of countries.” Examining some mothers’ additional comments for these reasons, we can find their interesting thoughts, which are reflected from their own experiences. For example, O mother, who is also fond of traveling, commented that she felt closest to English, as she travels through several English-speaking countries. Yet, her inability to manipulate English made her think that her children should learn English in order not to feel inconvenience in the same way she did while traveling.

Suggesting English and any other language, N mother, who had no profound
relation with foreign languages but really enjoys traveling, mentioned that English was not useful at all in some European countries except in some first-class hotels. She felt that knowing another foreign language would have helped her more at such times.

All of the English teacher mothers added their comments to their reasons why they chose English. For instance, J mother mentioned as a second reason for choosing English that she can somehow get involved with her child’s language education because of her occupation as an English teacher. I mother indicated that English is accepted by and used in many countries but Esperanto is not. She thought that English must have a secret to attract so many people in the world. H mother also mentioned that English would probably facilitate learning other foreign languages. Thus, English is strongly supported by the mothers in this study.

There were other areas of interest from this table. Two of the mothers chose Chinese, as many expect increased economic development in China. Two mothers wrote “because we understand each other far better in each person’s native language”; one is L mother, the head of a multilingual education group, and the other is G mother, the English teacher with the deepest linguistics knowledge. The latter thought that children can accept various thoughts by thinking in different languages. She also thought that if more and more people can do this, we will move closer to world peace. Examining these two mothers’ comments together, we can surmise that they believed in children’s unlimited ability in language, which is, in fact, also mentioned by C mother and D mother, both of whom lived in the U.S. Although A mother and B mother chose English, they also pointed out the immense importance of Japanese in order to communicate with relatives in their home country of Japan.

Tables 5 and 6 present the results of Questions (2a) and (2b), which
investigated the mothers’ method of teaching a language(s). Table 5 shows what mothers actually implement for their children’s language(s) learning, and Table 6 displays what mothers should do for their language education.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make videos, TV programs, picture books and/or CDs available for children</td>
<td>17</td>
</tr>
<tr>
<td>Children take English classes</td>
<td>7</td>
</tr>
<tr>
<td>Nothing</td>
<td>5</td>
</tr>
<tr>
<td>I say some formulaic expressions to them in daily life</td>
<td>2</td>
</tr>
<tr>
<td>I speak Japanese to my children, and use videos, picture books, etc.</td>
<td>1</td>
</tr>
<tr>
<td>(My husband speaks English to my children)</td>
<td></td>
</tr>
<tr>
<td>Nothing right now, but in the future the child will take English classes</td>
<td>1</td>
</tr>
</tbody>
</table>

As Table 5 shows, 17 mothers make use of videos, TV programs, books, and/or CDs (essentially, whatever materials are available to them). R mother, who had no relation with languages and disliked English, thought that she did not do anything to promote her 4-year old son’s English except let him watch such TV programs. Yet, he could say English words very well by mimicking the pronunciation, which made her think that English should be learned at an early age. T mother, who also had no relation with languages and who disliked English, pointed out the positive results from playing English recordings, and her children could sing along very well with them with perfect pronunciation. Some mothers mentioned that they received picture books and Disney videos from relatives in the U.S., even though such merchandise is available at many major bookstores in Japan. They had such goods sent to them because it was cheaper than buying such import products in Japan.
Seven mothers answered that they sent their children to English classes. Some of them mentioned that their teachers were native-speakers of English. Yet, U mother, who had no profound relation with languages, stated that even though her children took classes, she did not expect them to become fluent English speakers anytime soon. Instead, she hoped that they would learn that foreigners are not different from the Japanese. This mother confessed that in front of foreigners she herself would get very nervous, her whole body would tremble, and she could not even greet them in English, even after studying English in school for eight years. C mother also mentioned experiencing similar feelings, even though she had lived in the U.S. She remarked always feeling uncomfortable with the language and that she had no confidence in speaking it.

The number of mothers who answered they carried out nothing for their children with regard to foreign languages coincides with the number of mothers who answered they had no desire to do so. Yet, as a matter of fact, only three mothers had no desire to raise their children bilingual and do nothing. Two mothers (C mother and D mother) had no desire but did quite a few activities for their English, while two other mothers had the desire but carried out nothing. Hence, it can be seen that mothers’ desires contradict their implementation of their children’s foreign language education.

G mother (an English teacher mother) and M mother (the Japanese teacher mother) reported saying some formulaic expressions to their children in daily life. Yet, both of them felt the limit of their methods, as also described in Question (1a). M mother mentioned that trivial daily chores prevented her from being consistent in saying them, and she felt that it was very difficult and almost impossible to raise children as bilinguals in Japan with non-native speakers of English parents. Among those mothers
who wrote that mothers should send children to English classes, some mentioned that if possible they would prefer to teach them English, believing mothers should speak English to their children. Yet, in reality, they could not speak English, so as a second choice they would settle for sending their children to English classes, and that is what they actually implemented. H mother (an English teacher mother) added that they travel abroad for about a week once a year, since she felt constrained by the limit of experiencing “life with English” in Japan. It is certainly preferable to do so, but in reality this kind of investment is impossible for every household.

<table>
<thead>
<tr>
<th>Table 6. What mothers should do for their children’s language education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responses</strong></td>
</tr>
<tr>
<td>Produce an environment where children can acquire English naturally and can be exposed to it</td>
</tr>
<tr>
<td>Pay attention to our own Japanese in order to give children only proper language usage</td>
</tr>
<tr>
<td>Mothers should speak English (or a foreign language) to their children</td>
</tr>
<tr>
<td>Send children to English school</td>
</tr>
<tr>
<td>Nothing particular to do as a mother</td>
</tr>
<tr>
<td>Change myself rather than change others</td>
</tr>
<tr>
<td>Demonstrate mothers’ positive and friendly attitude to foreigners in front of children</td>
</tr>
<tr>
<td>Cooperate with children’s desires (e.g., send him/her to school or buy books)</td>
</tr>
<tr>
<td>Answer is unrelated</td>
</tr>
</tbody>
</table>

As Table 6 reveals, a wide variety of answers came up in this section. 12 mothers answered that to produce an environment where children can acquire English naturally and be exposed to it is what mothers should implement for their children. We can see mothers’ value of acquiring languages in a more natural setting rather than
learning or studying hard, which typically does little for most Japanese learners of English. Five mothers answered that mothers should pay attention to their own native language (i.e., Japanese) in order to teach children proper language usage. They value education in the Japanese language above education in foreign languages. Six mothers thought that mothers should speak English (or a foreign language) to their children, and three mothers thought that mothers should send children to English school. Two of these three mothers (H mother, the English teacher, and O mother, who likes English and traveling) mentioned that there is a limitation at home in cases where mothers cannot speak English, even though they believe that mothers should speak the target language to their children. Therefore, considering realistic options, the only possible way would be to send them to English lessons. Yet, H mother made a suggestion that mothers should learn English together with their children.

One of the most interesting comments was made by G mother (in the English Teaching Mother category). She was the mother with the most linguistic/language teaching knowledge. She wrote that she was disappointed when listening to speech contest speeches made by Japanese high school students who had returned to Japan after studying abroad. Such students ended up following the same predictable pattern: criticizing the areas in which Japanese society is lacking and insisting that Japan should change. G mother thought that instead of that, we Japanese should be able to express ourselves on an international stage without excessive modesty. We should convey to the world just how wonderful Japan really is. She thought that there are more things we should teach our children ahead of linguistic competence. In addition, she mentioned that Japanese mothers should definitely disagree with the “examination hell” system, which makes Japanese children struggle and takes away their free time from more
creative and physical activities. As a result of “changing ourselves” rather than “changing others,” we should become “the people who can change others.”

Answering that to demonstrate mothers’ positive and friendly attitude to foreigners in front of children is what mothers should implement for children, C mother confessed that even though she had lived in the U.S., she tended to look at foreigners differently. Although she knew the importance of showing children what she should do, she could not change herself easily. Therefore, she envied her children who naturally got along with the local people without prejudice or discomfort.

Examining the interrelation between their beliefs and what they actually do as mothers, 19 mothers implemented what they believed they should do. From six of the mothers’ comments, it was unclear what the relation was. The reality and the ideal of eight mothers conflicted with each other.

At this point, the results of Questions (3a) and (3b) will be shown in order to investigate mothers’ belief in bilingualism. Table 7 shows the result of the question regarding the best methods to promote bilingualism in children. The result of the question on the best time to start a second language for children is exhibited in Table 8. Graph 2 displays the results of the question about whether or not children will get confused by simultaneous languages exposure if they are spoken to in two languages immediately after their birth. All of the above-mentioned questions were included in Question (3a). Table 9 shows the results of Question (3b).
Table 7. Best method to promote bilingualism in children

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being in the environment English is naturally spoken in daily life</td>
<td>13</td>
</tr>
<tr>
<td>In case parents are native speakers of different languages, they speak their native languages to the child(ren)</td>
<td>5</td>
</tr>
<tr>
<td>Living abroad for a couple of years before puberty</td>
<td>2</td>
</tr>
<tr>
<td>Studying abroad</td>
<td>1</td>
</tr>
<tr>
<td>Attending an immersion program</td>
<td>1</td>
</tr>
<tr>
<td>Going to an English conversation school</td>
<td>1</td>
</tr>
<tr>
<td>Allow child(ren) to be interested in foreign language(s)</td>
<td>1</td>
</tr>
<tr>
<td>Have a stable foundation of Japanese language, and put a foreign language over it</td>
<td>1</td>
</tr>
<tr>
<td>I have no idea</td>
<td>3</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
</tr>
</tbody>
</table>

A great variety of answers can be seen in Table 7, which suggests that the mothers are quite different from one another in terms of their beliefs. 13 mothers answered that the best method would be to be in an environment where English is naturally spoken in daily life. 1 mother, who is a multilingual evangelist, remarked that children can acquire foreign languages in the same manner as their native language. Another mother added her comment that creating an environment that exposes children to other languages and then sending children abroad to study when they get older would be the best method. Five mothers considered the best method to be parents speaking in their native languages to child(ren), especially if they are native speakers of different languages.

According to two mothers, letting children live abroad for a couple of years before puberty is the best way. One of these two mothers suggested the importance of mothers’ involvement in foreign language learning and stated that in cases where
parents cannot teach a target language, they should at least learn together or play together in that language. G mother, who had the deepest linguistics knowledge of all the participating mothers, remarked that attending an immersion program is the only way to make children bilingual in Japan. She pointed out the great success of Kato Gakuen’s immersion program. One mother answered that allowing children to be interested in foreign languages is the best method. This mother proposed that small children are usually interested in everything and they can absorb things very quickly. For instance, when her children got together with her friends’ bilingual children, they became very interested in English and learned the language from them very quickly and steadily.

Earlier, the interrelation between mothers’ beliefs and actual implementations was examined. Now, the interrelation among the above-mentioned two categories and mothers’ considerations of the best method of raising bilingual children will be contemplated. Only seven mothers noted that they were at the time implementing what they believed mothers should do and which was also the best method that they believed worked. Unfortunately, it was not possible to judge the interrelation from 15 mothers’ comments. Eleven mothers’ reality and ideals differed from each other.
Table 8. The best time to start a second language

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately after birth</td>
<td>12</td>
</tr>
<tr>
<td>From around the time when children acquire their mother tongue (around two or three) until puberty</td>
<td>7</td>
</tr>
<tr>
<td>As soon as possible</td>
<td>5</td>
</tr>
<tr>
<td>When children are motivated to learn a foreign language</td>
<td>2</td>
</tr>
<tr>
<td>Until three years of age (in order to activate the right hemisphere)</td>
<td>1</td>
</tr>
<tr>
<td>After 6 years old when their mother tongue is stable enough not to get damaged by another language</td>
<td>1</td>
</tr>
<tr>
<td>Approximately from a higher grade of elementary school (11 or 12 years old)</td>
<td>1</td>
</tr>
<tr>
<td>Any time is fine</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
</tr>
</tbody>
</table>

As Table 8 suggests, with the exception of one mother answering that anytime is fine, three mothers with no answer and two mothers with the answer that when children are motivated, 27 mothers thought a foreign language should be introduced before puberty at the latest. Five mothers answered that children should be exposed to a foreign language as soon as possible. One of the five mothers mentioned that a genuine English “r” sound, which does not exist in Japanese, would not be acquired after six years of age. Yet, one mother answered that it should be introduced after the age of six “when their mother tongue is stable enough not to get damaged by another language.” As such, the mothers’ opinions at times completely contradicted each other. Some mothers proposed that length of study is more important than when children start learning another language. Additionally, V mother added the suggestion that we should not be conscious regarding when to study English but should let our children sense that English is not something special or difficult. In this way, children can accept English
As can be seen from Graph 2, an overwhelming majority (18 mothers) answered that children will not get confused, even if they are exposed to two languages simultaneously immediately after birth. E mother, who had experience living in China and the Philippines, also answered that to produce the natural foreign language environment would be the best method, and she thinks immediately after birth or even during the fetal stage we can start offering our children a second language and they will not become confused. Her children were able to handle different languages very well according to the listener’s language, for instance, English with the maid (from about age two and a half), Tagalog with the local friends, Japanese with their mother, and Chinese at school (from age three). She could attest from her experience with her children that they did not get confused. A mother suggested that immediately after birth is fine, yet patience is necessary since children might be slow in their language development. Two out of six mothers who answered that they may be confused without resistance.
distinguished between the two different situations. Unless their parents are native speakers of different languages and speak their native language to children, the children may be confused. However, in reality, most parents are native speakers of the same language, yet if one of the parents speaks a different language, the children could get confused. M mother, in fact, illustrated her case. She believed that, as a mother, she should speak the target language, especially the formulaic expressions, and that even with bad pronunciation children can pick up some expressions from her. Subsequently, that is what she implemented. Even so, what she considered the best method was for parents with different native languages to speak their own language to their children. She felt frustrated, and her children, especially the younger one, were apparently confused by two languages, as they sometimes said entirely meaningless expressions in both languages.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intuition</td>
<td>9</td>
</tr>
<tr>
<td>Actual experience with my own babies or with my own children</td>
<td>7</td>
</tr>
<tr>
<td>Intuition and information from books, magazines, and/or TV programs</td>
<td>5</td>
</tr>
<tr>
<td>Friends’ experience</td>
<td>4</td>
</tr>
<tr>
<td>Information from books, magazines, and/or TV programs</td>
<td>3</td>
</tr>
<tr>
<td>Information from books, magazines, and/or TV programs, and friends’ experience</td>
<td>2</td>
</tr>
<tr>
<td>Actual experience with my own children and intuition</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
</tr>
</tbody>
</table>

As Table 9 shows, nine mothers answered that they came up with their opinions on confusion according to their intuition. V mother answered that she thought
children do not get confused, and this answer came through her actual experience with her own children and with her intuition. Her elder daughter at age five repeated English words exactly as she heard them. She therefore thought that children get used to English sounds before they feel the sounds are difficult or before they become too bashful to pronounce them. When she was at school, she felt it was so embarrassing to create something different from Japanese in front of her classmates that she always pronounced English words with Japanese accents on purpose, just so she would not stand out.

Japan has been inundated by information on bilingualism. Compared to mothers from other countries, which I discovered through my previous research on international mothers’ views on bilingualism, there are more Japanese mothers who learned information from books, magazines, TV, and so on. In fact, some mothers mentioned that there are more and more features on bilingualism on TV in Japan nowadays, and they gained their knowledge about bilingualism from those programs.

Continuing, in Tables 10 and 11, to determine mothers’ attitudes toward English, the results of Questions (4a) and (4b) will be shown. Table 10 displays the outcome of the mothers’ attitudes toward English, and Table 11 reveals the outcome of their desire to improve their English.
Table 10. Attitudes toward English

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I have a positive attitude toward English and I liked it in school</td>
<td>11</td>
</tr>
<tr>
<td>Yes, I have a positive attitude toward English right now, but I did not</td>
<td>10</td>
</tr>
<tr>
<td>like it in school</td>
<td></td>
</tr>
<tr>
<td>No, I do not have a positive attitude toward English, and/or I did not</td>
<td>9</td>
</tr>
<tr>
<td>like it in school</td>
<td></td>
</tr>
<tr>
<td>I have a neutral attitude toward English, and/or I liked it in school</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 10 shows that at questionnaire completion time, a total of 21 mothers had a positive attitude toward English, which combines the 11 mothers who liked English in school and the 10 mothers who claimed that they did not like it at school. Several of the 10 mothers indicated that their dislike was attributed to their teachers, their boring lecture-type lessons, and/or their terrible pronunciation. Some of the mothers regretted that they did not study harder at school, so they hoped their children would be able to manipulate English better. Some mothers questioned the English education of their times in Japan. In other words they asked questions like “Why did they emphasize grammar, which most students have no interest in it?” “Why did we only do translations every day?” (asked by V mother). “Why did we study so hard for nothing?” (asked by U mother). U mother liked English until junior high school, but after high school English must be learned by rote for regular exams as well as entrance exams, which was a complete pain for her. Several mothers who loved traveling mentioned that they disliked English at school but learned how fun it is to use English by communicating with foreigners. They said that they could communicate with them even though they absolutely forgot about the details of the English they learned in school. They wished they had known that English could be great fun when they were at
school. They wondered why schools did not get students interested in English like that. The major reason was that learning English in school was almost solely to help students pass their entrance exams.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I would like to improve my English</td>
<td>18</td>
</tr>
<tr>
<td>No, I am not interested in improving my English</td>
<td>4</td>
</tr>
<tr>
<td>I do not strongly hope so, but I just think it would be good I could speak English</td>
<td>3</td>
</tr>
<tr>
<td>Yes, I would like to improve my English, but I do nothing for it</td>
<td>3</td>
</tr>
<tr>
<td>Yes, I think so, only when I make a trip abroad</td>
<td>2</td>
</tr>
<tr>
<td>I already gave up improving my English</td>
<td>2</td>
</tr>
<tr>
<td>Unrelated answer</td>
<td>1</td>
</tr>
</tbody>
</table>

As Table 11 demonstrates, except for four mothers with negative answers, two mothers who gave up, and one mother who provided an unrelated answer, a total of 26 mothers answered they would like to improve their English, which includes all the English teacher mothers. Among the English teacher mothers, as far as could be determined, H mother endeavored greatly for her English, taking evening classes at an English conversation school and attending English workshops on weekends, subscribing to “National Geographic” both in English and in Japanese for her study in her spare time, and so on. Needless to say, G mother made efforts for her English as well, having completed the TESOL certificate program. She then went on to attend graduate linguistics classes at a graduate school. Two other mothers answered that they felt like improving their English when traveling abroad.

Lastly, Tables 12 and 13 deal with the results of Questions (5a) and (5b),
which were asked in order to determine mothers’ cultural values. Table 12 displays the results on whether mothers think learning target culture at the same time of learning the language is important or not. Table 13 shows what mothers thought the best way to learn the target cultures is.

Table 12. Importance of learning target culture(s)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, it is important to learn target culture(s) as well as learning target language(s) at the same time</td>
<td>23</td>
</tr>
<tr>
<td>It does not have to be at the same time, and later would suffice</td>
<td>2</td>
</tr>
<tr>
<td>Yes, a little bit</td>
<td>2</td>
</tr>
<tr>
<td>No, it is not important</td>
<td>6</td>
</tr>
</tbody>
</table>

A total of 23 mothers answered simply “yes,” and six mothers answered “no.” Combining the numbers of mothers who answered “it does not have to be at the same time, and later would suffice” with those who answered “yes, a little bit” gives a total of 27 mothers who answered positively. They all admitted the importance of learning the target culture as well as the target language. It appears that not only the learning of the language itself but also learning culture is indispensable. Without knowing the target culture, it is almost impossible to survive in every possible situation. Although it is rather extreme to say, Heath (1992), for instance, views all language learning as cultural learning, which comes from data from interviews with spokespersons of language group communities in the U.S., comparing them, and investigating the effects of parents’ roles on children’s language development, based on their own cultural values.
Table 13. How to learn target culture(s) the best

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in the target country, and interacting with local people</td>
<td>21</td>
</tr>
<tr>
<td>Meeting people from the target country and interacting with them</td>
<td>4</td>
</tr>
<tr>
<td>Getting interested in the country</td>
<td>2</td>
</tr>
<tr>
<td>Getting knowledge from books, seminars, etc.</td>
<td>2</td>
</tr>
<tr>
<td>I have no idea</td>
<td>2</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
</tr>
</tbody>
</table>

As Table 13 shows, both the 21 mothers who answered living in the target country and interacting with local people and the four mothers who answered meeting people from the target country and interacting with them point out the significance of interacting with people. Some of the mothers who answered positively warned that our own culture should be absorbed first before learning foreign cultures in cases of less appreciation toward our culture because of the overpowering influence from foreign ones. Some of the mothers who answered negatively put additional comments, saying that we simply should naturally absorb interesting or unique aspects of cultures rather than trying to learn them. We can just start from them to step forward for learning the whole target culture(s).

**General discussion and conclusions**

While it is recognized that this was a small scale investigation that did not have the resources to make it sufficiently large enough in scope to produce generalizable results, based on what has been described concerning the data collected for this research study, the conclusions (i.e., the answers to the research questions) that can be proffered are that (1) Japanese mothers do, in fact, differ from one another in
their ideas toward bilingualism for their children, at least in degree, as some of them have similar ideas in some aspects, and (2) the mothers’ differences exert a certain amount of influence on their children’s language (i.e., their language exposure, which ultimately influences aspects like language production), but it does not necessarily mean that the mother with a stronger desire, a more positive attitude, and a particular method can develop her child(ren)’s target languages. Even though mothers with positive attitudes toward the target language using certain methods may hope to raise their children as bilinguals, those elements do not affect children’s language positively.

In the case of M mother (in the Language Teacher Mothers category), who had positive desire and attitude and believed in the efficacy of a certain method, her younger child was completely confused by two languages, which was a consequence of her using both of these languages. On the contrary, for instance, R mother’s (in the Mothers with no Profound Relation with Languages and the Mothers Who Dislike English category) child could say words very well by only picking them up from TV programs, even though R mother did not strongly wish him to be bilingual and had a negative attitude toward English. In addition to her, T mother and V mother (in the Mothers with no Profound Relation with Languages category and Mothers Who Dislike English category) reported their children’s ability to pronounce English words and sing English songs well, even though they had no strong desire and negative attitudes toward English. What they did was simply create, to the best of their abilities, an English environment in Japan. Analyzing these examples, the environment surrounding children seems extremely important in developing a foreign language, even though mothers may create it differently and artificially. Certainly, it should be noted that several kinds of tests on their children’s language should be carried out to judge their actual ability in
English/Japanese because what they can say and how they sing in English is just a self-evaluation from mothers. This self-evaluated outcome might be too low compared to mothers’ high expectations, and vice versa. Further research in this area is obviously warranted.

The surroundings of the children, moreover, seem to influence their languages, judging from the instance of C mother’s and D mother’s children. They were well-balanced bilinguals who went to local schools in the U.S. and spoke Japanese at home. However, D mother’s child lost almost all English immediately after going back to Japan, and C mother realized that there was a strong possibility her children would lose English in the Japanese-language-only environment in Japan. She long ago gave up on her children’s English. A mother also indicated another case that all of her acquaintances of Japanese mothers and American fathers in her city in the U.S. gave up teaching Japanese to their children. This was because they replied only in English to mothers who spoke to them in Japanese, especially after they began to attend local schools.

Considering the feeling of “giving up” on teaching another language expressed by some of the mothers, it appears that, on the one hand, such feelings are understandable because there are so many other matters mothers have to concern themselves with (e.g., housework, other family members), yet on the other hand it seems to be such a waste because their children’s receptive skills are likely to remain intact. As studies by Yukawa (1999, cited in Hirai, 2003) and Tomiyama (1994, 1999, cited in Hirai, 2003) show, receptive skills are more easily maintained than are productive skills. If parents do not give up talking to their children in their heritage language, they may maintain at least their receptive skills, which may facilitate
language learning in the future when they decide to restart the learning.

Because of the environment’s strong influence on language learning, it is extremely difficult to raise a bilingual in monolingual countries. Nakajima (1998) suggests tips for those families who have difficulty in raising bilinguals, both in the case of teaching Japanese at home in foreign countries and teaching English at home in Japan. Nakajima’s tips, which include being forgiving with language mistakes and focus on forging relationships rather than concentrating on the language, may go a long way in encouraging mothers who have a strong desire but nevertheless give up raising bilinguals because of the solid influence from the surroundings of monolingualism. Saunders (1983), who succeeded in raising his two children as German-English bilinguals in a monolingual English-speaking environment, also suggests that “the important thing is not to give up at the first hint of difficulties. If parents are patient, determined and persistent, it is very likely that they will succeed in raising their children as bilinguals” (p. 245). Kishimoto (2008) also discloses the regrets and cries of Japanese mothers in the U.S. failing to raise bilinguals and presents suggestions to aid parents in similar positions.

To conclude, after examining the data from the participants, the most prudent approach for parents who value bilingualism and who are serious about raising their children bilingual would be for those parents to implement what they believe to be the best methods with consistency and patience. Providing children the environment – even artificial ones that may include showing the English movies – would be quite useful due to the influence that the environment has on language development. Finances are of course a point of concern, but if at all possible, children should be taken to countries where the target language is spoken, although the costs involved to ensure that children
become bilingual, even biliterate, are indeed high (Okita, 2002, cited in Caldes, 2006). Caldas (2006), who successfully raised his three children English–French bilingual-biliterate, shows the importance of societal immersion. According to him, children should be in a place cut off from their parents and where they can only speak the target language. Moreover, Caldas’ ideal immersion situation is where children are surrounded by native language-speaking peers who did not have the ability to speak the children’s native language. Mothers who do not value bilingualism or who care little for foreign language development should not be dismayed. “Giving up” or implementing no course of action are acceptable alternatives because, as could be seen from this study’s results, not all mothers are the same, for they place priority on various things.

The purpose of this research project was to primarily observe the existing views and values of mothers on bilingualism with the ultimate aim of assisting mothers who are concerned about their children and who seek the best for them (e.g., furthering their education) to find a way to successfully raise them to be bilingual if they so desired. It is sincerely hoped that in the future that suggestions (from myself as well as from others) regarding effective ways to foster bilingualism in children that are drawn from past research and studies such as this one will be made. Even so, further studies in this area are highly encouraged. Such studies could, for example, be carried out via personal interviews and evaluations of the participants’ children’s actual ability. Making comparisons (e.g., of Japanese mothers living abroad with those in Japan) is also an option, as are investigations of the effects of Japanese mothers’ differences with mothers from other nations and ethnic backgrounds and observations of children’s chronological language development.
Note: all translations from Japanese were done by the author.

**Biodata**

Kayoko Ishikawa received her Master of Arts in Teaching degree from Georgetown University and continued her studies at the University of Texas at Austin. Her research interests include English loanword usage by native Japanese speakers, bilingual education, and second language acquisition.

**References**


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Abstract

This paper describes education and the educational system in Colombia. It begins with a review of the historical components, challenges, reforms and decrees that have affected where education began and where education currently is. This paper then takes a look at different perspectives of teacher education during the 19th century, its developments and achievements through the 20th century, as well as highlights of some of the the challenges and expectations for the 21st century. As a platform for understanding the social, religious, economical, political and cultural issues facing education, a statistical review is also presented. The paper will conclude with a description of the educational system, its birth and current status through the eyes and experiences of teachers who have been prepared by both the private and public sector of education. Some final thoughts present a forecast of where education could be in the future.
History of Education in Colombia

Trying to outline the history of education in Colombia is not an easy task, due to the fact that, according to Herrera (1994), “the history of education has not occupied a privileged place within the nation’s historical doing and only at very limited times has the historical re-enactment of educational happenings been approached with the tools pertaining to the discipline of history” (Londoño, 2001). This fact represents an unexplainable act of negligence if one considers the vital role of education in Colombian history as the driving force of economic modernization, territorial and cultural integration, and the constitution of a modern mentality through the diffusion of ideas and theories (Herrera, 1994). However, regardless of the difficulties previously mentioned, this article attempts to track the development of education and of the educational system in Colombia in the nineteenth century, give a general view of education in the twentieth century, as well as provide future perspectives of education into the current twenty-first century.

Following this order of ideas, it is then necessary to mention a Decree issued on January 26, 1822 by General Francisco de Paula Santander who ordered the creation of the first Normal Schools of the Republic, in Bogotá, Caracas, and Quito (Londoño, 2001). The term ‘Normal School’ refers to an institution that prepares future elementary school teachers. Its name comes from norm, that is, to homogenize, organize, standardize, and regulate the teachers who will then be in charge of educating the children (Herrera, 1990). These schools followed the Lancastrian method, and their mottos were “the shedding of one’s blood makes learning permanent” (an approximation of the Spanish ‘la letra con sangre entra’) and “no pain no gain” (an approximation of the Spanish ‘y la labor con dolor’) (Londoño, 2001).

In the beginning, future teachers in Colombia received their training while working with the children who became their pupils. There was only one teacher at each school who, being unable to have direct contact with every student, designated advanced students as class monitors who gave the teacher’s directions to their classmates. The teacher’s roles would then be limited to directing, receiving
information, and applying the necessary penalties and punishments depending on the case. Thus, future teachers lacked specific training with regards to the academic subjects they taught (Herrera & Low, 1990; and Londoño, 2001). This system of using one teacher for a thousand students was highly advantageous for the State that, as a result of its political instability, did not have the necessary resources to invest in education. Nevertheless, students suffered from the lack of pedagogical preparation of their classmates who had been newly converted into teachers (Londoño, 2001). According to Londoño (2001), schools with these characteristics only required very limited materials such as a blackboard, paper, and pencils, since all the teaching was based on memorization. Unfortunately, these teaching habits became deeply engrained in the system, and they can still be found in today’s schools (Londoño, 2001).

A New Educational Decree

On November 8, 1825, a new Decree established *Bentham’s Principle of Legislation* as a general text at the universities, arousing great controversy between the Church and the State. This same Decree also instituted free and sustained primary education provided by the State throughout the Gran Colombia’s territory (Londoño, 2001).

In 1826 the organizational and administrative guidelines of the General Division of Public Instruction were given. A Decree from October 3 of the same year dictated the principles and norms that regulated public primary education that could not be put into effect due to the country’s political instability (Herrera & Low, 1990; Londoño, 2001). Two years later, in 1828, a Decree dated March 12 prohibited teaching Bentham because of relentless pressure from the Church. Likewise, it abolished the Study Plan of 1826. This situation, according to Londoño (2001), left educational policy helplessly linked to the political sways of the time. Each successive party that held power would decide on different educational policies resulting in a lack of continuity in academic standards.
The Rebirth of the Normal School

During the decade of the 1840s, the Normal Schools received a considerable boost by changing their name to “Normal School of Primary Education” supported by the Division of Elementary Education of the Department of Education. Another important modification was the separation of the teacher from the school during the teacher education process. This led to the institutionalization of pedagogical learning that was based on teaching children general knowledge and moral standards. The axiom that represented this new movement stated that “the kind of man that desires a formal school and wants to model the teacher is a man defined by political and religious conviction” (Zuluaga, 1984, as cited in Herrera & Low, 1990). These convictions later defined the academic activities and the formal training of teachers (Londoño, 2001).

In 1842, a new series of reforms were implemented based on four pivotal perspectives: industrial development, political consolidation, moral and religious structures, and pedagogical innovations that combine humanities and vocations. Within the context of this judicial irregularity, the preparation and training of teachers could not be conducted in a clear and orderly matter. Londoño (2001) states that this politicized education slowly evolved in response to changes in the role of the State.

Moving Past 1840

A great example of the lack of continuity in educational reforms was the Law of 1850 that reduced the importance of all prior rulings related to education, established absolute academic freedom, and eliminated all academic titles. Londoño (2001) indicated that the main premise of this law, the implementation of a new civil and free education system, could not be implemented because of a lack of infrastructure.

Starting in 1870, the new role of the teacher was limited to being a transmitter of knowledge. The State still held all the power and was in charge of designing curriculum and education plans without consulting the teacher or ever taking into account the
classroom environment. The teacher’s only responsibility was to recite norms and moral principles, with some academic content scarcely embedded in the instruction. This led to teachers being named apostolic-teachers, a perception that is still held in the collective imagination of people in Colombia. Londoño (2001) and Herrera & Low (1990) describe the philosophy of this era that was to mold “men with healthy bodies and spirit, dignified, and capable of becoming citizens […] of a free and republican society”. This meant that education needed to be harmonious with the soul, the senses, and the forces of the body.

The year 1881 was witness to the arrival of the first pedagogical mission from Germany that was invited to help guide the Normal Schools under the educational principles of Pestalozzi. Londoño (2001) suggested that these principles were intertwined with a consciousness of the interconnectedness with the environment (or what they called Mother Nature), as well as with the acknowledgement of the existence of harmony between liberty and discipline and between the educator and the educated. It also paid close attention to free education, the creation of a moral conscience, the development of the self, the knowledge of personal values and flaws, and the idea of belonging to a social class. This particular movement further promoted the social differences of the time.

The weak point of this process was that the educational principles from Germany were imported into the national standards without considering the needs and demands of the Colombian people. Londoño (2001) suggested that the clash of these two different cultures made the implementation of these international academic standards virtually impossible. This missionary pedagogy also encountered great resistance from the ecclesiastic authorities. Combined with the political instability of the country, this turmoil gave rise to numerous civil riots that, in the end, prevented a better utilization of the German recommendations.

In 1887, the judiciary body of the government suffered another setback. The political Constitution enacted the previous year, along with the agreement with the Holy See, gave way to the abolishment of the attempt to create a free and civil education. It was
then determined that educational principles needed to be based on those of the Catholic Church. This marked the beginning of the dominance of Catholic pedagogy. Londoño (2001) and Herrera & Low (1990) stated that this movement was reinforced even further by the rise of several religious communities that monopolized the preparation of educators and, in turn, education.

At the end of the 19th Century, in 1983, Decree 429, known as the Zerda Plan, revised public instruction and declared a new standard for all normal schools. This plan required five years of higher education after elementary school in order to be certified as a teacher. This decree, along with the later one in 1904 (Decree 491), made these standards mandatory for future teachers and has not been altered since (Herrera & Low (1991).

The 20th Century: New Vision, New Opportunities

In order to study the evolution of education in Colombia during the 20th century, it is critical to acknowledge the support and involvement of Agustin Nieto Caballero, who studied in Europe, and upon his return to Colombia, founded what is known as the Gimnasio Modermo. The term gimnasio should not be confused with the word used for a sports building. Instead, it should be seen as a metaphor for educational activities. This institution became a pioneer in Latin America by putting into practice the premises of the New School. According to Herrera & Low (1991), this new mentality brought a much needed reform to the pedagogical belief systems of the previous century. In addition, the institution invited a group of German educators for a second missionary visit; these individuals brought with them the theories of John Dewey, María Montessori, and Ovide Décroly.

During the 1930s, with the assistance of the liberal government, considerable progress was made in modernizing and expanding education through the creation of more rural normal schools and the reacquisition of some urban ones. In regards to higher education, three new educational institutions were founded with the sole purpose of educating teachers who would teach and
become administrators in secondary education system (Calvache, 2004).

The year 1991 brought a change to the country’s political Constitution, or what was called the norm of norms. In this Constitution education was defined as “a person’s right and a public service that has a social function. With education, a man would be able to search for access to knowledge, science, technology, and the rest of goods and values of the culture” (Calvache, 2004; Colombian Constitution, 2009). Education was also made mandatory for children between five and fifteen years of age and included a year of preschool and nine years of basic educational instruction. At the same time, it was established that the State, the family, and society were responsible for its implementation. It was also stipulated that all public State schools needed to be free of cost, although some fees could be charged to those who could afford them (Colombian Constitution, 2009).

The General Law of Education, Decree 115 of 1994, defined the organizational structure of formal, non-formal, and informal education as, respectively: a. that education which is given in approved institutions, in series, and with curricular parameters; b. that education whose goal is to update knowledge outside the grading and evaluative system; and c. that education which is understood as the collection of concepts, as well as acquired information from people and means not regulated by the State (General Law of Education, 2009).

A New Boost to Education: The Ten-Year Educational Plan

A new plan, the Ten-Year Educational Plan, was introduced and implemented as an attempt to advance education. Its purpose was to include all public suggestions about improving the educational system. This decennial plan, the document governing the educational period of 2006-2016, was the product of information collected from several educational evaluations and reviews (Decennial Plan of Education, 2009).
The opposition, however, continues to compare this ten-year plan to those previously implemented. These critics persistently point out the failures and limitations of the plan itself. These shortcomings are reportedly related to equal access to education and to problems with student retention in schools. As part of the teacher preparation program, some questions are asked to assure that teacher candidates understand the various components of the plan. Examples of these core questions are: "What guarantees that this plan will be implemented, maintained and followed as it is proposed?" and "Who is in charge of securing the execution of the projects and collection of data proposed in the plan?"

Although it is understood that the educational system faces considerable challenges, there seems to be a willingness from the new teacher work force to improve this system. Some answers to the before mentioned questions and others, as provided by those teachers in preparation, are summarized in the following ideas:

1. Guarantee an educational system that can respond to the demands of the Colombian context, develop research skills, and promote access to communication technologies.
2. Educate in and for peace, civility, and citizenship.
3. Build pedagogical renovation that strengthens all aspects of schooling.
4. Integrate science and technology with education while developing human talent.
5. Provide an increased and improved investment in education
6. Improve educational statistics
7. Make elementary education and child development a priority at the national level.
8. Ensure access to equal education and student retention in a high quality environment.
9. Provide leadership, accountability, and transparency in the accreditation phase of the educational system.
10. Provide training, professional development, and appreciation of scholars.
11. Promote the active participation of the family, the labor sector, the general society, the mass media, and cultural institutions to ensure the relevance of education.

12. Improve teachers' working conditions.

**Characteristics of the Colombian Educational System**

Education in Colombia is a right as well as a requirement for that part of the population between five and fifteen years of age. In other words, a student at the age of fifteen can decide to leave the general educational system and not be penalized by the State. It is also important to mention that the system is divided into two levels: primary (elementary) and secondary (basic education). The elementary level goes from first to fifth grade, without including preschool or kindergarten. The secondary level goes from sixth to eleventh grades. In all, there are only eleven years of education, as compared to the twelve years in other countries such as the United States of America. What this means then is that a student in Colombia who turns fifteen years of age can choose to leave school and join the workforce. At fifteen, students are expected to be in the tenth grade.

This attrition problem has created a number of difficulties for the social, economic and cultural systems of the country (Flórez, 2005). The main problem created by what is called student desertion during or before the completion the last two years of basic education (tenth and eleventh grades) is the lack of preparation for the world of work. In 2004, only 47% of students who started school actually finished, which means that an estimated 53% of school-aged teenagers did not complete the cycle (Flórez, 2005). On an annual basis, it was estimated that approximately 7% of students left school. This problem is caused mainly by three specific factors. According to some experts such as Flórez (2005), the first factor is directly related to institutional structures in the educational service, in other words, failing to keep promises and responsibilities to students. Some issues in this area include lack of space in schools, rapid and unexpected increase in fees, unequal access to opportunities, and in other cases, lack of instructional quality. The second factor relates to the pedagogical preparation of the teachers. It is believed that teachers who are in charge of the integral development of the student fail to
motivate students and keep them interested in high school (taken from the *Ten-Year Education Plan*). Over-crowded rooms and inadequate teaching skills result in teachers who become uninterested in teaching, and even worse, caring for the students. Students' growing disinterest in school drop was studied by the *Departamento Administrativo Nacional de Estadisticas de Colombia* (National Administrative Department of Statistics), better known as the DANE, which reported that approximately 21% of students who leave school early expressed a major lack of interest for staying in school.

The DANE also reported that the third main factor for lack of student retention was, as one might guess, economic disadvantages. In 2003, approximately 40% of seventeen-year-olds who left school early claimed some level of financial need that forced them to leave school and look for a job. It is rather ironic and worth mentioning that the school system in Colombia is currently designed with the last two years of high school as the vocational years of basic education. It is expected that a student who completes the full eleven years of schooling, will have sufficient knowledge and skills to enter the workforce. The issue is that, unfortunately, more than half of the students who leave school early do so before they get prepared for a vocational job. In turn, it is harder for them to find employment because most employers won’t hire someone who has not completed high school (Flórez, 2005).

**Problems with the Current Education in Colombia**

Education in the twenty-first century should be concerned with solving several issues that will be discussed in this section. To begin with, teachers must have an active role in curricular planning. Since the 1970s education has been viewed as a static process that is centrally planned. This policy has resulted in making teachers the administrators of curriculum rather than leaders or guides. The resulting educational policies have few or no connection at all to the day-to-day realities of the classroom (Martínez & Alvarez, 1990).

Another legitimate question is that of educational quality because, with the exception of Cuba, the quality of basic education in Latin America does not meet minimum standards. The *Segundo*
Estudio Regional Comparativo y Explicativo de 2005 Y 2006 (Second Comparative and Explanatory Regional Study of 2005 and 2006) studied third grade elementary school students and first year secondary school students (i.e. grade 6) and found that education achievements in Colombia only reach the regional average, with no significant differences in students’ performance in mathematics and language (Hommes, 2008).

Likewise, nationwide educational coverage becomes a critical issue both at the basic educational level and at the advanced level because in many states there are no institutions in charge of advanced education. This fact is reflected in Law 1084 (2006) in which the State, as the institution responsible for education throughout the country, strengthened advanced education in remote areas by means of agreements with private and public institutions outside of these areas. These schools agreed to reserve 1% of their quota for students that come from less accessible areas (Law 1084, 2006). Even this proved to be insufficient support because student retention should be insured by programs that provide them with employment opportunities and/or university subsidies, without having to drop out.

A universal educational system with full coverage needs teachers who are qualified in their specific field of study and in appropriate pedagogical methods. At the same time, it is also vital to guarantee teachers' job stability, good working conditions, and necessary materials to shape Colombian citizens (Hommes, 2008).

In terms of educational quality, Decree 230 (2002) provoked a lot of controversy because it established that a maximum of 5% of an institution’s student population could fail a grade. It stated that having students repeat a grade was costly to the country, and the process of failing adversely affected students' self-esteem (Ministerio de Educacion Nacional). However, this Decree was revoked as part of the Ten-Year Educational Plan in response to pressure from teachers and the general population who perceived it as detrimental to the quality of education.
Some Helpful Statistics

Out of the 42.3 million Colombian citizens in 2000, 91.5% knew how to read and write, and the educational competition level was 90.7% for primary education and 61% for secondary education (World Bank, 2010). By 2007, based on figures provided by the National Ministry of Education, more than eleven million students attended basic primary education, secondary education, and middle school. The basic education level reached 100.87%. There were 1,444,544 students enrolled in advanced education. The creation of new openings had been achieved through three programs: credit, modernization of the management of public advanced education institutions; and the development of technological and technical education. This effort enabled enrollments to increase from 20.6% in 2002 to 33.3% in 2008. The most significant growth was related to the technical and technological levels.

Achieving these increases in educational enrollments was a slow process because at the beginning of the twentieth century Colombia had low educational levels compared to other Latin American countries. Ramirez and Téllez (2007) analyzed the evolution of both elementary and secondary education in Colombia during the twentieth century. Their study discovered that at the beginning of the century nearly 66% of children between the ages of seven and 17 years of age were illiterate (World Bank, 2010). This illiteracy rate decreased to 15.8% during the seventies and eighties, and reached 8% by 2006, which was the lowest figure in one hundred years. The efforts of the government, although limited at times, had also increased the net scholastic participation from 103.1% in the late 1980s, to 114% by 2000 (Ramirez & Téllez, 2007). Even though these numbers look promising, it must be considered that there are still 12% of children in Colombia that lack the means to attend school. These are troubling figures when compared to the 9% level in the rest of Latin America (World Bank, 2010).

A promising spike has been present since 2000, where an approximate 1.8% of elementary school enrollment has showed a steady annual increase. There is a current increase of about five million children enrolled in first to fifth grade. Secondary education
has also experienced a considerable growth of almost 5%, and retention has remained at the highest level it has been in years. Additionally, the number of schools and teachers has doubled. Based on a longitudinal study done by Ramírez and Téllez (2007), it can be seen that the number of children enrolled went from 4.5% in 1905 to more than 12% by 2000. Ramírez and Téllez (2007) also reported that there has been an increase of teacher preparation schools and that the teacher workforce has increased almost by 50%. Lastly, tuition in most cases grew proportionally in high school by going from 61% in the late 1980s to a little more than 70% by 2000.

Although the forecast is very promising, according to Ramírez and Téllez (2007), after the impressive advances of the past 30 years, the government still needs to improve educational access, quality, investment politics, and proper administration of the educational sector. Regarding teacher salaries, the new Decree enacted this year promises a pay increase of 14% for this year, and of 24% over the next three. This would benefit approximately 70,000 educators and administrators. This means that a high school graduate from a normal school or vocational educator would make $1,013,000 ($553), a lecturer or professional educator would make $1,983,948 ($1084), and a licensed, credential teacher from a university would make $2,367,092 ($1294). Lastly, a teacher with a Masters degree would make an estimated $2,934,879 ($1603) and with a doctorate, an approximate $3,904,519, or roughly $2133 dollars ("Salarios de 70," 2009).

**Teacher Preparation**

In Colombia, the responsibility for the training of teachers has been assumed by two types of institutions. The Normal Schools prepare students during the last two vocational years of high school and are responsible for teaching content knowledge (Calvache, 2004). The colleges of education prepare teachers, not in content, but in curriculum and pedagogical approaches at a higher educational level (Calvache, 2004). Both institutions have always been under the influence of diverse pedagogical models of instruction, as well as multiple political reforms throughout history. These inconsistencies, at times, have caused the educational system to project the idea that
only the elite could afford an education. According to Calvache (2004) education “is a privilege for some elite social classes, as well as a representation of a political purpose whose agenda reflects the dependency on external factors that contradict those internal factors that are inherent to the organization.”

When it comes to the Normal Schools, teaching is based on methodologies, and the predominant expectation for a teacher is *know-how*. On the other hand, the colleges of education at universities place great importance on training teachers in the administrative components of education (Calvache, 2004).

**A Brief Revisit to the Normal School**

It is important to note that the Escuela Normal, Normal School, is the most important step in teacher preparation. As described in the history of education in Colombia, the Normal School dates back to 1821, and throughout its historical turmoil, it has still proven to be an effective and productive institution for teacher preparation. Its most influential reform came in 1970 with the enactment of Decree 80, in which education was defined as an instrument that would equip the teacher with *practical knowledge* and with the use of technology as a foundation. From this point on, teachers would become supervisors of knowledge using a better developed curriculum and instructional guides that would assist them with time management and administration (Calvache, 2004).

**A Short Political Review**

As was previously mentioned, education in Colombia has been closely related to the political changes in the country. By observing politically motivated educational changes it has been easy to tell which political party was in charge. This was especially obvious during the twentieth century. A good example was during the 1949-1957 period during which the conservative party regarded the normal school as a vehicle for promoting its ideology. During this period, conservative politicians sought to replace high level liberals in the department of education. Once this was accomplished, the number of teacher in elementary schools doubled, and political beliefs of these
teachers became conservative. Unfortunately, this strategy backfired and the quality of education fell drastically, as did the value and appreciation for those in the field of education (Martínez & Alvarez, 1990).

**Teacher Certification**

When it comes to departments of education in universities, known as *Facultades de Educación*, their origins date back to 1920 when the influence of the *Escuela Nueva* (New School) indicated the need to train teachers with a different mentality from that of traditional educators. These new teachers would depart from the memorization methods used at the time in schools, as well as from pedagogical dictatorship styles (Martínez & Alvarez, 1990). During this time, it was imperative that teachers possessed the skills of a professional educational administrator, in other words, the new approach was that teachers should no longer be simple transmitters of content, but motivators, communicators, and thinkers. From this movement, the title *Licenciado en Educación*, or Certified Teacher, was born.

**One Last Historical Review**

The history of teaching practices in Colombia has been filled with contradictions both at the social and the state level. During the nineteenth century, at the time of the reconstruction process of the Republic, it was mandatory that all teachers be examples of virtue and good citizenship. It was believed that teachers who could demonstrate good behavior and judgment would be models of morality for students. The educator during this period needed to posses moral qualities, vocational skills, in addition to extensive knowledge of teaching methodologies (Martínez & Alvarez, 1990). This is why all aspiring teachers attended normal schools. Unfortunately, teaching came to be regarded as a missionary endeavor that received insufficient financial compensation.

Historically, there have been several functions assigned to teachers. These have been defined as being first and foremost an educational vocation, a State employee, and lastly, an administrator.
Teachers have been responsible for providing all social classes with high standards and a sense of responsibility, as well as taking the blame for social problems such as teenage pregnancy or the existence of criminal gangs. After several centuries of reforms, not much has changed in the public’s perceptions of educators' roles.

**What Current Teachers Think About Education in Colombia**

To get a slightly better idea about the current situation of education in Colombia, a short survey was conducted at the University of Antioquia, recognized as one of the best universities for teacher preparation in Colombia. When asked about their general opinions of the educational system, the most dominant feeling was that although there were substantial human resources, the State and the government have not supported the system (Anonymous, personal communication, April 24, 2009). Some respondents believed that still more changes were needed in the perception of teacher quality and that the government needed to re-evaluate the existing competitive approach among districts, which have reduced the willingness for teachers to participate.

Some of the other mixed responses dealt with too much money being spent on the current drug war and not leaving enough for education (A. Quiroz, personal communication, April 25, 2009). Also, it was felt that the quality of education for teacher training has been diminishing because there is too much attention paid to training teachers who can do, rather than preparing teachers who can think. Another point of agreement among teachers was that extensive pressure is being put on teachers by the State in regards to their discussions and teachings about the current socio-political, economic, and cultural realities (J. Marin, personal communication, April 23, 2009).

In reference to the challenges of education in Colombia, research indicates that there is a current lack of resources and investment and that there is little to no attention given to research and investigation. In addition, many believe that the teacher-student ratio is much too high, especially in cases there are over 40 students in elementary classes and close to 50 in high school classes. Most
teachers still agree that the biggest challenge is equal access for all (Ramírez & Téllez, 2007).

**Final Thoughts**

 Colombian people are hard working, honest, dependable, and resilient individuals. Teachers in Colombia want to teach; they understand that they must overcome the current situations to open up opportunities for the future. Teachers still have faith and hope for a better, more accessible educational system. They feel they are competent and believe that with the help of the local government and the State they can become even better role models for young people. They dream big and hope that in the near future the schools and the government will offer more opportunities for research and studies. They know that the support at this time is not ideal, but they also know that history will not repeat itself.

 All is not as bleak as it may sound. Vocational education in Colombia has begun to take root, and the private sector is taking notice. Current teachers are finally awakening from their sense of helplessness in the face of the political forces that have oppressed them for decades. Today's teachers have broader ideas, expanded interests, and stronger motivation for equipping themselves with better pedagogical tools. Finally, educators no longer think about themselves as individuals. They have become a community of minds and hearts that is ready to change the world.

References


How Far Is Too Far In Our Schools?
Cyberbullying, Sexting, and Blogs

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Cyberbullying in schools, a recent phenomenon, affects students, parents, and staff, and often the community as a whole. Some parents, having lost their teens to suicide, are suing school districts claiming their children were bullied to death. There is an urgent need for clear guidelines on what schools can and cannot do to stop bullies. Expansion of current laws, board policies, and the Education Code are necessary to guide districts and administrators in these new arenas. The goal is to ensure a safe and positive learning environment for all students.

Cyberbullying involves minors using electronic technology to harass, embarrass, intimidate, torment, or in any way cause emotional suffering to another minor. California was one of the first states to pass cyberbullying laws and provide school administrators with the authority to suspend, expel, transfer to alternative programs, or deny participation in extracurricular activities to offending students (Education Code 48900).

The potential for harm from cyberbullying is immense. In the case of Megan Meier, the consequences were fatal. A woman posing as a sixteen-year-old boy on MySpace initiated an online relationship with Megan. After six weeks, the imposter ended the communications by telling Megan the world would be better without her. The next day Megan hung herself. The gravity of this situation prompted city officials to pass an ordinance making online harassment a criminal offense. Megan’s tragic response to cyberbullying has repeated itself with countless other teens who saw no other way out.

According to the July 2010 California School Boards Association report, one-third of teens aged 12-17 are affected by cyberbullying. Girls are more likely than boys to experience cyberbullying as well as victimize others. Twenty-six percent of teens said they have been harassed via cell phone and this occurs in all cultures, races, and ethnicities.

Another issue of national concern involves “sexting” or sending sexually explicit text messages or nude photos via cell phone or other electronic device. According to a report on Good Morning America in April 2009, twenty percent of the nation’s students say they have participated in “sexting.” One example of the problem arises when a girl sends a photo of herself to her boyfriend, the two break up and the boy sends the photo to others, thus becoming a form of cyberbullying.
Most teens communicate on social networks and blogs. Websites such as MySpace and Facebook allow multiple users to publish information about themselves on a profile that can be accessed by other users. These sites are often the place where teens post cruel comments, make threats, and intimidate others.

Recent cases highlight the problems that courts face when deciding cases involving cyberbullying. In the case of Doniger v. Neihoff (2008), a student council member sent a mass e-mail from a school computer, expressing frustrations regarding the scheduling of a school event. The student encouraged community members to voice dissent to the administrator. A blog entry was posted referring to the administrator in offensive terms. The Second Circuit court ruled in favor of the school because the student’s speech was offensive, disruptive, the blog entry was inaccurate, and the school’s discipline was not excessive.

J.C. v. Beverly Hills Unified School District (2009) defined boundaries for disciplining students’ conduct off campus. The student posted a video on YouTube with demeaning remarks about another student including profanity and sexual innuendo. The video received 90 hits on YouTube but there was no evidence that students viewed it on school grounds. Judge Wilson’s 57 page decision stated, “The good intentions of the school notwithstanding, it cannot discipline student speech simply because young people are unpredictable or immature or because teens are emotionally fragile and may often fight over hurtful comments.” The school district was ordered to pay $107,150.80 to JC for legal fees.

In the case of J.S. v. Blue Mountain School District (2010), the courts ruled in favor of the schools. A student created a MySpace profile of the middle school principal indicating that the principal was bisexual, a sex addict, and also made disparaging remarks about his wife and children. The internet activity was conducted off campus but courts upheld the student’s suspension based on foreseeable substantial disruption.

A similar case, Layshock v. Hermitage SD (2010), was found in favor of the student based on a claim of the violation of his first amendment rights. The student used his grandmother’s computer to set up a parody profile of the school principal, along with a photo copied from the school website, on MySpace. Under the Tinker standard, the actions did not constitute a sufficient nexus between the profile and substantial disruption.
to the educational environment. Both J.S. and Layshock have been appealed and heard en banc in June. The Supreme Court has not yet taken a stance on Internet bullying (off campus) and Tinker still reigns.

Evans v. Bayer School District (2010) involved a student who created a Facebook group to express displeasure with a teacher whose photo was posted on the website. The posting was done off campus and when other postings came in supporting the teacher, the student removed the profile after two days. The student was suspended for three days and moved from an AP class to an honors class. The court ruled that the school district did not document substantial disruption to the school environment and that this is a case where the student speech is protected as it was not lewd, vulgar, threatening, or promoting illegal activity.

Courts look at three areas when determining whether schools have the right to regulate student use of technology. Judges consider true threats to school safety, whether the incident was materially and substantially disruptive, and if there is sufficient nexus to school activity. A few key court cases govern the court’s discretion regarding cyberbullying. Tinker v. Des Moines, a 1969 case involving students who wore black armbands to school in protest of the Vietnam War, is often quoted in noting that students and teachers do not shed their constitutional rights at the schoolhouse gate. However, the case is also used to show that conduct that disrupts class work or involves substantial disorder or invades the rights of others is not protected by the First Amendment.

The constitution guarantees freedom of speech in the First Amendment. However, the expression of free speech does not allow one student to deprive another student of the right to a safe school environment, free from harassment or damage of reputation. Bethel v. Fraser, a 1988 case, involved a student who gave a vulgar, lewd, and offensive speech during a school assembly. The courts ruled that younger students were a captive audience and that schools have a right to prohibit this type of speech whether or not actual disruption occurs.

Violence on school campuses across our nation shifted the burden of proof to students to show violation of First Amendment rights when a true threat exists. In the 1996 case of Lovell v. Poway USD, the court of appeals defined a threat as a “true threat” if a reasonable person would interpret it as a serious expression of intent to harm or
assault. Schools also have a right to regulate speech that promotes illegal drug use or other illegal activities under the court’s decision in Morse v. Frederick, a 2007 case. Schools may prohibit this type of speech without establishing a true threat.

President Obama signed the Broadband Data Improvement Act on October 10, 2008, which requires districts to develop policy to ensure students are educated about appropriate online behavior, awareness, and response to cyber bullying. Forty-four states have bullying statutes but less than half offer guidance about whether schools may intervene in bullying involving electronic acts.

California was one of the first states to pass a cyberbullying law. Assembly Bill 86 came into effect January 1, 2009, and states that cyberbullying is disruptive and invades the rights of others by creating an intimidating or hostile educational environment. This bill adds cyberbullying to the list of activities schools officials and law enforcement agencies are encouraged to prevent. Assembly Bill 86 also amended California Education Code 48900 under section (r) to allow school administrators to discipline students who bully others by electronic acts such as messages, text, sound, or images transmitted via phone or other wireless device.

California Board Policy (BP) 5131 provides instruction to those who supervise students who may be involved in cyberbullying. Expectations are that staff will intervene immediately or call for assistance, if they witness behavior that disrupts the classroom or school environment, and this includes cyber bullying, as defined in Education Code 32261. This Board Policy gives broad, general direction but leaves the details up to the districts. The policy mentions that teachers must receive professional development related to cyberbullying. Reported activities should be documented and any threatening messages saved and printed, but there is much left to the discretion of the district.

Cyberbullying, sexting, and social networks may put minors at risk for sexual predators. Megan’s Law, named for the seven-year-old raped and killed by a molester who lived across the street, provides the public with information on the whereabouts of sexual offenders. All states now have a form of Megan’s Law. Many cities have Sexual Assault Felony Enforcement (SAFE) Task Forces. The sheriff’s department, District Attorney, and local and state law enforcement agencies work together to identify, monitor and force sex offenders to register. Riverside County California also includes a SPIDER
(Sexual Predator Internet Decoy Enforcement in Riverside) unit under the SAFE task force. This unit targets unidentified predators that use the internet to prey on unsuspecting victims.

Due to lack of specifics in BP 5131 regarding cyberbullying and the increased incidents in schools and districts throughout the county, the Riverside County Office of Education convened a work group to address the issue of “sexting.” The work group was composed of Child Welfare and Attendance representatives from the districts, representatives from the District Attorney’s office, the DA Investigator’s Office, and the Sheriff’s Department. Specific guidance was provided for dealing with incidents such as the confiscation of a cell phone by turning it off, and turning it over to the School Resource Officer or law enforcement agent. The importance of acting immediately was stressed in order to recover data that is lost after three days. Accurate report writing was stressed to assist prosecution and defend school personnel if necessary. The purpose of the group was to gain consistency among all districts in the county and find ways to effectively eliminate sexting from schools.

The county workgroup planned to create an eighth grade assembly on cyber bullying to be presented by representatives from the Sheriff’s Department and District Attorney’s Office. Another presentation on the subject would be incorporated into Freshmen Orientation, and all seniors would attend assemblies to notify them of prosecution as an adult after age 18. The county workgroup also planned to create a DVD, modeled after one created by an Assistant Principal in Jurupa Unified School District, to address the issue of cyber bullying and the gravity of consequences that follow the offense. Students convicted of sending nude photos of themselves may be charged with a felony and consequences may include probation or time in Juvenile Detention. Staff must be warned that possession of nude photos of children under age 18 may be considered child pornography under penal code 311.

Cyberbullying is an issue that can tear student and staff morale apart. Teachers forced to spend time policing students and defending others from this behavior lose precious instructional time. Students who are harassed are unable to concentrate and learn. This issue could potentially cause test scores to drop and schools to end up in Program Improvement.
Clearly defined policies and staff training are essential in dealing with the problem. One district has reduced the incidents of cyber bullying significantly by communicating candidly with students on the issues and consequences. School administrators have the responsibility for maintaining a safe and secure campus so all students can succeed. Dealing with issues such as cyber bullying, and minimizing or halting the occurrences on campus is critical. One instance of sexting ended in a sting operation that included the arrest of a sexual predator. In cases such as this, the lives of students and families could be at stake.

Board policy in some ways resembles the constitution in that it provides broad guidelines. It is important that Administrative Regulations and district policy follow up with more precise guidelines. The county resolved to offer information and assistance to districts but the need was so immediate that districts and individual schools developed their own approaches to dealing with the problem. Providing a forum for districts to share ideas is crucial. Networking with outside agencies such as the DA’s office and law enforcement ensures that all preventative organizations are on the same page, and sends a message to students that the offense will be dealt with at all levels. Written and oral communications are critical to combat the spread of potentially harmful behaviors such as cyberbullying and sexting. The use of a county-wide DVD to open up dialogue and warn students of the possible dangers and consequences is an excellent resource. Courageous conversations with students, parents, and staff, and age appropriate educational assemblies are valuable tools to combat cyber bullying.

Communities must become proactive in facing the challenges related to cyberbullying, sexting, and blogs. Adults who interact with teens must be on the lookout for signs of low self-esteem, anger, loneliness and threatening behavior. Educating students regarding digital citizenship, informing them of the dangers and consequences, and engaging peer mediation strategies are proactive measures that may end up saving lives. Schools need to develop a system for reporting incidents of cyberbullying, and outline steps to investigate and document negative activities. Considering the recent increase in teen suicide, Congress has been called on to pass the Safe Schools Improvement Act requiring schools receiving federal funds to implement bullying prevention programs, specifically addressing anti-gay harassment.
Schools should also coordinate educational sessions and meetings with parents, staff, and outside agencies to target prevention and intervention strategies. The technological advances in society necessitate new school policies. County, district, and school administrators must stay abreast of current issues and be pro-active in research, collaboration, and implementation of strategies. We must ask ourselves whether poor school climate increases incidents of cyberbullying or if cyber bullies affect school climate? The end goal is to provide positive learning environments that allow all students the opportunity to succeed in a safe and secure setting.

References


PRACTICUM FINAL REPORT:
UNIVERSAL DESIGN FOR LEARNING
AND GIFTED STUDENTS
IN THE 21st CENTURY CLASSROOM

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Practicum Final Report
Submitted to Dr. Brendan Croskery
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Universal Design for Learning and Gifted Students in a 21st Century Classroom

Abstract

This study examined in what ways and to what extent using Universal Design for Learning strategies impacted the learning of gifted students in a 21st century classroom. Various UDL practices were employed in a Humanities grade 8 classroom over the course of one term, focusing on the Renaissance unit in the social studies curriculum. I hypothesized that the implementation of UDL teaching strategies into my professional practice and the creation and completion of UDL projects by the students would allow the five gifted students involved in the study to demonstrate an increase in learning, as illustrated through an increase in grades, in-depth student reflections and self-assessment, and evidentiary support written by the students on their clear target tracking sheets.

Gifted students can be difficult to motivate to work to their true potential. I theorized that by using the three principles of Universal Design for Learning, engagement, representation, and expression, the gifted students in my classroom would be intrinsically motivated to produce authentic learning activities to demonstrate their knowledge of the curricular objectives, or clear targets. My hypothesis was confirmed. The completion of these projects enabled the students to come to an in-depth understanding of the curricular content, through integrating prior knowledge with new concepts, which consequently gave them the tools to perform better on written exams as an assessment of their learning.

In this study, I discovered that through using UDL strategies consistently and giving students the opportunity to practice (to complete more than one UDL activity), the students generally demonstrated growth in learning as demonstrated in an increase in
Introduction

I conducted my action research project to explore the following question: In what ways and to what extent do using Universal Design for Learning strategies increase the learning of gifted students in the 21st century classroom? The study took place at Mitford Middle School in Cochrane, Alberta. Through the school’s AISI project, teachers at Mitford Middle School are working collaboratively to improve learning in students in 21st century classrooms using UDL strategies. Mitford’s AISI goal relates to specific aspects and priorities in Mitford’s Three Year School Education Plan in that:

Goal #1 in the SEP states: “Learners have their basic and diverse needs met”. Implementing UDL strategies will allow teachers to meet the students’ basic and diverse needs by differentiating instruction and providing access to technologies that will enable all students easier access to the material and an avenue of expression of the learning outcomes.

Goal #2 in the SEP states: “Learners are competent, qualified, and dedicated”. UDL strategies will engage students and give the opportunity for those students to acquire 21st century skills.

Goal #4 in the SEP states: “Learning opportunities are distinct, continuous, and systematic”. Implementing UDL strategies into classroom practice will provide distinct, continuous and systematic learning opportunities for students through differentiation and the use of technology.
Goal #5 in the SEP states: “Instruction challenges and engages the learner”. UDL strategies are proven effective in increasing student engagement and providing challenge for “highly able” students in the classroom.

I connected my research to Mitford Middle School’s AISI project to increase fluidity between my required school-based professional development and my personal action research project. My hope was that UDL strategies would be effective in increasing the learning of all of my students, regardless of ability. However, due to the extent of this task, and the data collection required as evidentiary support for my action research project, I have concentrated my data collection on the impact of learning on the gifted students I teach in the split 7/8 Humanities class. I wanted to demonstrate that by using Universal Design for Learning strategies, the gifted students would not only meet curricular objectives, but would exceed my expectations in pursuing enrichment opportunities. I theorized that using these strategies would:

• Help my “highly able” students to become more engaged in classroom work
• Increase their learning in humanities, and
• Motivate them to become independent, inquiry-focused learners who will develop a passion for life-long learning.

Why Universal Design for Learning?

Universal Design for Learning (UDL) is an emerging pedagogy in the field of education, which has the potential to positively affect the learning of all students in the classroom if employed correctly. “Truly every student, from the gifted to the at-risk to the one with physical and cognitive disabilities, benefits from UDL” (Erlandson, 2002, p. 2).
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UDL focuses on developing curriculum that reacts proactively to various pedagogical contexts that arise in today’s diverse classrooms by “uploading flexibility into the curriculum rather than waiting for students to falter to put strategies in place to remediate,” (Edyburn, 2003, p. 2). This is very similar to the practice of differentiation. Universal Design for Learning and Differentiation are synonymous in many ways, however, Universal Design for Learning has taken differentiation a step further, according to DeCoste, (2004), by anticipating the needs of diverse learners. “UDL is primarily concerned with learning content, learning process, learning products and the learning environment” (DeCoste, 2004, p. 2). UDL is an extension of differentiation, however, because UDL “places a greater emphasis on using the technology” (DeCoste, 2004, p. 8), that is readily available in today’s 21st century classroom. Pisha & Meyer (1998) as cited in Bart & Pisha (2001), suggest Universal Design for Learning is based on thinking about the needs of all the learners in the classroom and that the teacher should “design curricula, materials, methods, and environments that support and challenge each learner as appropriately and consistently as possible” (p. 198). UDL allows for a whole new range of technological tools to be used to increase engagement, student access of curriculum and demonstration of learning. This allows educators to “develop a new generation of flexible curricula and materials that accommodate each student’s idiosyncratic pattern of strengths, weaknesses, styles, interests, and background knowledge” (Bart & Pisha, 2001, p. 199). Examples of strategies incorporating UDL into the classroom suggested by Rose and Meyer (2002) include:

(a) Start with manageable curriculum units,

(b) Identify the goals of the unit,
(c) Identify what students need to do to show mastery,

(d) Determine what the instructional barriers are for specific students,

(e) Determine what tools would help this, and

(f) Determine how goals, methods and assessments can be adjusted.

Examples of strategies and technologies I used to implement UDL principles in my classroom are explained in my unit plan (Appendix E).

Rockyview Schools has posted a list of 21st century teaching strategies on their website for all teachers and administrators to access. This information states that teachers should:

A. Provide Clear learning objectives and goals

1. Ask the question "What do you want the learner to be able to remember in 5 years?"

2. When possible connect the outcomes and goals to examples the learners can identify with.

B. Provide a variety of learning resources that appeal to the various learning styles

1. Become familiar with each learner and any individual differences by reviewing those strategies that work.

C. Provide opportunities for formative learning thus checking understanding (practice and feedback)

1. Work toward the key understandings by providing multiple learning pathways that chunk the learning in stages and that move the learner toward the outcome.

D. Provide Rubrics for self-assessing quality of work and/or level of understanding

1. Allow learners to demonstrate understanding through multiple forms of representation
E. Provide opportunities for learners to exchange ideas and construct meaning

1. Provide opportunities for learners to co-construct knowledge with each other.

F. Provide multiple learning pathways that appeal to the learning styles of each learner

1. Allow the learners to attempt alternate pathways if unsuccessful with the first attempt
2. Provide enrichment and remedial activities that provide differentiated learning pathways

G. Accept different representations of learning that demonstrate understanding of the course objectives (Rockyview Schools, 2009).

These strategies correlate to the implementation of UDL strategies in that Rockyview is encouraging its teachers to try to find avenues to differentiate and allow learners to demonstrate their knowledge in a plethora of ways. This will allow students to demonstrate their ongoing development of 21st century learning skills. I have attempted to follow the strategies Rockyview has set out to implement UDL strategies in my classroom, as explained in my unit plan (Appendix E), to enable my students to increase their learning and develop 21st century learning skills.

Much of the focus on Universal Design for Learning is centered on how using those strategies in the classroom will benefit those students who encounter adversities in learning environments. But how do these strategies affect those mid and high-ability students? When changing classroom practice to reflect UDL practices, often mid and high-ability learners struggle because they have not yet been challenged and have not had difficulty in the past attaining decent grades, and it can take some time for those students to adjust to a new routine of challenging themselves to develop a work ethic that truly
demonstrates their ability (Tomlinson, 2001). Tomlinson advises that “learning to face challenges earlier gives these students more time to develop the planning, self-evaluation, and study skills they need to maximize their potential as learners” (p. 94). Delisle and Berger (1990) claim, “Providing an early and appropriate educational environment can stimulate an early love for learning. A young, curious student may easily become "turned off" if the educational environment is not stimulating; class placement and teaching approaches are inappropriate; the child experiences ineffective teachers; or assignments are consistently too difficult or too easy” (p. 3). It would seem then, that the implementation of UDL strategies should allow gifted students to focus their learning according to their interests and learning styles, alleviating many of the concerns mentioned above.

Baseline Data: Student Exposure to UDL Strategies in Previous Years

Students in my 7/8 Humanities class were given a questionnaire to assess their level of familiarity with Universal Design for Learning strategies at the beginning of this study. Through this questionnaire I hoped to determine how comfortable and knowledgeable the students were with UDL principles, and how / if these had been used with these students in the past. I analyzed only the results from the five gifted students in my Humanities 7/8 split class, as these were the students I had chosen to include in the study. All of these students are in grade 8. The sheet was given out in class, and all questions were read to the students, re-phrased, and explained in detail. The students answered each question at the same time (so no students would rush ahead and answer questions without fully understanding what they were being asked).
Analysis of question 1: What kinds of assignments have teachers given you in the past?

All five of the students I chose to study listed the types of projects they had completed in previous years, in point form. They did not describe the projects as I had asked. The students mostly listed paper and pencil tasks, such as: Notes, textbook work, tests, timelines, creation of passports, worksheets, and writing assignments. Four out of the five students also listed PowerPoint presentations, creation of videos and podcasts as projects they had completed in the past.

Analysis of question 2: What technology was available to you for project work in the past? What did you choose to use?

Computers were the main technology listed by the students for question 2. Two students identified that they had a choice between using a PC or a Mac, and three of the students also listed specific programs they had used: Word, PowerPoint, and Garageband. The students also stated that they had access to the Internet for research, as well as video cameras for filming. Two students out of five also listed pens, paper, and textbooks as technology they had access to. The students did not distinguish between what was available to them and what they chose to use.

Analysis of question 3: Did you feel engaged while working on these projects? Explain why or why not.

Yes – 1

Sometimes – 3

No- 1

The general sense I got from the students’ answers was that whether or not they were engaged depended on the project they were working on:
“Yes [I was engaged working] on the podcast because it was fun to learn about Garageband and the Mac.”

“Sometimes, because some projects were boring, but some were fun like the videos.”

“Most of the time no. Except for the last project in Science [last year]. We could choose anything we wanted so we chose something that was interesting to us.”

“The only one was a video we made because it was just a lot of fun.”

“It depends on the subject and the project I am working on.”

The students seemed to be suggesting that projects that involved technology were more engaging for them. Four of the five students also mentioned that they were usually not given a choice in what project they could complete, which made them less engaged in the work.

*Analysis of question 4: How did these projects improve your understanding of the content of the course you were in at the time?*

The answers to question 4 were quite varied. Three of the answers were vague and generalized, and suggested that the students learned more about the technology than they did about the subject matter, or curricular objectives. One student stated that completing these projects didn’t improve her understanding of the course because, “They usually weren’t interesting so I didn’t get into it and didn’t remember it later”. However, another student stated, “It forced me to research and study the subject in more detail”. This would have been an interesting answer if the student had elaborated on the subject and what they had learned.

*Analysis of question 5: What curricular objectives (clear targets) did you meet through the completion of your project(s)?*
Only one student out of five mentioned that her teacher had given her a sheet with all of the clear targets the students were expected to know. She did not mention, however which of these clear targets she met through the completion of her project(s). The other 4 students said they didn’t know what clear targets they had met, and some didn’t know what clear targets were. One student commented, “my teacher never talked about how a project fit into my curriculum”.

*Analysis of question 6: How did you meet these objectives in your project?*

Because most of the students couldn’t answer question 5, they were also unable to provide detailed answers to question 6. Most of the students simply said that they think they met curricular objectives because they received good grades on their projects.

*Analysis of question 7: In previous years, did you do more pencil-paper tasks, or more project-based class work?*

All five students stated that they had completed more paper-pencil tasks than project based work in previous years.

*Analysis of question 8: What kinds of marks did you receive on assignments in the past (in general)? Do you think you deserved the marks you received?*

All of the gifted students said that they usually received marks of A’s and B’s on their work and they felt they deserved those marks because they had worked hard on their projects.

*Analysis of question 9: What projects, that you have completed in the past, would you like to do again (not the actual assignments, but the same type of project)?
All five of the students said that they would like to do technology-based type projects again. Some specific examples given were: Creation of videos, Comic Life, Podcasts, as well as poster projects, and hands-on activities.

**Analysis of question 10: If you were to do a project like this again, what would you do differently?**

The students stated that if they were to do a project like one they had completed in the past, they would do a few things differently: choose a smaller group, choose a different medium, put in more detail, write a better script, be more organized, and ask the teacher what needs to be included in the project.

I also asked the students if their teachers had let them help create rubrics for their work in the past, and the overwhelming response was no, the students had not had any say in how or on what they were being graded.

**Analysis of students’ progress reports from previous years:**

All five of the gifted students in my Humanities class had previous Humanities marks ranging from B- to A+, as documented in past progress reports from grades 5 to 8. I analyzed their grade 6 achievement scores for language arts (reading and writing sections), and social studies (both knowledge and skills). I decided to give a general overview of these 5 students’ achievements in Humanities over the past 3 years, so that I could track whether their progress in grade 8 Humanities differed from that of previous years, and in what ways and to what extent their exposure to UDL strategies had affected their learning. The students are referred to as Students #1-5 throughout this paper to protect the privacy of the students.
| Student #1 | Male | Age 13 | Grade 8 | LA: A-, B+, B | SS: A-, B, B- | LA: A, A, B+ | SS: A, A, A- | A-, B+, B | LA reading: 40 | All Excellent and Very Good for all 3 years | -confident, independent, diligent ...
| Student #4 | Female | Age 13 | Grade 8 | LA: A-, A-, A | SS: A, A, A | LA: A, A, A+ | SS: A, A, A | A-, A+, A | LA reading: 45 | All Excellent for all 3 years | -could take more time to put in best effort ...

Note: The table above lists the grades and comments for various students across different subjects and terms. The grades are categorized as Excellent, Very Good, Good, Satisfactory, and Unsatisfactory. The comments highlight various strengths and areas for improvement.
As illustrated in the chart above, all of the students involved in the study had consistently high marks in Humanities throughout grades 5-7. This presented a challenge to track improvement in learning based on grades alone. Because of this, I not only analyzed the students’ marks, but personal reflections from the students as well as my own anecdotal comments to assess the impact of UDL strategies on their learning. The students each had their own Clear Target Tracking Sheet (Appendix F), which was filled out once before we started the unit (under the Background Knowledge column), once mid-way through the unit (Checking In column) and once when the unit was completed (Looking Back column). The students colored the traffic light red if they did not understand the clear target, yellow if the somewhat understood it, and green if they felt they had mastered the concept. If the students colored a light green, they had to provide evidence of that learning by explaining the clear target in the Evidence section. The tracking sheets showed a progression from red at the beginning of the unit to a mixture of red, yellow and green at the mid-point of the unit, and finally the goal was that all lights be colored in green at the conclusion of the unit, which was what occurred.
General Reflection on Student Baseline Data

Universal Design for learning is not just about completing inquiry-based learning projects. It can be difficult to track how using UDL strategies in everyday classroom practice effects students’ learning; therefore, I decided to focus my data analysis on the UDL project work these students had completed. In analyzing the student responses from the baseline data survey, I discovered that the students had some experience in using technology to complete projects, however, they did not know how these projects fit into the curriculum or why they were expected to complete them. Universal Design for Learning focuses on differentiating for students in three areas: representation, expression, and engagement. In the past, these students had been exposed to a few projects that would allow for an increase in individual expression and engagement, but there was a definite lack of accommodation to increase the students’ options for acquisition of the required information.

My goal during this study was to increase the students’ understanding of Universal Design for Learning, and to allow for multiple means of representation, expression and engagement, not only during inquiry-based learning projects, but during everyday class work as well. This seemed like a daunting prospect initially, but once I wrote out my UDL unit plan, it became clear that integrating UDL principles into my every-day teaching practice would increase all of my students’ learning and chances for success. I also wanted to focus on clarity of curricular connections, so that the students could identify the clear targets in their work, and gain an understanding of why they were completing these projects. I decided that I would focus on the nine Universal Design for Learning Guidelines as detailed by CAST (Center for Applied Special Technology, “a
UNIVERSAL DESIGN FOR LEARNING AND GIFTED STUDENTS

nonprofit research and development organization that works to expand learning opportunities for all individuals, especially those with disabilities, through Universal Design for Learning”:

Provide options for:

1. perception
2. language and symbols
3. comprehension
4. physical action
5. expressive skills and fluency
6. executive functions
7. recruiting interest
8. sustaining effort and persistence
9. self-regulation

I integrated these accommodations into my UDL unit plan (Appendix E), and separated them into the three areas of focus: representation, expression and engagement.

As well as implementing UDL teaching strategies into my everyday classroom practice, I also constructed four UDL style projects to give the students an opportunity to demonstrate their understanding of curricular content taught throughout the unit. I explored the successes and challenges the students faced while working on these projects, and in what ways and to what extent these UDL projects affected the learning of the gifted students. The first large-scale project I assigned the students was a culminating activity for chapter 1 of the Social Studies textbook: “Times of Change”. The focus of
this activity was for the students to identify with a person from the Medieval era, and profile a day in the life of this person.

Analysis of UDL Project #1 – September 2009

**Objective:**

The students demonstrated their understanding of a typical day in the life of a Medieval person. The students chose from any class on the Medieval social or Church hierarchy – peasant, noble, monarch, monk / nun, bishop, archbishop, pope, etc. The students brainstormed ideas on how to demonstrate their knowledge, and were reminded of the learning styles questionnaires that were handed out at the beginning of September. Students were encouraged to choose a media that would best represent their individual strengths and talents, while at the same time demonstrating an in-depth knowledge of the content covered in chapter 1 of the social studies textbook. Students were required to create a piece of writing and a visual representation, however the forms of these two pieces were up to the student (Appendix A). Students were also reminded of the curricular objectives (clear targets) covered in this chapter that they were to express in the project:

8.2.2: Recognize that different people have different beliefs, values and worldviews.

8.2.3: Understand that beliefs and values are affected by time, geographic location, and society.

**Assessment:**

The students were given an opportunity to discuss what they would like to be assessed on for this project, and the students were directly involved in the creation of the rubric and category weightings (Appendix A). Students were given two weeks for the
completion of this project and access to various technologies according to individual needs (video cameras, digital cameras, use of the Mac computers and the ilife suite, use of the internet and pre-selected library books for research, earphones, premier technology reader, etc). The students were allowed to complete the visual representation part of the project individually or in groups, but the writing part had to be done alone. The students were also required to complete a peer review of another group / person’s project as part of the editing process. The students were given one class to peer edit, and then fix their own work in preparation for the presentations. They were then required to self-reflect on their work as part of a self-evaluation process. The reflection sheets for all of the UDL projects completed by the students contained similar questions to the Baseline Data questionnaire (Appendix G).

**Outcome:**

I was somewhat disappointed with the work produced by the gifted students. I felt that I had supported and encouraged the use of technology, I allowed for different means of representation, I tried to stimulate the students interest to increase engagement, and provided different media of information. However, although the students did seem engaged during class time, as there was no off-task behavior, the results were mediocre at best. I received better projects – projects that demonstrated a deeper understanding of content and an expression of personal interest from students who, although are high achieving, are not considered gifted. I also found that only three of the five gifted students performed better than their peers on the chapter 1 written exam. I thought that having the students create this project would enhance their understanding of the content in a way that would be reflected on the written exam. But this did not occur in all cases.
The marks on the projects for the gifted students ranged from 77% - 80%, compared to the class average of 81%, and the exam marks for the gifted students ranged from 66% - 94%, compared to the class average of 76%, with two of the gifted students scoring significantly below the class average.

The student reflection sheets showed that the students were able to identify the clear targets they had met through completion of the projects, and that they felt they were more engaged while working on the projects. However, I didn’t feel that the students were fully taking advantage of the creative opportunities they were given, to work within their own individual talents and abilities. The students were choosing to create projects in a format they were already familiar with (i.e., creating a video interview, or a PowerPoint presentation) rather than “thinking outside the box”. On the individual reflection sheets, the gifted students each mentioned that they felt they deserved marks in the A-B range (depending on the student). In general, they had given themselves marks that were a grade level lower than what I had wanted them to achieve (i.e., Student #1, who should have been aiming for an A, reflected that he felt he deserved a B on this project).

I was not yet convinced that using UDL techniques had produced an increase in the gifted students’ learning more than what would have been expected using traditional classroom practices (i.e. paper and pencil tasks, notes, lectures, etc). My hope was that the students would begin to challenge themselves and produce projects that would exemplify their knowledge as well as individual talents and interests, as they had more exposure to and practice with UDL strategies and techniques.
Analysis of Project #2 – October 2009

Objective:

This UDL project was designed to showcase the students’ understanding of the topics covered in chapter 3 of the Social Studies textbook: The Humanist Approach. The students were given three choices of projects, as choice is an integral part of UDL practice. I wanted to see if being given a choice in the project to be completed would increase student engagement and quality of work, compared to the first UDL project the students had completed. Refer to Appendix B for the three project options. The clear target the students were required to meet was 8.2.4E: *Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance.*

Assessment:

The students were again given the opportunity to decide, as groups this time, what they would like to be graded on for this project. The rubrics the groups came up with were tailored to their individual projects with different categories and weightings based on what the students felt was important, and what they had done well in their first UDL projects. All of the students agreed, however, that it was important to include the clear target in the rubric. I believed this to be a positive step in the students’ realization of what was important in the completion of these projects – they were coming to the understanding that it wasn’t the aesthetics that were as important as the information presented. The only stipulation I made was that the rubric had to be out of 12 marks (for ease of creation of the rubric, and ease of inputting marks into my grade book).

The students were also given the choice to complete the project individually or in pairs – but group work was discouraged this time, as I felt that allowing the student to
work in groups on the last UDL project diluted the quality of work being expressed by each student. I also did not have the students do a peer assessment of work this time, as the students were all working on different projects, and I didn’t feel that the peer assessment for Project 1 made a significant difference in the final product handed in to me by the students. The students didn’t take advantage of their peers’ critiques and go back to their project to improve areas that were lacking. I did include an individual reflection and self-assessment component to the project to make the students think about the work they had done and how they could improve from the last project they had completed.

Outcome:

The projects completed by the gifted students included: A puppet show illustrating a conversation between Raphael and Michelangelo, an imitation of *The David* sculpted out of clay with an accompanying written explanation of how/why Michelangelo completed the piece and how it demonstrates the concept of humanism, and an illustrated booklet on the life and works of Michelangelo. Again, I felt that the amount of effort put into these projects by the gifted students, compared to the quality of work produced by other students in the class, generally did not live up to my expectations. I was only impressed by the work produced by one of the gifted students, who worked in a pair with a non-gifted, but high-achieving student. This was Student #4, who created the puppet show, and received a mark of 11.5/12 or 96% (A+).

Students #1 #2 and #5 worked together to produce the illustrated autobiography (even though I had said there should be no more than 2 people working together), and received a mark of 7.5/12 or 63% (C), which proved my hypothesis that the quality of
work decreases as the number of students working on a project increases. Student #4 worked with a partner who is a non-coded, but high-achieving student, on the sculpture of The David with the accompanying written component. She received a mark of 9/12 or 75% (B) based on the rubric she and her partner created. The class average for this project was 81% (A-).

In analyzing the student reflections and self-assessments for this project, I noticed that all of the gifted students listed the clear target they were expected to meet, and they all explained, in detail, how they met the target in their projects. Interestingly, all of the students said that they would give themselves a grade between the range of B+ to A. All of the students also said that they were very engaged while working on the project and that they felt they had increased their learning on the concept of humanism, as well as their understanding of important thinkers from the Renaissance who contributed to this school of thought. The students felt they could improve on their time-management skills, and working with people whom they don’t just get along with, but whom they would produce the best work with.

The students also mentioned that they would like another chance to complete a UDL project, because they felt that they could increase their quality of work, and would like to try a different medium for expressing their knowledge. Even though the students’ marks were not yet reflecting an impact on the students’ learning, the student self-reflections were demonstrating an increased understanding of curricular clear targets. The students also performed significantly better on this chapter test, compared to their results on the chapter 1 test. The gifted students scored between 80-98% on the chapter 3 exam,
demonstrating that UDL teaching strategies used in the classroom were positively impacting their learning of the social studies curriculum.

For the third UDL project, I wanted to focus on ensuring that the students created rubrics that truly reflected their understanding of curricular content, so their marks reflected this as well. I also hoped for more effort from the gifted students, which would need to come from an internal motivation to do well on the next project.

Analysis of UDL Project #3 – November 2009

Objective:

In conjunction with the Renaissance unit in Social Studies, I taught a Shakespeare unit, with a focus on the play *Twelfth Night*. The clear targets the students were to meet while completing this project are from the Grade 8 Language Arts curriculum as set out in the Alberta Program of Studies:

- 1.1 Discover and Explore: *Discuss and respond to ways that forms of oral, print or other media texts enhance or constrain the development and communication of ideas, information, and experiences,* and

- 2.2 Respond to Texts: *Interpret the choices and motives of characters portrayed in oral, print, and other media texts, and examine how they relate to self and others, and identify and describe characters’ attributes and motivations,* using evidence from the text and personal experience.

The students had a choice of projects they could complete to demonstrate their knowledge of the plot, setting, and characters in *Twelfth Night* (Appendix C). I decided that these projects would be completed individually, due to the issue of decreased quality of work produced during the two past UDL assignments.
Assessment:

The students were again given the opportunity to create their own rubrics that would suit their projects. I offered more support and suggestions on what could be included in the rubric for this assignment, as the students had struggled with this during the creation of the rubrics they constructed for the last UDL project. After a class discussion, the students all decided to work with the same rubric that they had helped to create with my guidance. This still allowed the students a sense of responsibility for their grades, even though I had been able to direct them in producing an authentic assessment tool. The rubric can be viewed in Appendix C.

Outcome:

Because I had not put the clear targets on a poster, or a handout (as I had done with the Renaissance clear targets), the students had difficulty remembering and identifying the clear targets they had met through the creation of their projects. On the student self-reflection sheets, three of the five gifted students confessed that they didn’t know what clear target they had met, one student stated that he was able to understand the play, and one student stated that she was able to imagine what the play would be like if it were written today, although none of the students were able to clearly state the two clear targets I had set out for them at the commencement of the project. I was impressed, however, by the reflective answers the students gave for the question “How did this project improve your understanding of the content of this course?” The student responses to this question directly related to the clear targets:

- “It helped me summarize the play”
- “It helped me think about the play and review the important scenes”
• “It forced me to search for words I didn’t understand, so now I understand Shakespearean English better”

• “It helped me organize all of the events in order in my head”

• “It helped me understand the characters and what happened in the play”

Student #1 chose to complete the restaurant project, and received a mark of 17/24 or 71% (B-). He stated on his self-reflection that he deserved a B because he didn’t put as much effort into it as he could have. Four of the five gifted students wrote that they were engaged while working on the project, but one student claimed that the project he had chosen to complete wasn’t that exciting. This particular student, Student #2 received a mark of 17/24 or 71% (B-) on his project, based on the rubric the students helped to create. On his self-assessment, he suggested that he receive a mark of B+ or A- because “that is how much effort I put into it”. He chose to work independently on the restaurant project. I wrote on this student’s rubric, “…if a project doesn’t pique your interest, don’t choose it. I want you to choose a medium that will showcase your talents, interests, and knowledge. The project you have completed has not given you the opportunity to do that”.

Student #3 selected the movie poster assignment, and received a mark of 22/24 or 92% (A). This student gave herself a mark of A on her self-assessment due to her effort, and inclusions of specific scenes and characters from the play. Student #4 created a movie poster based on the play, and received a mark of 21/24 or 88% (A) This student gave herself a B on her self-assessment because she felt she “didn’t spend enough time on it, but … still had the correct information”. Student #5 completed an independent study on Shakespeare’s A Midsummer Night’s Dream, as he had already studied Twelfth Night the previous year. He chose a specific scene from A Midsummer Night’s Dream to
translate into modern English, and expressed his desire that we read it aloud in class as a reader’s theatre (an activity we had completed in class using Twelfth Night). Student #5 received a mark of 22.5/24 or 94% (A). He also gave himself an A on his self-assessment.

Three of the five gifted students met my expectations for this project and received marks higher than the class average of 81%. The gifted students also scored remarkably high on the Twelfth Night final exam, with grades ranging from 90% (A) – 97% (A+). I was finally starting to see the positive effects of UDL strategies on the learning of the gifted students.

My next challenge was to have the students create their own UDL inquiry-based learning project and rubric that reflected their understanding of the curricular clear targets for all of Unit 1: The Renaissance. This final project for Unit 1 allowed the students to demonstrate an increase in their learning based on the grades they received on the project, as well as their ability to clearly state, on the student self-reflection sheets, the clear targets for the unit and how they met these in the completion of the Unit 1 final project.

Analysis of UDL Project #4 – December 2009

Objective:

This project was designed as a culminating activity for Unit 1 of the Social Studies grade 8 curriculum: The Renaissance (Appendix D). The students were required to demonstrate their understanding of all of the clear targets outlined in the Alberta Program of Studies for Unit 1 of the Grade 8 curriculum. The students were given the option to either complete the inquiry-based learning project, or an open-book final exam, to be completed during class time.
Assessment:

The exam was graded using a scantron key (wherein the students colored in the correct answer in pencil). The exam was worth a total of 63 marks, which was converted into a percentage grade. The projects were assessed using student-created rubrics, and these marks were also converted into percentage grades for ease of inputting the marks into my gradebook.

Outcome:

All of the gifted students, with the exception of Student #2 chose to complete the project. Student #1 chose to create a game board, complete with questions and activities based on the clear targets for Unit 1. He created this project with Student #5 and another non-coded student. Both Students #1 and #5 were able to clearly list and describe the clear targets they had demonstrated their knowledge of in their project. They also both stated that they felt very engaged while working on the project because they “had fun, enjoyed the group, and worked hard on the project”. Student #1 gave himself an A- for his part of the project, and Student #5 gave himself a B+.

I enjoyed marking this project very much, and had the students in the class play the game, so that this group had a chance to showcase their work. Due to the rubric the students created, however, the project only received a mark of 15/20 or 75 (B). I felt that guiding the students in the creation of the assessment rubric would have increased the chances of the students getting a higher mark on the project. The students did not include categories in the rubric that they would have scored well on (i.e. including all clear targets), but rather focused the rubric on the aesthetic qualities of the work, which was
mediocre, compared to other game boards their peers had handed in. There were a few game boards handed in as final projects between my two Humanities classes.

Student #2 decided to write the exam, as he does very well on paper-pencil tasks and exams. I believe that giving the students the option to complete either an exam or a project was a UDL strategy in itself, as the students had the choice to complete the work that they believed would best demonstrate their learning, and for some students, like Student #2, an exam was the best option. Student #2 received a mark of 90% (A) on his exam, proving that a written task really was the best option for him to demonstrate his understanding of the curricular clear targets (which were represented as questions on the exam). On his reflection questionnaire, Student #2 could clearly list and describe each of the clear targets we had covered in the Renaissance unit. He also remarked that writing a test was easier for him than completing a project, and that he preferred teacher-directed work to an inquiry-based learning project. He also stated that he would give himself an A for the test, because he had studied the material “pretty hard for it”.

Students #3 and #4 also created board games, but each worked in a pair with non-coded, high-achieving students from the class. Both Student #3 and Student #4 clearly listed and described the clear targets on the self reflection sheets, and stated that they felt engaged while working on the project because it was “simple and fun”. Student #3 rated her work as an A, and Student #4 gave herself an A- for this project. Based on the rubrics each student created with their group, Student #3 received a mark of 19/20 or 95% (A), and Student #4 received a mark of 17/20 or 85% (A-). Both students’ predictions for how they would do on this project were accurate.
Conclusion

At the conclusion of the Renaissance unit, the students revisited their clear target tracking sheets for a final time and completed the “Looking Back” column (Appendix F). As I had predicted, all of the gifted students had colored in the lights green for all of the clear targets, with one exception. The students had difficulty mastering the last clear target 8.2.4.G: Provide examples of how exploration and intercultural contact affected the citizenship and identity of Europeans. Even though the students had demonstrated their knowledge of this clear target in their projects, they had difficulty describing this clear target in succinct language. Three of the five gifted students colored this target yellow, and did not write anything under the Evidence section. I decided that this would be an area I will focus on clarifying next year when I teach the Renaissance unit. The following chart illustrates the growth each student demonstrated throughout the unit based on project percentage grades:
Based on the chart alone, it seemed that the students had demonstrated only minimal growth in their learning. However, I was encouraged by the growth and depth of knowledge the students demonstrated in their projects throughout the term. With practice and guidance, the students were able to meet my expectations for growth in their learning as reflected in their grades, reflections, and self-assessments. Consistent use of Universal Design for Learning strategies eventually produced the results I had hoped for. All five gifted students involved in this study were engaged in the curriculum, demonstrated an increase in learning of the clear targets due to various means of representing the information, and were able to express their knowledge in creative ways that demonstrated personal strengths and talents of each student.

I found it interesting that many of the non-coded and Learning Disabled students in both of my Humanities classes made as much, if not more, progress in their learning as the gifted students (as demonstrated in their understanding of curricular targets in their projects and an increase in grades on these UDL projects). Due to this occurrence, I have deduced that Universal Design for Learning strategies is an effective tool to use for all students, not just those with special learning abilities or disabilities. This is not to say that the implementation of UDL strategies is an optimal solution for everyone, however it can allow teachers and other persons in the school community to accommodate and create success for students with different backgrounds, learning styles, abilities and disabilities (Rose & Meyer, 2002).

Next Steps

I will be sharing the results of this study with the staff of Mitford Middle School during our final AISI day of this school year, to encourage the use of UDL practices and
share the positive results my students achieved during this unit. I will continue to use these strategies and act as an embedded coach for all teachers at Mitford Middle School to assist them in the creation of their own UDL unit and lesson plans. At the end of this school year, all teachers at Mitford Middle School will be able to produce at least one UDL unit plan, and I will create UDL unit plans for the other two social studies units for grade 8: The Aztec / Spanish conflict, and Historical Japan.

I will also make this report available on the Mitford Middle School homepage, under the AISI tab, so that it may be shared with the educational community at large. Teachers, administrators, parents, and students will all have access to this report. The results of this study may prove to inspire other education professionals to integrate UDL strategies into their professional practice, ultimately having an advantageous impact on the learning of all students.
works cited


Appendix A

Universal Design for Learning Assignment
“A Day in the Life of…”

In order to help you achieve success, you will be given the opportunity to demonstrate your understanding of the curriculum in multiple ways. You will be given choice in the format and presentation of your assignment, and you will have input into how your project is assessed. This is a great way for you to take responsibility for your learning by choosing a format that is interesting and engaging for you, and that will allow you to show your knowledge of the subject to the best of your ability! Show me what you are good at; show me what you know. 😊

There are 2 parts to this assignment:

Part 1: A piece of writing
In a piece of writing, demonstrate your understanding of the worldview of someone from the Middle Ages. You can choose to be a peasant, knight / squire, noble, king (or queen), priest/nun, bishop, arch-bishop, or pope (see the hierarchies on pages 18 & 31 of the textbook for more info). You must include an example from each of the worldview elements: geography, time, beliefs, society, values, economy, and knowledge in your piece of writing. For example, for geography, you might describe the landscape where you live. For time, you might describe how you tell time, and if time, or the seasons are important to you. Your piece of writing could take many forms. For example, you could write a story, a script, create a storyboard, a comic strip with dialogue, write an essay, create a journal or diary entry, write a poem, etc. Choose a format that you enjoy to express your knowledge!

Part 2: A visual representation
Your visual representation will accompany your piece of writing and will help to illustrate your knowledge of the medieval worldview. You may complete this part of the assignment individually, in partners, or in a group (however, each group member must represent a different character). Your visual representation could take the form of a poster, a puppet show, an interview, a short film or documentary, a pod-cast, a slide show or photoessay, a children’s picture book, a painting, a diorama, a graphic novel or comic book, etc. The possibilities are endless!
You will have about 6 classes to work on this project in the Mac Lab—allowing you access to many technologies to aid you in the completion of this project. If you would like to complete some of this work after school, you may (for example, filming in different locations around the community or at your house), however, ample class time will be given.

How do you find information to include in this project? You can use many resources available to you, such as the textbook, my notes (which are posted on my plone), your notes from the videos watched in class, information you find on the internet (make sure the source is reputable), videos you find on the internet, books from the library, etc. Make sure to use quotation marks and site any sources that you quote (see your agenda on how to create a bibliography).

The assessment of this project will be discussed in class, and students will have an opportunity to suggest what should be included in the rubric. This project is due at the end of class on Monday, September 28, 2009 (digital projects can be blue-toothed to your teacher’s laptop).

Remember, this is an opportunity for you to show me what you know. Be creative, get into it, and have fun! 😊
UDL assignment “A Day in the Life…”

<table>
<thead>
<tr>
<th>Name:</th>
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<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Value / Weight</th>
<th>Total</th>
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<tbody>
<tr>
<td><strong>Spelling / grammar</strong></td>
<td>Written portion of assignment is expertly edited. Minimal mistakes in spelling and grammar, if any.</td>
<td>Written portion of assignment is well edited. Minimal mistakes in spelling and grammar.</td>
<td>Written portion of assignment is only partially edited. Some mistakes in spelling and grammar.</td>
<td>Written portion of assignment is not edited. Many mistakes in spelling and grammar.</td>
<td>10% X 1</td>
<td>/4</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Assignment is expertly organized. Has a clear flow from one idea to the next. Also includes an introduction and conclusion.</td>
<td>Assignment is well organized. Has a flow from one idea to the next, may be missing an introduction and/or conclusion.</td>
<td>Assignment is partially organized. Some elements may not fit with the rest. Missing an introduction and/or conclusion.</td>
<td>Assignment is not well organized. Many elements do not fit together. The assignment is confusing.</td>
<td>10% X 1</td>
<td>/4</td>
</tr>
<tr>
<td><strong>Information</strong></td>
<td>Students included in-depth descriptions of all 7 worldview elements.</td>
<td>Students included descriptions of all 7 worldview elements.</td>
<td>Students included descriptions of most of the worldview elements.</td>
<td>Students did not include descriptions of most of the worldview elements.</td>
<td>50% X 5</td>
<td>/20</td>
</tr>
<tr>
<td><strong>Creativity &amp; appearance</strong></td>
<td>Assignment is exceptionally creative. Student went beyond expectations in the creation of this project.</td>
<td>Assignment is fairly creative. Student met expectations in the creation of the project.</td>
<td>Assignment could have been more creative. The student met some of the expectations in the creation of the project</td>
<td>Assignment is minimally creative. The student did not meet expectation in the creation of the project.</td>
<td>30% X 3</td>
<td>/12</td>
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Total: /40
Appendix B

Chapter 3 UDL Activity – Choose ONE of the following activities to complete: (may be done in pairs)

- Choose an artist, sculptor, architect, musician, or writer of the Renaissance. Research his/her life and work and complete a 500-word report on what his/her work tells us about Renaissance society and the concept of “humanism”. Include at least 3 visuals in your report. This may be presented as a written report, PowerPoint presentation, podcast, or website.

- Create a LARGE color poster that illustrates and describes the musical instruments and composers that were popular in the Renaissance, and how these demonstrated the concept of “humanism”. Include a 1 page (double spaced) write up to accompany your poster. (Hint: think about the difference between Medieval music and Renaissance music, as was discussed in class).

- Design a political cartoon (in color) that comments on what art tells us about society in the Renaissance and the emerging idea of “humanism”. Include a typed explanation of your cartoon and how you think art in the Renaissance reflected the society of that time.

- Design your own UDL project demonstrating your understanding of the clear target presented in this chapter: “Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance”. This project must be approved by the teacher before you start.
### UDL Assignment: Chapter 3 - Humanism

**Name(s):**

<table>
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<tr>
<th>Creativity / Originality</th>
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<th>3</th>
<th>2</th>
<th>1</th>
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<tbody>
<tr>
<td>Assignment is exceptionally creative. Student went beyond expectations in the creation of this project.</td>
<td>Assignment is fairly creative. Student met expectations in the creation of the project.</td>
<td>Assignment could have been more creative. The student met some of the expectations in the creation of the project.</td>
<td>Assignment is minimally creative. The student did not meet expectation in the creation of the project.</td>
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<table>
<thead>
<tr>
<th>Information / Inclusion of Clear Targets</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student demonstrated in-depth understanding of the clear target: “Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance”.</td>
<td>Student demonstrated a general understanding of the clear target: “Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance”.</td>
<td>Student demonstrated partial understanding of the clear target: “Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance”.</td>
<td>Student demonstrated minimal understanding of the clear target: “Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance”.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization / Aesthetics / entertainment value</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment is expertly organized. Has a clear flow from one idea to the next. The project has great aesthetic appeal and/or entertainment value.</td>
<td>Assignment is well organized. Has a flow from one idea to the next. The project has some aesthetic appeal and/or entertainment value.</td>
<td>Assignment is partially organized. Some elements may not fit with the rest. The project has a little aesthetic appeal and/or entertainment value.</td>
<td>Assignment is not well organized. Many elements do not fit together. The assignment is confusing. The project is not aesthetically pleasing and/or is not entertaining.</td>
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Total: /12
Appendix C

**Twelfth Night Final Project Options**

Choose ONE of the following projects to complete your *Twelfth Night* portfolio:

**Newspaper Article - Written Assignment**

Write two newspaper articles. Choose two major events that took place in the play and write one newspaper article for each event. Or write two articles about one event but write each from a different perspective.

This assignment should look like a page of a newspaper, therefore it must:
- include a catchy caption for each story
- be typed with two or three columns on a page
- include at least two graphics, either created using a graphics program, inserted from a web site or drawn.
- include at least one “interview quote” with a character from the novel
- be creative

**Report Card - Written Assignment**

Design a report card to evaluate the qualities of the main characters (Viola, Olivia, Duke Orsino, Malvolio, Toby Belch, Andrew Aguecheek). Include a few qualities for each main topic: personality, physical make-up, heroic qualities and friendship qualities.

For each group of qualities write a brief comment on why you gave the main character that grade.

You should have a minimum of 10 qualities for each character. Make the report card look realistic.

**Movie Poster - Art Assignment**

The play is being made into a movie. Why not? Most great plays are. You must make a movie poster to advertise the movie.

You must think about what elements are on movie posters. Think about the style, the title, actors used to portray main characters, important scene you may want to include, producer, setting, graphics, etc.

Project must be poster size, and must be done by hand. You may use pencil crayons, paint, markers, etc., but make it look professional!

**Design A Restaurant - Art Assignment**

Pretend you are one of the main characters from the play and you are opening a restaurant based on your adventure. You need to demonstrate your understanding of plot, theme, characters and setting of the play. You must include these elements:

- Catchy title for restaurant – based on characters, theme or setting of the play
- Design artwork for menu – should reflect Shakespeare’s era
- Must look professional.
- You must connect the item menus to characters in the play – based on the characters personalities. Be creative!
Radio / TV Interview - Presentation Assignment
You and a partner must record an interview of the main character. Both you and your partner must write a list of good interview questions that are open-ended. (These must be handed in.) One person must pretend they are the main character and answer the questions as the main character would, while the other person acts as the interviewer. Think about using interesting voices. You must record this on a blank tape for the class to listen to / watch.

Acting Out - Presentation Assignment
This can be a group project. 2-6 group members. You must choose a main scene from the play to act out. As a group write dialogue (in modern English) based on the events of the story. Bring in props and costumes and rehearse skit. Be prepared to perform scene for class. This may be recorded or live.

Web Page on Author - Technology Assignment
Create a simple web page about the author. Include reviews of his or her novel, facts about the author's life, a graphic and a link to another site. Save the html and all graphic files on a disk to be handed in (if using Microsoft. Or send me the address of your webpage.

Slide show - Technology Assignment
Create a 10-15 page slideshow illustrating your opinion of the play. You can include things like character sketches, plot summary, your review of the play, your own original artwork depicting different scenes from the play, a comparison of the script and the film version, biography of Shakespeare, etc. MUST include a bibliography.

Open to your Suggestions
Decide on a project and get it approved by the teacher before you begin. Must hand in a written proposal (typed and edited) to be approved.
UDL assignment Shakespeare: Twelfth Night

### Creativity / Originality of ideas
- **X2**: Assignment is exceptionally creative. Student went beyond expectations in the creation of this project.
- **X3**: Assignment is fairly creative. Student met expectations in the creation of the project.
- **2**: Assignment could have been more creative. The student met some of the expectations in the creation of the project.
- **1**: Assignment is minimally creative. The student did not meet expectations in the creation of the project.

### Information / Inclusion of Clear Targets
- **X2**: Student demonstrated an in-depth understanding of plot, theme, characters and setting. Student demonstrated an integration of prior knowledge and new concepts learned.
- **X3**: Student demonstrated a concise understanding of plot, theme, characters and setting. Student demonstrated some integration of prior knowledge with new concepts learned.
- **2**: Student demonstrated an incomplete understanding of plot, theme, characters and setting. Student had difficulty integrating prior knowledge with new concepts learned.
- **1**: Student demonstrated a limited understanding of plot, theme, characters and setting. Student was unable to integrate prior knowledge with new concepts learned.

### Organization / Aesthetics / entertainment value
- **X2**: Assignment is expertly organized. Has a clear flow from one idea to the next. The project has great aesthetic appeal and/or entertainment value.
- **X3**: Assignment is well organized. Has a flow from one idea to the next. The project has some aesthetic appeal and/or entertainment value.
- **2**: Assignment is partially organized. Some elements may not fit with the rest. The project has a little aesthetic appeal and/or entertainment value.
- **1**: Assignment is not well organized. Many elements do not fit together. The assignment is confusing. The project is not aesthetically pleasing and/or is not entertaining.

Total: /24
Appendix D

Student-directed UDL project

Unit 1 “Renaissance Europe” – Origins of the Western Worldview

You may choose to complete this self-directed UDL project, or the open-book unit final exam, which will be completed in class. The unit final is 63 questions, consisting of T/F, multiple choice, matching and mapping questions. This will be written on a scantron sheet. You may use your notes and textbook. This test will be written independently. Questions will come from the unit 1 of the text, notes, worksheets, and videos presented in class.

Using your experience with universal design for learning projects completed previously, you will have the opportunity to design your own, unique UDL project and rubric to demonstrate your understanding of the clear targets presented in Unit 1!

Keep in mind the projects you have completed in the past, and what kind of work will best demonstrate your talents and abilities. This project may be completed individually, in pairs, or in groups of up to 4 people (the more people, the more detailed I expect the project to be). You will also create your own rubric the way we did together in class – the total must add up to 20 marks.

Remember, the point of this project is to **demonstrate your understanding of the 10 clear targets presented in Unit 1**. You may not, however, do a project in the same style of one you have already completed.

Some project ideas to get you thinking:

- board game or role-playing game (like Dungeons and Dragons)
- write your own Unit 1 test complete with multiple choice, T/F, matching, and short answer questions (which you will answer and provide an answer key)
- write (and/or) perform a song or poem
- create a storyboard as if you were making a movie out of Unit 1
- film a talk-show using characters from Unit 1
- re-create one of the stories from Unit 1 using live action filming or animation software
- create a comic / graphic novel / picture book based on the events of Unit 1 (this should have a clear storyline and be entertaining)
- choreograph an interpretive dance and provide a written or recorded explanation of how the dance demonstrates events and important persons in Unit 1
- write a creative short story based on the information presented in Unit 1
- write or record a journal entry from the point of view of a person presented in Unit 1
- create a newspaper from the mid-late 1700’s with articles, pictures, and ads demonstrating what was happening in Acadia at that time
- create a current events package (in the style of the ones we do in class) based on Unit 1
- build a diorama illustrated an important event
- create a podcast
- create a legomation video
- paint a piece of artwork (abstract or realist) and provide a written or recorded explanation of how your art demonstrates events and persons from Unit 1.

*Rubrics were student-generated for this project*
Appendix E

Universal Design for Learning
Unit Plan

Jackie Cholach
Grade 8 Humanities

Unit 1: Renaissance Europe – Origins of the Western Worldview
Themes: Culture / Ideas / Worldviews
Focus Topics: Factors that shaped the Renaissance Worldview
How the Western Worldview grew out of the Renaissance

ELA connections: Reading, writing, listening, viewing, visually representing
Shakespeare “Twelfth Night” (critical analysis of a piece of literature that demonstrates the Renaissance Worldview)
Lois Lowry “The Giver” (critical analysis of a piece of literature that challenges our Western Worldview)

Social Studies Clear Targets (curricular connections):

8.2.1: Demonstrate how the worldview of Renaissance Europe has affected the Western worldview.
8.2.2: Recognize that different people have different beliefs, values and worldviews.
8.2.3: Understand that beliefs and values are affected by time, geographic location and society.
8.2.4A: Define the Renaissance.
8.2.4B: Describe how the Renaissance sparked the growth and exchange of ideas across Europe in the areas of Astronomy, Math, Science, Politics, Religion, and Art.
8.2.4C: Describe how the geography of Renaissance Europe affected trade and competition among European countries.
8.2.4D: Explain how increased trade led to the rise of powerful city-states, such as Florence and Venice.
8.2.4E: Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance.
8.2.4F: Define the Age of Discovery and explain how it led to the expansionist worldview.
8.2.4G: Provide examples of how exploration and intercultural contact affected the citizenship and identity of Europeans

UDL connections:

Multiple Means of Representation
(options for perception, language and symbols, and comprehension)

- notes are posted on the plone for students to print off
notes and articles are delivered orally to students, a highlighter and the document camera is used when students are expected to copy down answers

during exams, students are put into groups to either write the test individually or have the test read orally to them (test is also put up using the doc camera in this case)

online videos are shown to visually illustrate information presented and provide background knowledge (i.e. a cartoon found on Youtube.com about David and Goliath – to show who Michelangelo’s David was modeled after) (i.e. cartoon on Youtube.com of “Twelfth Night”)
documentaries are shown using the LCD projector and speakers (i.e. The Crusades)
pictures and maps are enlarged using the doc camera (which also allows the teacher to zoom in on areas of interest)
music is played to demonstrate worldview of the time (i.e. Gregorian chants were played for the class when we were discussing Medieval times, and how every area of life was focused on the secular worldview)
  o the song “Istanbul Not Constantinople” by They Might Be Giants was played and the lyrics were analyzed when students were learning about the trading centers of Europe and how the control of these cities meant increased power and wealth

Study guides for exams are posted on the plone and are given in paper copy to the students and are gone over and discussed orally in class

Class discussions, brainstorming, use of graphic organizers such as T-charts, Venn diagrams, thought webs, etc. to document important information

Audio version of the novel study played for students while they read

Poster displaying the Social Studies clear targets is on display for the students to see

Students are given paper copies of the clear targets sheets 3 times during the unit

Word wall is used to display important vocabulary from the chapters

Multiple Means of Expression
(options for physical action, expressive skills and fluency, and executive functions)

Inquiry-based projects at the end of important concepts / chapters (see assignments attached)

Class discussions, brainstorming, use of graphic organizers such as T-charts, Venn diagrams, thought webs, etc. to document important information

During exams, students are put into groups to either write the test individually or have the test read orally to them (test is also put up using the doc camera in this case)

Some students are offered a scribe during an exam, or have the use of a computer to type the answers

Some students may also be offered an oral exam rather than a written exam
Students are given choice in how they represent information, can use their talents (i.e. various computer software, singing, dancing, creative writing, model-building, etc)

Multiple Means of Engagement (options for recruiting interest, sustaining effort and persistence, and self-regulation)

- “Popsicle stick” technique to encourage participation in class discussions (every student’s name is on a popsicle stick in a can, and when students are expected to give an answer, a name is drawn out of the can so that the same students aren’t always providing the answers – no one can “hide”; students can also use a ‘lifeline’ if they really are stuck, but I come back to them to answer another question if this is the case – only allowed to use 1 lifeline)
- Students are given computers (PC’s and Macs) to use when completing inquiry based projects
- Alpha-smarts are given to students who have difficulty writing
- Students are given choice in how they represent information, which keeps them engaged
- Students are given the opportunity to have a say in the creation of the rubric – so they know and have input into how they are being graded
- Students are sometimes given the opportunity to work in pairs or groups to “think-pair-share”
- Some students are given the opportunity to work independently in the library if they need a quiet space to focus
- A variety of software is available for the students to create projects (comic life, podcasts, power point presentations, readwritethink.org, xtranormal.com – text to animation software, etc)

Evaluation / Assessment

- Student self-reflections, peer reviews
- Student and teacher created rubrics
- Written and oral exams
- Anecdotal comments (descriptive feedback) on student work
- Observation
- Checklists
Appendix F

**Unit 1: The Renaissance**

**Origins of the Western Worldview**

Clear Targets Tracking Sheet

<table>
<thead>
<tr>
<th>Clear Target</th>
<th>Background Knowledge</th>
<th>Checking In</th>
<th>Looking Back</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.2.1: Demonstrate how the worldview of Renaissance Europe has affected the Western worldview.</td>
<td><img src="red" alt="Traffic Light" /></td>
<td><img src="green" alt="Traffic Light" /></td>
<td><img src="yellow" alt="Traffic Light" /></td>
<td></td>
</tr>
<tr>
<td>8.2.2: Recognize that different people have different beliefs, values and worldviews.</td>
<td><img src="red" alt="Traffic Light" /></td>
<td><img src="green" alt="Traffic Light" /></td>
<td><img src="yellow" alt="Traffic Light" /></td>
<td></td>
</tr>
<tr>
<td>8.2.3: Understand that beliefs and values are affected by time, geographic location and society.</td>
<td><img src="red" alt="Traffic Light" /></td>
<td><img src="green" alt="Traffic Light" /></td>
<td><img src="yellow" alt="Traffic Light" /></td>
<td></td>
</tr>
<tr>
<td>8.2.4A: Define the Renaissance.</td>
<td><img src="red" alt="Traffic Light" /></td>
<td><img src="green" alt="Traffic Light" /></td>
<td><img src="yellow" alt="Traffic Light" /></td>
<td></td>
</tr>
<tr>
<td>8.2.4B: Describe how the Renaissance sparked the growth and exchange of ideas across Europe in the areas of Astronomy, Math, Science, Politics, Religion, and Art.</td>
<td><img src="red" alt="Traffic Light" /></td>
<td><img src="green" alt="Traffic Light" /></td>
<td><img src="yellow" alt="Traffic Light" /></td>
<td></td>
</tr>
<tr>
<td>8.2.4C: Describe how the geography of Renaissance Europe affected trade and competition among European countries.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.4D: Explain how increased trade led to the rise of powerful city-states, such as Florence and Venice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.4E: Explain how thinkers and philosophers contributed to the humanist worldview during the Renaissance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.4F: Define the Age of Discovery and explain how it led to the expansionist worldview.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.4G: Provide examples of how exploration and intercultural contact affected the citizenship and identity of Europeans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix G

Name: _____________________

Student Reflection on UDL project

Describe the assignment – what did you do?

What technology was available to you? What did you use?

Did you feel engaged while working on this project? Explain.

How did this project improve your understanding of the content of this course?

What curricular objectives (clear targets) did you meet through the completion of your UDL project?
How did you meet these objectives in your project?

Do you feel a project like this was more beneficial or less beneficial in increasing your learning on this topic than a paper-pencil task? Please explain.

What mark would you give yourself on this project (a letter grade please)? Why do you feel you deserve this mark?

Would you like to do a project like this again? Why or why not?

If you were to do a project like this again, what would you do differently?
ABSTRACT. This paper reports on a study of elementary preservice teachers’ inquiry-based practices, their efficacy beliefs, and the role beliefs had on two preservice teachers’ practices in urban classrooms. Results show inquiry-based practices can be cultivated through field-based experiences and preservice teachers’ efficacy beliefs, as it relates to practice in urban settings, are malleable. Specifically, personal efficacy beliefs about teaching science improved or were sustained for one cohort of preservice teachers. However, beliefs about students’ ability to learn science, that is outcome beliefs, were less stable. The results of two case studies show that science content knowledge was a factor in preservice teachers’ inquiry-based practices. However, why preservice teachers’ beliefs about student learning declined is less clear. More research is needed, along with follow-up data on teacher induction, to learn how preservice teachers’ beliefs impact urban students’ science education.
Can Strategic and Motivational Intervention Develop Second Language Reading Performance?

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Abstract
This study investigated whether strategic and motivational intervention based on a diagnosis helps a group of Japanese learners develop their L2 reading performance (i.e., reading comprehension, strategy use, and motivation). The participants were 40 EFL nursing students enrolled in a required reading-based course. Two types of instruments were used: reading scales for strategy use and motivation and reading comprehension tests. Although the intervention did not have positive effects on the quantitative development of the participants’ L2 reading performance, in the process of learning to read, motivation affected strategy use more significantly, one strategy use (identifying main ideas) affected reading comprehension most strongly, and each strategy was used in a more coordinated manner. In short, certain qualitative change continued to happen in the minds of the participants.

1. Introduction

Research on reading strategies has contributed to unraveling the reading process and also to improving reading instruction. A plethora of studies have reported positive effects on second language (L2) reading performance by employing intervention in reading strategies in order to improve comprehension (Carrell, 1985; Carrell, Pharis, & Liberto, 1989; Chung, 2000; Floyd & Carrell, 1987; Hudson, 1982; Oded & Stavans, 1994; Padron & Waxman, 1988; Tang, 1992; Yang, 2002). Further, the importance of the orchestration of reading strategy use has also been delineated in the literature (Anderson, 1991; Carrell, 1998; Fitzgerald, 1995; Guthrie & Taboada, 2004). Although strategy intervention has been validated for L2 reading performance, most of the interventional studies focused on one or a few strategies that researchers or educators had chosen for L2 learners in advance. These studies did not reflect individual differences, and particularly not the potential drawbacks (e.g., weak or inappropriate strategy use itself and combinations of relevant strategies that should be
employed simultaneously) inherent in L2 learners. Strategy intervention tailored to a group of L2 readers based upon their own individual differences appears to contribute most to the development of their L2 reading performance.

The importance of motivation in the domain of reading instruction has been emphasized in the related literature (e.g., Guthrie, 2008) because the development of L2 reading performance relates to the motivational aspect of language learning. Reading motivation encompasses several dimensions: self-efficacy, intrinsic motivation, and extrinsic motivation (Guthrie, Wigfield, & Perencevich, 2004). In reality, some students display an eager attitude toward reading; on the other hand, other students display a lack of interest to read. That is, a learners’ level of motivation affects L2 reading performance, thus any reading instruction must include some remedial measures for undermotivated learners. Taking students’ motivational differences into account is important in determining the measures to be taken during any course of reading instruction.

2. Objective

The objective of this study is to investigate whether strategic and motivational intervention based on a diagnosis at the outset of an L2 reading course helps a group of learners develop their L2 reading performance: measured in terms of reading comprehension, strategy use, and motivation. After the diagnosis, a strategic intervention was carried out in the fields of (1) identifying main ideas, (2) summarizing, (3) making inferences, (4) utilizing organization, (5) adjusting reading, and the coordination of these strategies. Concurrently, a motivational intervention was introduced in the dimensions of (a) self-efficacy, (b) intrinsic motivation, (c) extrinsic motivation, and (d) orientation to learning to read.

3. Method

The study was conducted in one 15-week semester of regular instruction, and strategic and motivational intervention was integrally combined into course activities. The participants were 40 second-year English-as-a-foreign-language (EFL) students who were enrolled in a required reading-based course at a nursing school. Using a commercially-produced textbook (Edmunds, Price, Ohtaki, & Hikichi, 2009), the course of 15 classes proceeded with reading comprehension and relevant activities from Chapter 1 to 10. All the topics covered in the textbook relate to nursing and medical care (e.g., the history of nursing, patient-nurse relationships, and nurses in the community).

Two types of instruments were used for data collection (see Appendices): reading scales for
strategies and motivation (RSs) and two multiple-choice reading comprehension tests (RCTs). RSs assessed the perception of strategy use and the level of motivation with 42 items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). In pilot studies, the Cronbach alpha indices of internal consistency were confirmed: .84 for identifying main ideas, .87 for summarizing, .84 for making inferences, .80 for utilizing organization, and .78 for adjusting reading. The scale items include “I read for the purpose of content comprehension” and “I differentiate main ideas from supporting details” for strategy use, and “I can read English proficiently with effort” and “I would like to learn a lot through reading English” for motivation. RCTs were equivalent-form tests and evaluated identifying main ideas, summarizing, general understanding, making textual inferences, and guessing word meanings. Each test has two passages with 20 corresponding questions (the score is converted to 100 points). In pilot studies, no statistically significant difference was found to exist between the two forms, and the maximum correlation coefficient was .424.

Prior to the intervention, students were given RS 1 and RCT A, and cluster analysis and t-tests were performed in order to explore the individual differences in strategy use, motivation, and reading comprehension. After the intervention, RS 2 with an open-ended question and RCT B were administered. In order to estimate the development of L2 reading performance (i.e., reading comprehension, strategy use, and motivation), the scores on RCT A and B, the averages of each subscale in RS 1 and 2 for strategy use and motivation, and the relationships among reading comprehension, strategy use, and motivation were analyzed using t-tests, covariance structure analysis (CSA), and also multiple regression analysis. All the analyses were carried out among lower strategy use and motivation groups as well as among all the participants, except for the CSA because of its numerical limitation.

4. Intervention

Strategic and motivational intervention was integrally combined into the course activities, which every student participated in regardless of the diagnosis. The strategies explicitly taught and practiced were (1) identifying main ideas, (2) summarizing, (3) making inferences, (4) utilizing organization, and (5) adjusting reading. Before class, students were asked to read each chapter passage using specific strategies. During class, the strategies were explained and demonstrated to students by the instructor, followed up by practice with relevant activities. For example, for identifying main ideas, students were advised to find a topic sentence usually placed at the beginning of a paragraph, to differentiate which information is the most important in a paragraph, and to pay attention to how key words are
connected. In other words, hands-on training for identifying main ideas was implemented using passages and exercises. At the end of class, they were frequently asked about how effective (i.e., goal-wise) and efficient (i.e., speed-wise) each strategy use was. After class, students were instructed to review each strategy based on what they learned during the class. They were also encouraged to utilize the strategy learned in class when reading the next chapter's passage. In later classes, they were taught how to coordinate strategies (e.g., from identifying main ideas to summarizing).

Motivational intervention was carried out during the whole semester by emphasizing the importance of reading in the academic domain of nursing. Based upon the fact that it is compulsory to be able to read related literature in English, the students, as future nurses, were encouraged to be confident in reading English, set the development of reading proficiency as a goal, and find various opportunities to practice reading.

5. Results and Discussion
5.1. Diagnosis

Cluster analysis using ward method and squared Euclidean measure was performed on RS 1 and RCT A in order to explore the individual differences in strategy use and motivation. With the aid of dendrograms, or graphic representations of the grouping, students were divided into two groups in each of strategy use and motivation (N = 39): (1) high and low strategy use groups (Figure 1 & 3) and (2) high and low motivation groups (Figure 2 & 4). In several t-tests, all the averages except for orientation to learning to read in motivation were statistically different between the high and low groups (p<.05). It is noted that 11 students overlapped in the high groups and that 17 students overlapped in the low groups: Motivation and strategy use co-varied to a large extent.
Two *t*-tests were performed to see if there were statistical differences in RCT A between the high and low groups. The mean of the high strategy use group (\( n = 16 \)) was 41.88, with a standard deviation of 13.40; the one of the low strategy use group (\( n = 23 \)) was 33.26, with a
standard deviation of 13.78. The difference between them was 8.61, the \( t \)-value was 1.941, and its probability was .060 (two-tailed). This implies that reading comprehension was affected to some extent by strategy use, although the difference was not found to be statistically significant.

Next, the mean of the high motivation group (\( n =17 \)) was 40.00, with a standard deviation of 12.37; the mean of the low motivation group (\( n =22 \)) was 34.32, with a standard deviation of 15.14. The difference between them was 5.68, the \( t \)-value was 1.256, and its probability was .217 (two-tailed). This implies that reading comprehension was less affected by motivation than by strategy use, although there was an actual difference between the two means.

In sum, one group of students with higher strategy use and motivation tended to display higher reading comprehension ability; while the other group with lower strategy use and motivation tended to display lower reading comprehension ability.

5.2. Reading Comprehension

A \( t \)-test was performed between RCT A and B (\( N =39 \)). In RCT A, the mean was 36.79, with a standard deviation of 14.12; in RCT B, the mean was 33.46, with a standard deviation of 11.07. The difference between the two means was 3.33, the \( t \)-value was 1.302, and its probability was .201 (two-tailed). Thus, the two means were not found to be statistically different. This indicates that the intervention did not contribute to the enhancement of reading comprehension ability among students.

Two \( t \) tests were also performed in the low groups in the diagnosis in order to see if the intervention contributed to the enhancement of their reading comprehension. The mean of RCT A in the low strategy use group (\( n =23 \)) was 33.26, with a standard deviation of 13.78; the one of RCT B in the same group was 29.78, with a standard deviation of 9.11. The difference between them was 3.49, the \( t \)-value was .984, and its probability was .336 (two-tailed). Next, the mean of RCT A in the low motivation group (\( n =22 \)) was 34.32, with a standard deviation of 15.14; the one of RCT B in the same group was 31.36, with a standard deviation of 12.17. The difference between them was 2.95, the \( t \)-value was .771, and its probability was .449 (two-tailed). Because of no statistically significant differences, the intervention did not contribute to the enhancement of reading comprehension ability in the low groups.
5.3. Strategy Use

Several *t*-tests were performed between RS 1 and 2 for strategy use (*N*=39). The results are shown in Table 1, where all the means were not found to be statistically different. This indicates that the intervention did not contribute quantitatively to the enhancement of strategy use among students.

<table>
<thead>
<tr>
<th>Strategy Use</th>
<th>M</th>
<th>SD</th>
<th>Difference</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Main ideas</td>
<td>2.86</td>
<td>.74</td>
<td>.072</td>
<td>.762</td>
<td>.451</td>
</tr>
<tr>
<td></td>
<td>2.78</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Summarizing</td>
<td>2.92</td>
<td>.79</td>
<td>.032</td>
<td>.288</td>
<td>.775</td>
</tr>
<tr>
<td></td>
<td>2.89</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Inferences</td>
<td>3.25</td>
<td>.75</td>
<td>.060</td>
<td>.670</td>
<td>.507</td>
</tr>
<tr>
<td></td>
<td>3.31</td>
<td>.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Organization</td>
<td>3.58</td>
<td>.72</td>
<td>.021</td>
<td>.185</td>
<td>.854</td>
</tr>
<tr>
<td></td>
<td>3.56</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *N*=39; RS 1 = the upper row, RS 2 = the lower row; *M* = the average of each subscale’s items; two-tailed.

Other several *t*-tests were performed in the low strategy use group (*n*=23) in the diagnosis in order to see if the intervention contributed to the enhancement of their strategy use. Table 2 demonstrates these results, which indicate that the intervention did not contribute quantitatively to strategy use.

<table>
<thead>
<tr>
<th>Strategy Use</th>
<th>M</th>
<th>SD</th>
<th>Difference</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Main ideas</td>
<td>2.43</td>
<td>.52</td>
<td>.096</td>
<td>.746</td>
<td>.463</td>
</tr>
<tr>
<td></td>
<td>2.34</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Summarizing</td>
<td>2.66</td>
<td>.61</td>
<td>.174</td>
<td>1.435</td>
<td>.165</td>
</tr>
<tr>
<td></td>
<td>2.82</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Inferences</td>
<td>3.03</td>
<td>.43</td>
<td>.210</td>
<td>1.647</td>
<td>.114</td>
</tr>
<tr>
<td></td>
<td>3.03</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Organization</td>
<td>2.49</td>
<td>.56</td>
<td>.033</td>
<td>.282</td>
<td>.781</td>
</tr>
<tr>
<td></td>
<td>2.46</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Adjustment</td>
<td>3.16</td>
<td>.55</td>
<td>.096</td>
<td>.681</td>
<td>.503</td>
</tr>
<tr>
<td></td>
<td>3.25</td>
<td>.56</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *n*=23; RS 1 = the upper row, RS 2 = the lower row; *M* = the average of each subscale’s items; two-tailed.

5.4. Motivation

Several *t*-test were performed between RS 1 and 2 for motivation (*N*=39). The results are shown in Table 3, where all the means were not found to be statistically different. This
indicates that the intervention did not contribute quantitatively to the enhancement of motivation among students.

Table 3. *t*-tests Summary for Motivation

<table>
<thead>
<tr>
<th>Motivation</th>
<th>M</th>
<th>SD</th>
<th>Difference</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Efficacy</td>
<td>3.05</td>
<td>1.02</td>
<td>.000</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>3.05</td>
<td>1.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Intrinsic</td>
<td>2.98</td>
<td>.94</td>
<td>.146</td>
<td>1.187</td>
<td>.243</td>
</tr>
<tr>
<td></td>
<td>2.83</td>
<td>.994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Extrinsic</td>
<td>2.49</td>
<td>1.08</td>
<td>.153</td>
<td>1.246</td>
<td>.221</td>
</tr>
<tr>
<td></td>
<td>2.64</td>
<td>1.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Learning to Read</td>
<td>3.98</td>
<td>.72</td>
<td>.222</td>
<td>1.909</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>3.76</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N=39; RS 1 = the upper row, RS 2 = the lower row; M = the average of each subscale’s items; two-tailed.*

Other *t*-tests were performed in the low motivation group (*n=22*) in the diagnosis in order to see if the intervention contributed to the enhancement of their motivation. Table 4 demonstrates these results, which indicate that the intervention did not contribute quantitatively to motivation.

Table 4. *t*-tests Summary for Motivation in the Low Motivation Group

<table>
<thead>
<tr>
<th>Motivation</th>
<th>M</th>
<th>SD</th>
<th>Difference</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Efficacy</td>
<td>2.50</td>
<td>.85</td>
<td>.190</td>
<td>1.220</td>
<td>.237</td>
</tr>
<tr>
<td></td>
<td>2.69</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Intrinsic</td>
<td>2.39</td>
<td>.62</td>
<td>.071</td>
<td>.494</td>
<td>.626</td>
</tr>
<tr>
<td></td>
<td>2.46</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Extrinsic</td>
<td>2.08</td>
<td>1.05</td>
<td>.175</td>
<td>1.177</td>
<td>.253</td>
</tr>
<tr>
<td></td>
<td>2.25</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Learning to Read</td>
<td>3.85</td>
<td>.79</td>
<td>.197</td>
<td>1.250</td>
<td>.225</td>
</tr>
<tr>
<td></td>
<td>3.65</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. n=22; RS 1 = the upper row, RS 2 = the lower row; M = the average of each subscale’s items; two-tailed.*

5.5. Relationships between Motivation, Strategy Use, and Reading Comprehension

The relationships between motivation and strategy use were compared using CSA models in RS 1 and 2 in order to examine if there were any qualitative differences between them. Figure 5 shows the overall relationships from the data in RS 1 before the intervention. This model was constructed with two latent variables (i.e., strategy use and motivation) that define observed variables (i.e., the subscales of strategy use and motivation) because motivation is considered as one of the most powerful factors that affect strategy use (Oxford & Nyikos, 1989). Standardized coefficients along the arrows mean how strongly the variables...
affect the other ones, and squared multiple correlation coefficients on the variables mean how much they are explained by the other ones (the maximal value of each coefficient is 1.00). The most important relationship in this model is from motivation to strategy use: Motivation affected strategy use by the strength of .50 (p = .056, which means the value is not significant at the probability level of 5 percent), and strategy use was explained by motivation by 25 percent. NFI and CFI, which back up the appropriateness of this model when the values come closer to 1.00, were .770 and .883 respectively. In the same way, RMSEA, which does so when its value is near zero, was .117.

Next, Figure 6, which adopted the same modeling as in Figure 5, shows the overall relationships from the data in RS 2 after the intervention. Motivation affected strategy use by the strength of .80 (p = .001, which means the value is significant at the probability level of 1 percent), and strategy use was explained by motivation by 64 percent. Both values are higher than those in Figure 5. NFI and CFI were .832 and .948 respectively, and RMSEA was .083. These indices demonstrate more appropriate goodness-of-fit than in Figure 5.
What follows are some learners’ comments to the open-ended question on strategy use and motivation from RS 2. Approximately 80 percent of the participants reported on some strategic change, and no less than 60 percent of them reported on motivational development.

[Strategy Use]
“l pay more attention to main ideas of each paragraph.”
“l pay more attention to key words (which seem so to me) in a paragraph.”
“l try to find a topic sentence in a paragraph.”
“l pay more attention to the whole passage than to details.”
“l pay more attention to the connection of each sentence.”
“l guess the meanings of unfamiliar words and infer what comes next in a passage.”
“l think about what the author is trying to say in a passage.”
“l weigh the importance of information in a passage.”
“l try to understand main ideas, but sometimes guess the meanings of words if necessary.”

[Motivation]
“l do not give up reading a passage until l gain a general understanding.”
“l have understood that reading English is one of the goals in studying English.”
“l want to be able to read English more proficiently.”
“l am sure I can read English almost successfully if I find key words, guess meanings, and gain main ideas.”

In summary, the relationships between motivation and strategy use changed qualitatively after the intervention, although any quantitative increase of motivation and strategy use was unfound. That is, in the process of the participants’ learning to read, motivation affected
strategy use more significantly, and strategies were used in a more coordinated manner.

Similarly, relationships between motivation, strategy use, and reading comprehension were compared using other CSA models with observed variables (i.e., the scores on RCTs and the averages of each subscale in RSs). Figure 7 shows the results before the intervention, in which making inferences significantly affected reading comprehension (.42, p < .01). In a confirmatory multiple regression analysis, it predicted reading comprehension (t = 2.113, p = .043).

![CSA Summary in RS 1-2](image)

<table>
<thead>
<tr>
<th>Main Ideas</th>
<th>Summarizing</th>
<th>Inferences</th>
<th>Organization</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.09</td>
<td>-0.03</td>
<td>0.42**</td>
<td>0.06</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Efficacy: -0.33
Intrinsic: 0.8
Extrinsic: 0.02
Learning to Read: 0.33

NFI = 0.053 CFI = 0.000 RMSEA = 0.29;** p < .01

Figure 7. CSA Summary in RS 1-2

Figure 8 shows the results after the intervention, in which identifying main ideas and intrinsic motivation significantly affected reading comprehension (.44 and .43 respectively, p < .01). In a confirmatory multiple regression analysis, identifying main ideas predicted reading comprehension (t = 2.778, p = .009), but intrinsic motivation did not (t = 1.506, p = .144).
In short, **making inferences** affected reading comprehension most strongly before the intervention; on the other hand, **identifying main ideas** affected reading comprehension most strongly after the intervention, although both models are insufficient in the goodness-of-fit indices. This suggests that the participants’ strategy use that can explain reading comprehension mostly shifted from **making inferences** to **identifying main ideas** in the process of learning to read. That is, **identifying main ideas** became the main focus of their strategy use.

6. Conclusion

The intervention did not have any positive effects on the quantitative development of L2 reading performance (i.e., reading comprehension, strategy use, and motivation) among the participants. The effects expected among the low strategy use and motivation students were not found to arise, either. However, it was found that, in the process of the participants’ learning to read, motivation affected strategy use more significantly, **identifying main ideas** affected reading comprehension most strongly, and that each strategy was used in a more coordinated manner. To paraphrase, some qualitative change continued to happen in the minds of the participants. Motivational aspects in relation to reading strategy use must be studied more elaborately in various situations because both motivation and strategy use abide by individual differences, although motivation is regarded as a powerful factor that affects strategy use (Guthrie, 2008; Oxford & Nyikos, 1989).
References


Appendices

Reading Scales for Strategies and Motivation * reverse items

(1) Identifying Main Ideas

3. I pay attention to the connections of key words for main ideas. (S01)

4. I pay attention to the connections between sentences or paragraphs for main ideas. (S02)

19. I search for a topic sentence representing a main idea in each paragraph. (S03)

20. I read for the purpose of understanding main ideas. (S04)

21. I differentiate main ideas from supporting details. (S05)

12. I always understand the exact meaning of each word in a sentence. * (S06)

(2) Summarizing

6. I check my overall understanding of a text. (S07)

7. I check my understanding when I come across new information. (S08)

22. I organize the whole picture from a series of text information. (S09)

8. I check to see if my understanding of a text is correct after reading. (S10)

13. I deal with a series of text information in a separate way. * (S11)

(3) Making Inferences

23. I relate text information to what I already know. (S12)

15. I predict what is going on in a text. (S13)

9. I check to see if my guesses are right or wrong. (S14)

17. I infer the meaning of preceding parts while I continue reading. (S15)

18. I guess the meaning of unfamiliar words. (S16)

16. I interpret what is not clearly written in a text. (S17)

14. I depend on only text information for my understanding. * (S18)

(4) Utilizing Organization

5. I pay attention to text types, organization, and linking words. (S19)

24. I make use of what I know about text type and organization. (S20)

1. I take an overall view of the text content to see what it is all about. (S21)

2. I take an overall view of the text type and organization. (S22)

(5) Adjusting

25. I translate difficult parts into Japanese. (S23)
11. I read important or difficult parts carefully again. (S24)
26. I go back and forth in a text for necessary information. (S25)
27. I change the speed of reading according to the text type and difficulty level. (S26)
10. I read slowly and carefully when a text is difficult. (S27)

(a) Self-efficacy
28. I can read English proficiently with effort. (M01)
29. I will be able to read English in the future because I can read Japanese now. (M02)
30. Special talent is unnecessary for English reading comprehension. (M03)
31. I will not be able to read English well because I do not like English. * (M04)

(b) Intrinsic Motivation
32. One of my goals in learning English is to become able to read English well. (M05)
33. I would like to learn a lot through reading English. (M06)
34. To read English is enjoyable. (M07)
35. I like challenging books written in English. (M08)

(c) Extrinsic Motivation
36. I would like to be recognized as a proficient reader of English. (M09)
37. I would like to gain more scores than my classmates on reading tests. (M10)
38. I would like to gain good scores in the reading sections on the TOEIC or STEP tests. (M11)
39. It is worthless to be able to read English well. * (M12)

(d) Orientation to Learning to Read
40. I would like to read a lot of English fast and extensively. (M13)
41. I would like to read English carefully with the focus on grammatical structures. (M14)
42. To read a variety of texts is important. (M15)

Reading Comprehension Test A

Educational systems and environments across the world are different from country to country, and appear to reflect on what the society expects. Many educational rankings find that Finland has the most educated population in the world. Sixty percent of Finns enter university, so Finland is possibly the most literate society on earth. Singapore also ranks very high for its educational system, but the methods and atmosphere are completely different.

Finnish students are allowed to relax and find a setting that is most comfortable for study. When you visit a Finnish high school, you will notice that students take off their shoes at the entrance, just as they do in their homes. The intention is that students feel they are at home while in school. In such a setting, a culture of literacy and learning is encouraged. Finland has long been a nation of readers. Even when they read in English, they might attempt a 600-page book just three years after they
start learning the language! No one in Finland ever thinks a lengthy book is something that only the best scholars should attempt. Also, students study a great amount on their own and write lengthy essays. The basic concept accepted in society is that students find their own favorite topics, study them extensively, and then write about them. In sum, Finnish students are expected to read and write a lot, and to study in a relaxing atmosphere.

The methods in Singapore are almost exactly the opposite of those in Finland. Society, parents, and schools push students very hard to succeed. Students must accept strict rules, tight schedules, and detailed procedures, so school is not informal at all. Everything is strictly controlled, so students never have the freedom to study. They do not choose what and how they want to study, and must take many standardized examinations. That is, the pace of instruction is decided by the school and the nation. However, large numbers of students follow the demanding schedule without complaint because in the future they are expected to work hard in a hectic society.

How can two completely opposite environments both produce well-educated students? In both Finnish and Singaporean cases, much thought is given to what the society expects, and students must reach those expectations constantly. In other words, students need to understand and adjust to the social system so that they can work and succeed in the society.

1. What is the BEST title for this passage? [Identifying Main Ideas]
   A. Educational rankings in the world
   B. Finland and Singapore: Educational giants all over the world
   C. Educational systems that reflect on social expectations
   D. Different educational methods and schooling systems

2. What is the MAIN idea of the passage? [Identifying Main Ideas]
   A. Finland has the most educated population in the world because of its system.
   B. The educational methods in Singapore are different from the ones in other countries.
   C. One educational system is more effective than the other one.
   D. An educational system that matches social needs works best.

3. Choose the BEST summary for the second paragraph? [Summarizing]
   A. Finnish students are expected to relax by taking off their shoes at school and to enjoy studying there.
   B. Finnish students are expected to study their favorite topics by reading and writing a lot in a comfortable setting.
   C. Finnish students are expected to read 600-page English books three years after they start learning the language.
   D. Finnish students are expected to make presentations about their own favorite topics and to discuss them with other students.

4. Choose the BEST summary for the third paragraph? [Summarizing]
   A. Singaporean students are expected to follow what is determined by the school in order to work hard in their society.
   B. Singaporean students are expected to accept strict rules, tight schedules, and detailed procedures that they have decided upon with their schools and parents.
   C. Singaporean students are expected to take many standardized tests, but not to compete against each other at school.
   D. Singaporean students are expected to feel free to study at school and to decide what they want to learn.

5. Why do Finnish students take off their shoes at school? [General Understanding]
A. To keep the school clean  B. To reduce stress
C. To read a 600-page book  D. To write a long passage.

6. What is traditional in the Finnish educational setting?  [General Understanding]
   A. To be high in educational rankings  B. To study in a relaxing way
   C. To be taught by scholars  D. To read a lot

7. What is the MAIN reason why Singaporean students study hard at school?  [General Understanding]
   A. Their futures may also be difficult.  B. They must take exams.
   C. They must follow the pace of instruction.  D. The expectations of the nation are high.

8. Which of the following is NOT expected of Singaporean students?  [Making Inferences]
   A. To obey the school rules  B. To follow the tight schedules
   C. To study very hard  D. To find interesting topics

9. What opinion does the author have of the two educational systems?  [Making Inferences]
   A. The author supports one system, and rejects the other system.  B. The author supports both systems.
   C. The author rejects both systems.  D. The author does not have clear notions about both systems.

10. What is the meaning of demanding in the third paragraph?  [Guessing Meaning]
    A. Tough  B. Clear  C. Opposite  D. Favorite

    In these early years of the 21st century, the world faces serious environmental challenges. The environmental costs of these problems are huge and require an immediate change in behavior by businesses and consumers worldwide. Our oceans are being polluted, and fish populations are being destroyed. Our forests are disappearing quickly, reducing the planet’s ability to produce oxygen. Climate change threatens human, animal, and plant life on Earth.

    The first problem that must be changed is fishing practices. Today’s fishing fleets catch too many fish. They keep certain fish that they catch, and throw away the rest. According to environmental groups and government agencies, overfishing has reduced the population of many fish families by between 75 and 90 percent. Furthermore, the huge nets used by the fleets destroy the sea bottom that other creatures depend on for life. The cost of such greedy resource management is not only to fish. The loss of fish populations often means that local communities that depend on fishing for income will become economically deprived. It also means that many countries including Japan will see their traditional food culture changed forever because tuna, halibut, cod, and others become unavailable or unaffordable.

    The second problem that needs attention is the loss of our forests and grasslands. Unfortunately, the trend is still toward cutting trees and reducing natural grass cover. Large areas in the world have become deserts due to deforestation. Re-planting trees is vital to restore a healthy ecological system. The world needs to increase forest cover in order to promote the conversion of carbon dioxide to oxygen. The disappearance of grasslands is as serious as the disappearance of forests. For example, the growing demand for meat in China has caused sheep and goats to be raised in areas that are naturally quite dry. As these animals eat more of the grass that grows there, deserts expand and dust blows to the east. Japan and Korea have the
misfortune of being in the path of the worst dust storms and air pollution. This pollution sometimes goes across the Pacific Ocean to North America.

The trend in the world that is toward more consumption and more environmental damage must be cut off with people's efforts. For one thing, people in developed countries should not waste valuable resources and damage the globe. Further, however prosperous people in developing countries become, they should not just copy the lifestyles in developed countries that consume too many resources.

11. What is the BEST title for this passage? [Identifying Main Ideas]
   A. Serious environmental challenges 
   B. Overfishing and fish populations 
   C. Deforestation and desertification 
   D. Changes that protect the environment

12. What is the MAIN idea of the passage? [Identifying Main Ideas]
   A. Immediate action should be taken to keep fish populations.
   B. Immediate action should be taken to preserve forests and grasslands
   C. Immediate action should be taken to save the Earth.
   D. Immediate action should be taken to help local communities.

13. Choose the BEST summary for the second paragraph? [Summarizing]
   A. Methods for commercial fishing should be changed for the sake of resource management and people's needs.
   B. Fishing fleets must keep all the fish they catch and must not throw away what they do not want to keep.
   C. Overfishing has reduced the population of all fish families, and fishing fleets have destroyed the sea bottom where other creatures live.
   D. Traditional seafood cultures in many countries must be protected so that their favorite sea products will not become unavailable.

14. Choose the BEST summary for the third paragraph? [Summarizing]
   A. Large areas in the world have become deserts only because a lot of forests are rapidly disappearing.
   B. Planting billions of trees is important to promote the conversion of carbon dioxide to oxygen for a healthy ecological system.
   C. Deserts spread further in China because a number of animals like sheep and goats eat too much grass.
   D. Grasslands as well as forests on earth should be preserved in order to stop desertification and air pollution.

15. According to the passage, what threatens living things? [General Understanding]
   A. Water pollution 
   B. Air pollution 
   C. Deforestation 
   D. Climate change

16. According to the passage, how do local communities suffer? [General Understanding]
   A. They become polluted 
   B. They become poor 
   C. They become unavailable 
   D. They become unaffordable

17. According to the passage, why are sheep and goats raised in China? [General Understanding]
   A. For wool 
   B. For work 
   C. For food 
   D. For milk

18. If fish populations remain unreduced, what can we expect? [Making Inferences]
Reading Comprehension Test B

Helping people is important not only for those who get help but also for those who give help. The book by Catherine Ryan Hyde, *Pay It Forward*, tells us about this lesson. The book was then made into a movie. In the movie, a young boy announced that he would be helpful to others. He asked people not to return the favor to him, but instead to help others in need. Instead of paying a kindness back, he told them to *pay it forward*. Throughout the story, people received kindness and then gave kindness. Happiness spread around them. The movie had such a strong impact that an organization was created to get people to follow his example. In real life, the organization hopes that children will volunteer to help others.

If you want to do a volunteer activity to help others, first of all, it is very important to choose what you are actually interested in. A good question to ask yourself for confirmation is: what are you willing to do for a long time? No volunteer activity is very useful if you stop doing it. Therefore, you need to find an activity that you can enjoy. Because organizations or citizen groups all around you are always asking for volunteers, you should check them in detail and try different activities. For example, if you like working with animals and elderly people, then you could take pets to visit the elderly. If children’s education is important to you, you could take part in activities at a local school. If you care about environmental problems, you could plant trees or pick up trash. The most important point is that the volunteer work you do should not feel like a burden.

Once you find a volunteer activity you like, continue doing it on a regular basis to find some meaning in it. Over time, you will discover new aspects of the activity that you did not first notice. You will also develop expertise in the activity and be able to help people and society. When you reach this stage, the activity that you keep on doing will make your own life satisfactory and meaningful. Surely, it will become a precious part of your life. If you continue with it long enough, it may even become something to live for.

As our society has economically grown, people are likely to forget kindness to others. In order to change this tendency, you should do what benefits others and gives you satisfaction. Then the kindness goes on to other people and makes everybody happy. If everybody across the world *pays it forward*, the world will be a better and more comfortable place.

1. What is the BEST title for this passage? [Identifying Main Ideas]
   
   A. Volunteer work for people in need     B. Various types of volunteer work
   C. Volunteer work for others and yourself  D. Continuation of volunteer work
2. What is the MAIN idea of the passage? [Identifying Main Ideas]
   A. Volunteer activities are always necessary for our society.  
   B. We must choose volunteer activities that help poor people. 
   C. We must continue doing volunteer activities for years.  
   D. Volunteer activities help other people and satisfy our lives.

3. Choose the BEST summary for the second paragraph? [Summarizing]
   A. Choosing a volunteer activity is important because an uninteresting activity cannot last for a long time. 
   B. Researching organizations or citizen groups in detail and trying different types of volunteer work are necessary. 
   C. Taking animals to elderly people is a kind of volunteer work if someone likes both animals and elderly people. 
   D. Planting a lot of trees and picking up trash are recommended if someone is interested in environmental problems.

4. Choose the BEST summary for the third paragraph? [Summarizing]
   A. Continuing a volunteer activity on a regular basis is important because it is useless to stop working on it. 
   B. Continuing a volunteer activity on a regular basis is important because different aspects must be found. 
   C. Continuing a volunteer activity on a regular basis is important because expertise must be developed. 
   D. Continuing a volunteer activity on a regular basis is important because satisfaction or a life goal may be found.

5. What actually happened after Catherine Ryan Hyde wrote the book? [General Understanding]
   A. A young boy said that he would help others.  
   B. A young boy asked people to help others. 
   C. Happiness spread around the world.  
   D. An organization was established.

6. According to the passage, what is the point of volunteer work? [General Understanding]
   A. To help others  
   B. Not to be burdened  
   C. To try many activities  
   D. Not to quit for a long time

7. According to the passage, where are people unkind to other people? [General Understanding]
   A. In a comfortable community  
   B. In a rich community  
   C. In a poor community  
   D. In an old community

8. What do you think will happen if someone has chosen the wrong volunteer activity? [Making Inferences]
   A. The person will worry or quit.  
   B. The person will ask for help. 
   C. The person will get desperate.  
   D. The person will see a doctor.

9. What can you guess logically from the whole passage? [Making Inferences]
   A. If people are rich, they feel happy.  
   B. If people work hard, they feel happy. 
   C. If people have life goals, they feel happy.  
   D. If people have hobbies, they feel happy.

10. What is the meaning of expertise in the third paragraph? [Guessing Meaning]
    A. Long experience  
    B. Talent  
    C. Understanding  
    D. Special skills and knowledge

As globalization continues to influence countries, economies, and cultures, it is important for people everywhere to recognize that members of other societies might not think in the same way. For example, Japanese living in America have been surprised by receiving chrysanthemums. They commonly represent death in Japan, but have no such meaning in America. This is an example of people's first experience of culture shock, when they first realize that their own cultural standards are not universal. After they meet such situations, they may notice that not everyone shares their way of thinking.
In cases of cultural mix-up, people may feel someone is offensive. An example is seen in the distance that people keep between each other while talking. When two people of different cultural backgrounds are speaking, one person may step forward and another person may step back because they try to establish a comfortable distance. Neither person is doing anything wrong, but the person who steps back may feel the other person is being offensive. Another example is seen with eye contact. In some societies, eye contact is regarded as a positive thing; however, in other societies, too much eye contact is seen as an offensive attitude.

If people continue to stay in different societies, they are likely to learn how to behave properly there and no longer suffer from culture shock. However, this adjustment may cause a different type of culture shock. In some cases, people feel it when they return to their home countries and have to go back to their old behaviors. This is known as reverse culture shock. Many people say that they are surprised by reverse culture shock because they do not expect any difficulties in getting back into their own society. They do not realize how much they have actually changed while adjusting to the culture of the other country. They become foreigners to a certain extent.

In sum, various types of culture shock may worry people not only in other cultures but also in their own cultures. It is one solution for them to learn how those with different backgrounds are likely to think and behave. It is also important for them to have their own standards of thought and behavior regardless of cultural differences. In other words, in order not to worry about culture shock, knowing different cultures is one thing, and establishing a person's identity is another.

11. What is the BEST title for this passage? [Identifying Main Ideas]
   A. Different ways of thinking  B. Personal space and eye contact  C. Reverse culture shock  D. Taking care of culture shock

12. What is the MAIN idea of the passage? [Identifying Main Ideas]
   A. Not everyone shares the same way of thinking.  B. Various types of culture shock worry people.  C. Problems caused by culture shock can be solved.  D. It is important to behave regardless of cultural differences.

13. Choose the BEST summary for the second paragraph? [Summarizing]
   A. The distance between people while talking is different from culture to culture, so people always feel uncomfortable
   B. Only eye contact causes different reactions from culture to culture, so sometimes people may feel offended.
   C. The degree of personal space and eye contact is different from culture to culture, so sometimes people may feel worried.
   D. The degree of personal space and eye contact is different from culture to culture, but usually people are not surprised.

14. Choose the BEST summary for the third paragraph? [Summarizing]
   A. People who continue to stay in different cultures tend to know what behaviors they should take there and no longer suffer from culture shock.
   B. People who continue to stay in different cultures tend to adjust to the cultures properly and feel comfortable there.
   C. People who return to their home countries may feel confused because of their adjustment to the other country's culture.
   D. People who return to their home countries are regarded as foreigners by citizens because of their adjustment to the other country's culture.

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15. Why have Japanese living in America been surprised by receiving chrysanthemums?  [General Understanding]
   A. They mean people's death.  B. They mean cultural differences.
   C. They mean different societies.  D. They mean culture shock.

16. According to the passage, how is eye contact regarded in different cultures?  [General Understanding]
   A. Positive  B. Negative  C. Both positive and negative  D. Neither positive nor negative

17. According to the passage, what is the main reason for a different type of culture shock?  [General Understanding]
   A. Reverse culture shock  B. Adjustment to a different culture  C. Old behaviors  D. People's identities

18. What can you guess logically about distance while people in the same society are talking?  [Making Inferences]
   A. They keep the distance that they feel comfortable.  B. They do not keep the distance they feel comfortable.
   C. They do not care about the distance.  D. The distance depends on individuals.

19. What can you guess logically from the whole passage?  [Making Inferences]
   A. Humans are different.  B. Humans are positive  C. Humans are changeable  D. Humans are social.

20. What is the meaning of *chrysanthemums* in the first paragraph?  [Guessing Meaning]
   A. Flowers  B. Toys  C. Clothes  D. Books
Abstract:

Student loss in nursing educational programs may exceed 35%, especially with minority populations. Retaining students in a nursing educational program is critical and requires a unique approach to student instruction and support. A “Prescription for Academic Success” program was instituted at a 4 year baccalaureate nursing program in southern United States following a population and cohort analyses of student failures and successes. As the United States struggles to identify solutions to the mounting nursing shortage, one strategy recommended to address this crisis is to attract more men and minority students. Today’s nursing students in baccalaureate programs are 90% Caucasian and female. Nursing students today do not mirror the nation’s population. Studies have demonstrated that members of minorities are more likely to seek services from and follow the health care advice of minority providers. A culturally diverse nursing workforce is essential to meeting the health care needs of the nation’s population. This presentation will reveal the findings of the analyses conducted as well as the progress made to date regarding the second year implementation of a dynamic program aimed at retaining students and tailoring support to the needs of the students (n = 61). Retention data reflect positive outcomes and trends. Ideas for implementation at other institutions will be shared.
Teaching methods and student learning are two separate issues. The emerging educational genre refers to teaching “methods” as traditional, blended, or on-line. Student “learning” has been identified by styles such as auditory, visual and kinesthetic. The Dunn and Dunn Learning Styles Inventory and others have been used by Colleges of Education in an attempt to better prepare their teacher candidates who, in turn, will be better prepared to enhance student learning.

In determining which delivery “method” to employ, teaching faculty must deal with several considerations such as....am I prepared to use this delivery method? Do we have the technological resources to allow for student success, and does the students’ learning style complement this method?

It was the purpose of this project to answer the following questions:

(1) Will students enrolled in a university Anatomy and Physiology class see similar learning gains under a traditional versus a Blended/Hybrid method of delivery?
(2) Will the students in either of the two classes be equally satisfied with the course?
(3) Are the learning styles different between the traditional and Blended/Hybrid delivery methods and a control group of education majors?

The Department of Health and Kinesiology at NSU has two sections of Anatomy and Physiology taught by the same faculty member. During fall 2009, the instructor taught one class with the traditional method and the second class under a Blended/Hybrid model. The students were not aware of any difference until the first day of class and there were no students who switched classes. The traditional class met two days per week and met face to face with the instructor for 3,400 minutes, the equivalent of a four hour semester course. After several initial class meetings two days per week, the Blended/ Hybrid class met one day per week and the additional minutes were not face to face. Both classes had the equivalent of 3,400 minutes of instruction.
In answering question one, a two-way ANOVA determined that there was a significant difference between a pre and post assessment using the identical instrument (F=205.1, p < .001). This was a knowledge test that was directly related to the student learning objectives. When determining if a difference existed between the Blended/Hybrid versus the traditional method, no significant difference was found (F=.87, p=.35). This means that both methods of delivery produced student learning gains where one met once per week (Blended/Hybrid) compared to a similar class that met twice per week.

In answering question two, there was no significant difference between the Blended/Hybrid and the traditional delivery on any of the 14 satisfaction questions.

In answering question three, there was no significant difference between either the Blended/Hybrid, traditional delivery, of a control group of education students on any of the 20 question in the Dunn and Dunn Learning Styles Inventory.

The results of this study indicate that teaching Anatomy and Physiology under a Blended/Hybrid versus traditional delivery method produced significant learning gains in both methods, students in either type of delivery were equally satisfied and there was no one learning style that dominates this subject.

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Proceedings Submission

Title of Submission: Teaching Academic Vocabulary to English Learners with Peer Mediated and Task-Based Activities

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TEACHING ACADEMIC VOCABULARY TO ENGLISH LEARNERS WITH PEER-MEDIATED AND TASK-BASED ACTIVITIES

By

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Introduction

There has been much effort in the last few years to address the needs of minority students in schools in the United States, especially those who are English Learners (ELs). The No Child Left Behind (NCLB) legislation of 2001 has added emphasis to this effort (Nesselrodt, 2007). Schools are now accountable for all students achieving at grade level, including subgroups of ELs (No Child Left Behind Act, 2001). This has been a struggle in the state of Utah. According to information from the Utah State Office of Education (USOE) website (http://schools.utah.gov), scores from the 2005 (according to the latest available records of scores on the state website) National Assessment of Educational Progress (NAEP) for grade 4 students show that only 33% of ELs scored at the basic level or above on the reading portion of the NAEP test. This means that 35% of ELs scored below the state average of 68% for all students. On Utah’s Language Arts Core Criterion Referenced Test (CRT) for 5th grade in 2008, there has been a steady decline in EL scores since 2006, dropping from 53% proficient to 40% in 2008. This is in comparison to a 76% proficiency rate for all students in 2008, meaning that ELs score 36 percentile points below the state average. These tests are normed on English speaking children, and are given to all children in the state. On a 2009 state-wide report, overall scores were 79% proficient on language arts, whereas ELs scored 49.5% of students proficient on the same test. On the IOWA Test of Basic Skills, which is administered to all 3rd, 5th, and 8th grade students, grade five EL students in Utah scored at the 23rd percentile in both reading and language, compared to the whole school average of 55 and 51 percentiles, respectively.
Problem Statement

Given the academic struggles represented in the fore-mentioned data, it is apparent that current approaches to educating ELs have not proven to be effective. There are many facets in reading and language acquisition, including phonemic awareness, phonics, fluency, vocabulary, and comprehension (August & Shanahan, 2006). However, there is an apparent paucity of research that addresses these necessary reading skills for ELs. August and Shanahan (2006) report that

Despite the finding of research that reading comprehension is an area of weakness for language-minority students, minimal information is available on the nature of their comprehension difficulties and the specific skills having the greatest influence on reading comprehension (e.g., vocabulary, reading fluency). (p. 67)

Purpose

The purpose of this study is to determine if using explicit instruction in combination with peer-mediated task-based activities is an effective way to teach vocabulary to English learners.

Literature Review

Vocabulary

One factor contributing to reading and language achievement scores is vocabulary knowledge. Vocabulary plays a critical role in all of our lives. It is the hallmark of an educated person, and impacts a student’s future possibilities. Academic vocabulary knowledge is strongly related to reading proficiency and school achievement (Beck, McKeown, & Kucan, 2002; Freeman & Freeman, 2009), and is a factor indicated in the achievement gap (Barton, 2004; Diamond & Gutlohn, 2006; Marzano, 2004). In one
study examined by August and Shanahan (2006) it was found that English oral proficiency measures of vocabulary and syntactic processing correlated significantly with performance on an English word reading test, and a regression analysis showed that knowledge of English vocabulary maintained a significant relationship with reading even after other effects were taken into account. Another study indicated that after general cognitive ability had been controlled for, one of the two skills that contributed most significantly to word reading ability was English vocabulary, and another found that English vocabulary scores correlated significantly with English word reading scores (August & Shanahan, 2006).

Not only does vocabulary impact word reading skills, but it also has an effect on comprehension (Flynt & Brozo, 2008; Cummins, 2003; Blachowicz & Fisher, 2006; Beck, et al., 2002; Genesee, Lindholm-Leary, Saunders, & Christian, 2005). In a study done by Pérez, cited in August and Shanahan (2006) and Genesee, et al. (2005), it was found that systematic daily instruction in receptive and expressive vocabulary skills improved reading comprehension skills in third-grade ELs. A study done in 1984 by Saville-Troike also found that oral vocabulary knowledge is crucial for reading comprehension (August & Shanahan, 2006; Genesee, et al., 2005). In a meta-analysis conducted by Stahl and Fairbanks, researchers found that students who had placed at the 50th percentile on reading comprehension measures increased their comprehension scores by as much as 30 percentile points when they received explicit and meaningful vocabulary instruction (Flynt & Brozo, 2008).

One way to ameliorate the situation of low achievement scores could be the vocabulary instruction that takes place in schools. However, there is little emphasis on
the acquisition of academic vocabulary in school curricula (Beck, et al., 2002). Teachers often state that they are teaching vocabulary, but in observations done on 23 ethnically diverse classrooms, it was found that only 6% of school time was devoted to vocabulary development, and that amount dropped to 1.4% in the core academic subjects. The instruction that was observed consisted mainly of mentioning and assigning rather than teaching the vocabulary. In examining the most popular basal programs, none of them did a sufficient job of teaching academic vocabulary enough to increase comprehension (Flynt & Brozo, 2008).

This becomes an even bigger issue for ELs who are trying to not only acquire basic language, but also the vocabulary of academic content. A study by Becker (1977) linked vocabulary size to the academic achievement of disadvantaged students. He posited that with good instruction all students can master basic reading skills, but the main difficulty in sustaining those early foundations is the lack of adequate vocabulary to meet the academic demands that begin in the upper-elementary grades. It is essential that academic vocabulary become an integral component of every day instruction in all content areas, especially for ELs. For English language learners, it is important to make meanings explicit and comprehensible through explicit instruction, teacher modeling, guided practice, and usage. Comprehensible input is a central component to language acquisition for ELs. The basic information ELs have for building some kind of mental representation of language is the input they are exposed to (VanPatten, 2000). Explicit and systematic instruction is one of the keys to successful academic vocabulary acquisition (Beck, et al., 2002; Marzano, 2004; Diamond & Gutlohn, 2006; Marzano & Pickering, 2005; Flynt & Brozo, 2008; Freeman & Freeman, 2009).
What exactly is meant by academic vocabulary? Marzano (2004) defines academic vocabulary as terms that relate to specific academic subjects. General academic vocabulary terms are words that are used across content areas, have abstract definition and are difficult to master (Townsend, 2009). Beck, McKeown, and Kucan (2002) describe three levels, or tiers, of vocabulary words. The first tier includes the most basic words; tier two words are high frequency words that are usually utilized by mature language users and cover a variety of domains. Tier three words are words that are specific to content, are not used very often, and should be taught only when the need arises, such as in a subject area. This is what would be termed academic vocabulary, or words that are used in subject matter lessons (Manyak & Bauer, 2009).

Another definition from Flynt and Brozo (2008) is that academic vocabulary refers to word knowledge that makes it possible for students to engage with, produce, and talk about texts that are important in school. Townsend (2009) supplies a definition of academic English that describes it as a variety of English used in professional books and characterized by specific linguistic features associated with academic disciplines. It is primarily accessed through texts rather than conversation. Coxhead, as cited by Townsend (2009), has developed an Academic Word List that contains 60 general academic words; these are not discipline-specific words, as they may cross contexts. An example from the list would be the word *structure*, which has different connotations in science and the study of the *structure* of cells, in contrast to the word used in relation to literature, or the *structure* of a poem (Townsend, 2009).

Cummins, as cited in Williams (2001), describes language proficiency as falling on a continuum, with cognitive academic language proficiency as the desired goal.
Academic language, in contrast to interpersonal communication skills, is context reduced and cognitively demanding (Williams, 2001; Goldenberg, 2008). Academic language is used to describe vocabulary and language used in U.S. classrooms (Echevarria, Vogt, & Short, 2008). Success in school depends on proficiency in academic language, and academic language occurs in content lessons (Williams, 2001; Swanson & Howerton, 2007; Goldenberg, 2008). Echevarria, Vogt, and Short (2008) define academic English as semantic and syntactic knowledge along with functional language use. They list three key elements of academic language: content words, process/function words, and words and word parts that teach English structure, based on English morphology. Freeman and Freeman ((2009) also break academic words into two categories, content-specific and general academic words. Content-specific words are related to a specific academic domain, while general academic words cut across disciplines, such as the terms hypothesis, therefore, and analyze.

In summary, it seems reasonable to conclude that academic vocabulary refers to words that are used in content areas and that are more abstract and thus more difficult to learn than basic vocabulary terms. One area that is not specifically focused on in these descriptions of academic vocabulary is vocabulary that is found in reading basals. When the stories in a reading basal are expository, then the academic vocabulary descriptions apply. But in narratives, the words are not so content specific, but are still important vocabulary for students to learn to be able to comprehend the story they are reading. Some may not describe those words as academic vocabulary, but they are content words in texts that students read almost on a daily basis. Many of those words may be classified by Beck, et al., (2002) as tier two words, which are words used by more mature language
speakers. As they explain, these are words for which students generally have a basic conceptual knowledge. These would be important to teach in narrative reading to enhance comprehension for ELs.

**Social Learning**

As we look at teaching the English language, it is important to think about the context of the instruction. According to Vygotsky (1978), instruction should take place in a socially relevant context. Vygotsky focused on how people learn socially, and how learning can be related to language. Learning is a social process, where students learn through communicating and interacting with adults or peers (Vygotsky, 1978; Nilsen & Nilsen, 2004; Moll, et al., 2001; Trueba, 1989). Cognitive development is rooted in social interaction, and is inseparable from social development. This development is possible only if children participate in culturally meaningful activities. Children learn their first language by communicating with real people in real situations (Andrews, 2006). This is the same for second language learners (Bauer & Manyak, 2008). Educational theories based on Vygotsky’s ideas tend to accentuate project-oriented and group-based classroom procedures (Cummins, 2003), including the Communicative Approach to language learning (Ballman, Liskin-Gasparro, & Mandell, 2001).

Vygotsky’s ideas can be used to inform us about how we can help ELs be successful in school. It is imperative that teachers assist students in mastering the semiotic devices, or tools of communication, used in the country or culture the students live in. When children are unsuccessful in the oral language, text, or other symbolic systems, it is because of failure to provide opportunities for them to engage in social and cognitive activities for learning (Trueba, 1996). It is important that there be emphasis on
functional communication between teachers and students, and between classmates (Abadiano & Turner, 2002; Genesee, et al., 2005). Activities need to involve the students in meaningful communication with each other (Ballman, et al., 2001; Echeverria, et al., 2008; Goldenberg, 2008). In the Communicative Approach to language instruction, the goal is communicative competence and the development of linguistic skills, which are achieved through student interactions within the four modalities of communication, listening, speaking, reading, and writing. These play an important role in learning language, and frequent student interaction within these four modalities is crucial to language acquisition (Abadiano & Turner, 2002). An additional aspect in the Communicative Approach involves using authentic tasks and materials (Larsen-Freeman, 2000, Ballman, et al., 2001). It is only through producing language and using it in new and authentic ways that students acquire proficiency in a language. Students must be given many opportunities to make meaning of the content and academic language they are trying to learn (Flynt & Brozo, 2008; Diamond & Gutlohn, 2006; Peregoy & Boyle, 2008). The input they receive should be explicit, should be comprehensible, and should contain a message that is intended for the learner to capture (VanPatten, 2000). Providing authentic tasks where students know they are to use the language in order to learn is an excellent way for a new language to be internalized (Lewis-Moreno, 2007).

Language learners can only assimilate so much before their attentional resources are depleted and their working memories have to dump information to accommodate more input (VanPatten, 2000). ELs may struggle to identify important terms, especially academic vocabulary, when they appear amid large amounts of language, whether oral or written (Lewis-Moreno, 2007). Theorists believe that learning takes place when
collaborative conversations happen in the classroom, and children who participate in group-learning experiences internalize knowledge (Anthony, 2008); socially authentic activities facilitate learning. Unfamiliar content words, or academic vocabulary, may be better understood when students manipulate words through group activities requiring word association, categorization, or semantic analysis (Flynt & Brozo, 2008; Marzano, 2004; Marzano & Pickering, 2005).

There are a number of teaching and learning strategies that involve social interaction, including cooperative learning. These strategies often share components with and encourage the use of explicit teaching. There is a growing research base on the benefits of peer-mediated instruction, which include improvement of student engagement, modeling correct answers, providing on-going feedback, monitoring progress, and increasing student verbal interaction as well as the quality of that interaction (Vaughn, et al., 2001). Partner Reading (PR) (Vaughn, et. al., 2000) involves the students working in partners to read stories. Collaborative Strategic Reading (CSR) (Klingner & Vaughn, 1999) entails students working in small groups to read informational text. Each student has a role in the group, and students help each other read through and analyze their comprehension of a reading passage, using four specific comprehension strategies. In Kindergarten Peer-Assisted Learning Strategies (K-PALS) approach, lower-performing students are paired with higher performing students to practice reading skills. There is a component of teacher- explicit instruction of the skill being taught, which is important for ELs. The partnering of students incorporates interactive teaching and student engagement, as well as frequent opportunities for
accurate responses and peer-mediated learning, which are all a benefit to ELs (McMaster, Kung, Han, & Cao, 2008).

**Methodology**

**Purpose and Objectives**

The purpose of this study is to determine if using explicit instruction to teach specific academic vocabulary from reading basals in the context of socially meaningful and authentic activities, using a task-based activity (Ballman, et al., 2001) will improve knowledge and retention of academic vocabulary. This study will benefit teachers of ELs who are in mainstream classes and find themselves struggling to find effective ways to teach English learners. It will also benefit ELs themselves who are in the transition period of learning to read to reading to learn (Cummins, 2003), and need support in vocabulary as well as language acquisition.

The study may have an impact on instruction of English language learners throughout this district. This district is involved in program improvement through NCLB because they have not made adequate yearly progress with a number of subgroups, including Limited English Proficient students. It is important that instruction for ELs be as effective as possible. If it is found that a more explicit and direct approach to vocabulary instruction using peer-mediated and socially authentic activities, such as a task-based activity, increases vocabulary knowledge, that will be of great benefit to the high number of ELs who struggle with second language vocabulary acquisition, and will be a way to strengthen ELs as they progress to a higher language proficiency level as well as to more difficult linguistic demands in content instruction. In contrast, if the study shows that there is no effect on student achievement of acquisition of academic
vocabulary, that information will benefit district administrators as they frame district goals and give direction to teachers.

**Rationale for intervention.**

It is imperative that vocabulary instruction be explicit (Marzano 2004; Tran, 2006; Goldenberg, 2008; Flynt & Brozo, 2008; Collins, 2010). Explicit instruction is the idea that teachers are very deliberate in explaining what is going to be taught (Cambourne, 2002). Teachers first describe what the students are going to learn, using clear objectives. They model how it is to be done, and then guide students through practice before students ever practice the concept independently.

It is thought that instruction for ELs is just good instruction; however, that is not the case. English learners require explicit instruction plus instruction that addresses their linguistic and cultural needs (Harper & de Jong, 2004). ELs are processing information differently than native English speakers, and instruction needs to include input that is presented in a comprehensible way for them (VanPatten, 2000). Clear explanations and examples of the new vocabulary are crucial for all students (National Reading Panel, 2000), but especially for English learners (Goldenberg, 2008). Many times content words are the main source of meaning for ELs, before grammar starts to help inform comprehension. Therefore it is important that the words are presented in an explicit and comprehensible manner (VanPatten, 2000). When introducing new vocabulary, a nonlinguistic representation must be present to provide a way to understand the new term without having to rely on English language proficiency (Marzano & Pickering, 2005; Goldenberg, 2008). Even abstract concepts can be represented through a picture or diagram that students can use to make connections. A visual representation gives the
students something nonverbal to connect the new term to, and provides good comprehensible input (Ballman, Liskin-Gasparro, & Mandell, 2001; Townsend, 2009). Having students construct their own picture or symbol for the word helps them express the meaning without being constrained by limited linguistic skills (Marzano & Pickering, 2005).

Recommendations for strong vocabulary development include the ideas of giving students opportunities to use the word in different contexts, providing opportunities for deeper processing of word meaning, and engaging students in using the newly learned words (Peregoy & Boyle, 2008; Flynt & Brozo, 2008; Marzano & Pickering, 2005; Diamond & Gutlohn, 2006; Echevarria, Vogt, & Short, 2008). Multiple opportunities to use the word encourage additional vocabulary acquisition (Marzano, 2004; Goldenberg, 2008; Flynt & Brozo, 2008; Beck, et al., 2002).

Students benefit from developing word relationships rather than just learning the meaning of the word. Word association is one means of promoting in-depth word knowledge (Beck, et al., 2002). It helps students make a connection between the new word and words they are already familiar with, which is important in vocabulary development (Peregoy & Boyle, 2008; Collins, 2010). Using word association also helps students review the words that were introduced and prepares them to construct their own nonlinguistic representations.

It is generally accepted that the focus of learning a new language is the ability to communicate in that language (Andrews, 2006; Moll, Saez, & Dworin, 2001; Ballman, et al., 2001), which is even more vital for ELs whose academic success hinges on language skills. However, as is often the case in foreign language instruction, students are not able
to communicate effectively outside of the classroom with traditional language instruction (Reagan & Osborn, 2002; Larsen-Freeman, 2000). Being able to communicate requires more than linguistic competence, it requires communicative competence (Larsen-Freeman, 2000; Ballman, et al., 2001), or the capability of using the language in social situations (Moll, et al. 2010). Language should be looked at as “…a real activity used in real society by real people for authentic and real purposes…” (Andrews, 2006, p. 59).

It is important that there be emphasis on functional communication between teachers and students, and between classmates (Abadiano & Turner, 2002; Genesee, Lindholm-Leary, Saunders, & Christian, 2005). In the Communicative Approach to language instruction, the goal is communicative competence, which is achieved through student interactions using authentic tasks and materials (Larsen-Freeman, 2000, Ballman, et al., 2001); the activities should involve students in meaningful communication with each other (Ballman, et al., 2001; Echeverria, et al., 2008; Goldenberg, 2008). Two types of activities that are used in the Communicative Approach are information gap and task-based activities. There are three main aspects of task-based activities: the activity is student centered, there is an exchange of information between the students, and there is a goal the students are working together to achieve (Ballman, et al., 2001). The task is the path to a deeper understanding of the concept being taught.

**Explanation of intervention.**

This intervention will be based on a weekly schedule that will emphasize explicit instruction and social interactions. The classes will contain a mix of native English speakers as well as ELs, providing interaction between students with varied language proficiency, as well as peer-mediated learning during the task-based activity. The
experimental group will be given a weekly schedule with prescribed activities that are directly linked to teaching tested vocabulary from the basal being used. The first day the teacher will administer a pretest of the vocabulary from the story, and then will explicitly teach the new vocabulary using descriptions, explanations, or examples of the words along with non-linguistic representations. Students will restate the description in their own words, and then write that restatement in a vocabulary notebook.

The second day will involve a word association activity, where students will relate the word to a word or phrase they are already familiar with. For example, if one of the new words in a given list was *virtuoso*, the association would be created by the teacher asking the question, “Which word goes with piano? (*virtuoso*). Explain why”. Word analysis will also take place on day two, where it will be determined if the words contain prefixes or suffixes that will aid in the knowledge of the word. Students will then create a picture, symbol, or graphic to illustrate the vocabulary word in the vocabulary notebook.

On days three and four, students will complete an interactive task-based activity. This will be the task of partners working together to complete a graphic organizer for each of the vocabulary words. The activities included in the completion of this organizer will add to the students' knowledge of the words, as well as provide time for students to interact and discuss the words with each other. One partner will be the reporter, the other the recorder. These roles will alternate between the partners.

The last day of the week will consist of a review game, and then a posttest. Review games will be one of two powerpoint template games, Jeopardy or Pyramid. Students will work with partners or teams to participate in these games.
In the intervention, the words are explicitly taught by the teacher, providing explanations of the words and using nonlinguistic representations in the form of pictures, diagrams, or symbols. The students also write their own description of the word in their vocabulary notebooks after the teacher has shown them the words and modeled creating descriptions of the terms.

The intervention implements both concepts of information gaps and task-based activities, the task being the completion of a graphic organizer (see figure 1) for each new vocabulary word. The aim of using the graphic organizer is not only communicating with each other, but also helping students to increase their lexical knowledge of the vocabulary words they are studying. Using the graphic organizer, students will complete five tasks as partners. One partner will be the reporter, and the second partner will be the recorder. The reporter will tell the recorder what to write in two sections of the graphic organizer. The reporter will give the description/explanation in his/her own words, and will tell the recorder what to draw for a representation of the word. Together they will determine examples and non-examples of the word. These can be linguistic or nonlinguistic representations. They will also analyze the word to determine if the word has affixes, but the recorder continues to be the one doing the writing. Students will interchange roles with each word.

The use of graphic organizers can enhance the learning of vocabulary for ELs (Townsend, 2009; Freeman & Freeman, 2009). The graphic organizer (see Figure 1) used in this intervention provides many beneficial activities for students. These include creating a nonlinguistic representation of the vocabulary term, restating the term in their
own words, multiple opportunities to interact with the word, determining differences and similarities, and analyzing the word. One of the benefits of restating the term in their own words is that it helps with clarification and comprehension of the word (Beck, et al., 2002; Marzano & Pickering, 2005; Diamond & Gutlohn, 2006). One of the most effective methods to teach a topic in an in-depth way is to help students see differences and similarities (Marzano, 2004; Beck, et al., 2002). Providing opportunities for students to implement words that are different and similar to the vocabulary term, as may occur in completing the examples and non-examples section, is an effective way to teach vocabulary (Vaughn & Linan-Thompson, 2004; Beck, et al., 2002). Analyzing the parts of the word is an opportunity to increase knowledge about the word (Marzano & Pickering, 2006; Manyak & Bauer, 2009; Nilsen & Nilsen, 2004; Freeman & Freeman, 2009). The end goal of the specific task-based activity in this intervention is the acquisition of specific vocabulary words and a comprehensive understanding of the meaning of those words.

Not only is it important for students to interact with each other in authentic situations, it is also important that they have enjoyable activities and play with the language (Marzano & Pickering, 2006; Vaughn & Linan-Thompson, 2004; Townsend, 2009; Blachowicz & Fisher, 2006; Diamond & Gutlohn, 2006). Marzano (2004) describes seven characteristics of explicit vocabulary instruction, and giving students the opportunity to play with the words is one of those characteristics. Two games will be played interchangeably the last day of the intervention: Jeopardy and Pyramid. However, Jeopardy requires 20-25 words, and each unit only has six-seven words. So Jeopardy will not be played until the third week, and each time it is played it will use words from
previous lessons as well as the current lesson. Review of prior words helps increase retention of learned vocabulary (Goldenberg, 2008; Flanigan & Greenwood, 2007). On the alternate fifth day, the pyramid game will be played. This game involves classification of terms; the students list words that are similar, synonymous, or descriptive of the vocabulary word on the board to provide clues to their partner to guess what the vocabulary word is.

Vocabulary notebooks will be an integral part of this intervention. Students will use a notebook for the activities of the weekly schedule. The use of notebooks helps students personalize their vocabulary learning (Tran, 2006; Marzano, 2004; Echevarria, et al., 2008; Freeman & Freeman, 2009). Writing in a notebook also assists students’ memories (Peregoy & Boyle, 2008). The notebooks used in this intervention will be created by the investigator of this study. It will be divided into a section for each story. The pages will be structured to provide students with a template to write each word, as well as a frame in which to write the nonlinguistic representations. There will be a section of pages with the graphic organizer printed on each page to eliminate loose and lost pages and to facilitate ease for the teachers in implementing the vocabulary notebook.

**Research Question**

The research question to be answered is: Will implementing explicit instruction with the use of socially authentic activities in the form of a peer mediated task-based activity in teaching academic vocabulary during basal reading instruction help ELs increase their knowledge of English vocabulary as determined by growth on an experimenter-developed test measuring specific academic vocabulary?
H₁ = Fifth grade English learners who receive explicit instruction on specific academic vocabulary words in socially authentic contexts, using a peer mediated task-based activity directly related to reading content, will have a higher mean score on an experimenter-developed test measuring academic vocabulary acquisition than students who receive vocabulary instruction as framed in the district-adopted basal who do not use the prescriptive socially authentic activities.

Procedures

For this study, there will be a comparison between ESL student scores on a pre- and posttest assessing knowledge of academic vocabulary from a district-adopted reading basal for grade five, when explicit instruction and peer-mediated task-based activities are implemented. The study will be based on the use of a district-adopted basal. This basal has three categories of vocabulary. The phrase “academic vocabulary” refers to language functions, such as paraphrasing, summarizing, and determining cause and effect. There is a section of vocabulary called “amazing words”. These are words that are conceptually related to the story but are not necessarily included in the story; they are used for oral vocabulary development. The category that will be used in this study is the “tested vocabulary”, or words that are found in the stories that are explicitly taught and assessed each week. The vocabulary words used in this basal series are chosen from two main sources, Coxhead’s Academic Word List, and a data-based which is compiled of thousands of commonly used words gleaned from student essays of English language learners from different countries with differing levels of proficiency. The essays are evaluated, and words are chosen based on needs the material writers see in their evaluations. These words are used to create dictionaries produced by this company, as
well as words to target in the basal instruction. Because the vocabulary words used in the basal are in part based on observed needs of ELs from a number of different linguistic backgrounds, these words are appropriate to use in this research study.

The study will use both a control and an experimental group. Both groups will use the district-adopted basal described above. The control group will receive the tested vocabulary instruction from the basal. The treatment group will receive explicit instruction on the tested vocabulary from the basal, and will complete a task-based activity. A five-day schedule will be implemented with the treatment group (See appendix).

**Population and Sample**

Participants will be students from a culturally diverse mid-sized urban school district in northern Utah. This district has approximately 53% of the total student population who are influenced by a language other than English in the home. Just over 30% of the total population is classified as Limited English Proficient (LEP), indicating that they require language services of some kind. There is an average of 13 different languages spoken in the district, with Spanish being the primary one. The district is economically impacted with 75% of the students qualifying for free and reduced lunch. The district has a 40% mobility rate, and the highest migrant population percentage in the state.

There will be six schools from this district involved in the study; they will be selected on the basis of the enrollment of ELs in their population. There will be a total of 18 classes and approximately 180 EL students. The two study groups will include grade five EL students immersed in regular classrooms. The English learners will be included
in the analysis as determined by their proficiency levels based on their Utah Academic Language Proficiency Assessment (UALPA) or Quick Informal Assessment (QIA) scores. Students who score as non-English proficient (NEP) or (LEP) will be included in the analysis.

The classes will be chosen randomly from within the six schools, and will include approximately 18 teachers. The groups will be determined by random selection of the teachers of the 5th grade classes. The students are nested within classrooms so there is no random selection of the subjects. The random sampling of teachers is important because of the differences in teacher ability, experience, and level of education that could affect results of the study.

**Design**

This study is considered a quasi-experimental design because of the inability to do completely random selection of the subjects. The classes/teachers will be randomly chosen, but the students themselves cannot be. Another aspect of a quasi-experimental design is the use of time series analysis, or observing data over a period of time. This will be in place with the use of an overall pre- and posttest, as well as the weekly pre- and posttests. The main focus will be quantitative, analyzing the results of pre- and posttests between a control and experimental group. This test will be experimenter-developed using specific vocabulary words from district-adopted reading basals. The researcher of this study will write the procedures and intervention for use with the treatment group as they relate to the tested vocabulary from the stories used in the basals for reading instruction. This will help ensure consistency in the experiment. The design is also unbalanced, because there will not be the same number of students in each group. It is
important in this study to keep all available subjects, even though numbers may be
uneven, because dropping students to get equal group sizes will reduce the power of the
analysis.

A pre-post test design will be used. The control group teachers will teach
vocabulary with no intervention. There will be observations and teacher information logs
(see Appendix) to record the type of vocabulary instruction being utilized. This will need
to be tracked and reported in the results of the study.

**Instrumentation**

A pre-test will be administered in August, and the experiment will be carried out
from August through December. A post-test will be administered in December. The
analysis design for the study will be multilevel modeling analysis. The variables for level
1, the student level, will be the amount of growth in academic vocabulary acquisition
demonstrated on the post-test, gender, and the language proficiency of the students, as
measured by the state language proficiency test, UALPA. The teacher level variables to
be considered in the analysis are teacher experience, length of time in the teaching
profession, the attainment of an ESL endorsement, other endorsements/degrees attained
since being in the teaching profession, gender, and ethnicity. This information will be
retrieved through a self-completed teacher survey.

**Validity**

There are some issues of external and internal validity. One factor for internal
validity could be the mobility of students. Often with EL students, there is a great deal of
mobility. This is due to economic and housing concerns, as well as the migrant
population who move to find agricultural jobs. The number of students who take the
posttest may be smaller than the number who took the pre-test. Having a sample size of over 100 students should minimize the effects of mobility in the analysis. The families of ELs often travel to their home country to visit family for weeks at a time. This usually occurs around the time of the winter break. By ending the study in mid-December, this should minimize the chance of so many absences during the study time.

Another issue of internal validity is the experimenter-developed test. Two considerations that make this a difficult issue are a) there are no valid academic vocabulary measures normed on EL students to measure academic vocabulary acquisition, and b) the use of specific academic vocabulary linked to the basals being used in the classrooms precludes the use of a standardized vocabulary test for this study. However, concurrent validity can be developed by using similar measures to those used in standardized tests. The Utah state criterion-referenced test (CRT), the Stanford Achievement Test and the Stanford Reading First use multiple choice responses that include defining the word in context using synonyms and antonyms. The Peabody Picture Vocabulary Test, Expressive One-Word Picture Vocabulary Test, Gray Diagnostic Reading Test, and the Gates-MacGinitie Reading Test use pictures that match with either written or oral vocabulary words to measure word knowledge.

The experimenter-developed test will incorporate two facets of these standardized tests, the picture matching and the multiple choice sections using synonyms or antonyms of words used in context from the basal stories. The experimenter-developed test will be correlated against a standardized test, the 4th grade Utah state CRT tests. This information will be used to determine criterion validity; the students should have a similar ranking on their 4th grade CRT sections on vocabulary in comparison to the experimenter-developed
test. Although the standardized test has been normed on English-only speaking students, there may be some interesting and applicable comparisons acquired with this. With other measures from the basal weekly tests and the Dynamic Indicators of Basic Early Literacy skills (DIBELS) scores, validity will be increased.

The short time of the study could be an issue of internal validity. However, there are other studies that have been conducted in short periods of time. One of the first studies on Reciprocal Teaching was performed for just 15-20 days, and resulted in increases on comprehension assessments (Oczkus, 2003). A study done on peer pedagogy and student collaboration with 4th and 5th graders was conducted over a period of ten weeks (Ching, 2008). Another study on the effects of constructivist-oriented instruction on 11-year-olds in Taiwan was conducted for three weeks (Wu & Tsai, 2005). This study will be conducted for 16 weeks. With explicit direction in this study, focusing on a specific number of vocabulary words, validity should be increased.

Some external threats to validity involve the number of interruptions that occur that could cause teachers to not teach the prescriptive intervention each day. Some of these involve assemblies, fire drills, and other unforeseen circumstances. Having the study length of 14 weeks will help compensate for days missed.

Another threat to validity would be any teacher illness or mobility. It is unusual to have a teacher move in the middle of the year, but it is possible. Teacher illness is a likely event that could affect the validity. If a long-term sub is used, that sub would need to be trained on using the prescriptive intervention. The information of the sub would need to be included in the analysis of teacher factors. It may be possible that that group may have to be excluded from the study. Again the number of students in the study should help
offset an event such as this, as there will be approximately 15 EL students in each group. If a group were to have a student teacher, the information on that teacher will need to be analyzed with the other teachers, but being under the direction of the regular classroom teacher the student teacher should be following either the control group or the treatment group directives.

**Analysis**

A multilevel model design will be used to analyze the data from the experiment, using a statistical software package. A multilevel model is used to analyze data on more than one level, and also allows examination of cross-level interactions between variables that occur at different levels of aggregation (Cohen, Cohen, West, & Aiken, 2003). This analysis will have two levels, with the possibility of a third level. With students nested within the classrooms, this creates the two levels of the analysis, the student level, and the class level. Because this study involves students nested within classrooms, a multi-level model is an appropriate tool to analyze the data. A third level of analysis that could be included is that of the school level. Some of the schools chosen from this district for this study are not as highly impacted as others. The percentage of free/reduced lunch is much higher in some of the schools than others, indicating a neighborhood or population with a lower socioeconomic status. This may need to be included in a preliminary model to determine if school location and demographics actually play a part in the success of vocabulary acquisition as presented through this intervention.

The pre- and posttest will be administered to both the control group and the treatment group. These will be given in August and December, respectively. Growth on the posttest as compared to the pretest will be determined for both the control and the
treatment group, which will be the dependent variable. Weekly pre- and posttests will also be administered and included in the analysis. A mid-point test to measure retention of words taught from the beginning to the middle of the study will be administered, rather than waiting until the end of the study to determine retention factors.
References


Associates, Inc.


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Marzano, R. J., & Pickering, D. J. (2005). *Building academic vocabulary teacher’s


Vaughn, S., Klingner, J. K., & Bryant, D. P. (2001). Collaborative strategic reading as a means to enhance peer-mediated instruction for reading comprehension and content-area learning. Remedial and Special Education, 22(2), 66-74. doi:


Graphic Organizer for Vocabulary Task-based Activity

Figure 1. Vocabulary Task-based Activity

<table>
<thead>
<tr>
<th>Word:</th>
<th>description</th>
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<th>non-example</th>
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<th>word</th>
<th>prefix</th>
<th>base word</th>
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Figure 1. Graphic organizer for use with vocabulary task-based activity.
Weekly Schedule for Intervention

Vocabulary Intervention

Materials: Vocabulary notebook

Day 1:
Pre-test of vocabulary words from the basal story is administered by teacher.
Teacher then provides a description, explanation, or example of each word with a non-linguistic representation.
Students restate the description in their own words. They write their restatement in the vocabulary notebook.

Day 2:
Word association activity: Relating the word to a word or phrase the students are already familiar with. For example, if one of the new words in a given list was virtuoso, the association would be created by asking the question, “Which word goes with piano? (virtuoso). Explain why”. Students should also be given the opportunity to associate the word with things known to them from their own cultures and backgrounds.
Students create a picture, symbol, or graphic to illustrate the vocabulary word.

Day 3 and 4:
Peer-mediated Task-Based Activities (TBA) are used. These will be activities that add to the students' knowledge of the words, as well as provide time for students to interact and discuss the words with each other. Students will complete a vocabulary graphic organizer for each vocabulary word, working in partners. One partner is the reporter, the other is the recorder. These roles will alternate between the partners.

Day 5:
Review games are played. Posttest is administered.
Games will include 2 powerpoint template games: Jeopardy and $100,000 Pyramid

Note:
For weeks that only have 4 days, there will only be one day of TBA activities.
Word Analysis Template

<table>
<thead>
<tr>
<th>word</th>
<th>prefix</th>
<th>base word</th>
<th>suffix</th>
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Ignoring New Literacies is Not an Option: Finding Critical Spaces for 21st Century Literacy Practices in an Era of Scripted Reading Programs

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Abstract

Theories and practices relating to “New Literacy Studies” or “Literacies for the Twenty-First Century” have been evolving for more than four decades. However these theories and practices are absent in most public schools today. This study focuses on twelve graduate students, who were elementary classroom teachers practicing in southern California, where they were mandated to teach scripted reading programs and administer standardized assessments. As part of a Language Arts Seminar the teachers were immersed in theories of literacy learning and required to undertake Action Research that focused on New Literacies in their classrooms. The study found most teachers did make spaces for these ‘new literacies’ in their practices but it left them with dilemmas as to how they might bring mutually exclusive literacy theories and their associated practices into their classrooms.
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Every semester when I meet my graduate students in the Language Arts seminar that I teach, I discover the same thing. They do not know or understand literacy theory. The beliefs that they do have about how one becomes literate or how literacy should be taught are deeply imbedded in the scripted practices they have been mandated to teach. I learn this early in the semester, because I ask them to do a free write, followed by discussion of what they believe literacy to be and how one becomes literate. I receive such responses as these:

Sandra: “I believe we become literate by knowing the sounds of the letters and then knowing the basic sight words until we can read enough text to understand what it is saying. That is what we are told to do when we teach, so I guess that is what I believe literacy is and how we should teach it.”

Jennifer: “Literacy is the process of decoding sounds to make phrases and sentences and simultaneously make sense out of what is being decoded. Literacy also includes the ability to express oneself coherently in writing.”

Dawn: “One becomes literate through learning to read and comprehend text. Reading begins with phonemic awareness, then phonics and sight words, ultimately fluency.”

Kelly: It’s easy to tell an illiterate person. All one needs to do is give them some instructions in the text or have them write on a topic to see if they can apply the written word and what they know about language to achieve the task.”

There are many more suggestions of what my students understand about literacy among the papers that I gather after the free write and subsequent class discussions are completed. However, virtually all of them are positioned in the traditionalist views of reading. It’s a view that they may or may not have been taught in their methods classes but certainly it is the model they have been instructed to follow in their daily teaching.
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Traditional views of reading purport that we become literate through the successful acquisition of specific skills offered in linear fashion. Gee refers to it as an assembly line (Lankshear & Knobel, 2007). First phonemic awareness must be mastered, then phonics, followed by fluency and then comprehension. All of these skills are taught in isolation and through direct instruction. This is what my students know. When they want to question why their students are struggling or bored and why they, themselves are bored as they follow through on these daily mandates and scripts they have no other perspectives on literacy to which they might turn for understandings. They are unable to step outside the discourse of the reading programs and school districts’ instructions to critique what it is they do with children and to look at their beliefs and practices through a different lens (Gee, 2005).

I teach at California State University, Northridge, which is located in Los Angeles County. The majority of my graduate students teach in schools in the San Fernando Valley, which is also located in Los Angeles County. Their students are struggling and the teachers themselves are struggling under the burden of standardized tests and fast paced programs, which direct their teaching minute-by-minute, day-by-day, and year-by-year. I am concerned about my students, teachers who care and who are not invited to think, question and construct knowledge about good literacy teaching for themselves. In fact these teachers often worry about punitive action by their schools or school districts if they veer away from the prescribed curriculum to try ‘other things’ in their efforts to meet the needs of their students.

This research was prompted by my desire to examine whether the learning opportunities I offered my students in the Language Arts seminar were achieving my goals. Teachers’ lack of understanding of literacy theory was a specific concern. To that end I assigned readings and assignments with the intent that students come to an understanding that literacy theories existed, that the mandated teaching practices associated with their jobs were connected to a specific theory of learning and that they were capable of critically examining these practices through the theoretical perspectives and practices of New Literacies Studies. I was also curious as to how the students would understand what “New Literacies” theories were coming to mean for educators in the twenty-first century. My goal was to have them move beyond thinking literacy was a set
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of skills and realize it was an ever changing phenomena as the world and people’s use
and needs for literacy grew to encompass new kinds of texts and modalities.

This paper will discuss the current literacy teaching of the teachers in my class. It
will give a rationale for having these graduate students learn about New Literacies. It
discusses theoretical perspectives of some literacy studies associated with the New
Literacies’ theory and agendas. It will then talk about the major assignment the students
undertook in the Language Arts Seminar and students’ responses to this assignment. The
paper discusses how teachers can critique their practices, develop theory and create
curriculum with their students when they are able to find spaces to practice, question and
articulate thoughts about literacy learning, Finally this paper will argue that changing
practices in today’s political climate can be very difficult for teachers, even when they
see the need or have the desire to do so. These difficulties leave teacher-educators with
key questions to ask of their own teaching.

Times Are A-Changing. Or Are They?

Literacies and the way people need them and use them are vastly different from
the way literacy was used and needed when governments first mandated that all children
attend school more than a century ago (Brandt 2001, 2009). However, literacy practices
in today’s public schools look remarkably similar to those children encountered in those
early days of public schooling. Children were taught to read through basal reading
programs such as the familiar Dick and Jane series as early as the 1930’s in the United
States. Writing was taught through practice sheets of printing, cursive writing, spelling
and grammar. Literacy learning was thought to be a cognitive process of mastering
isolated skills, each building on the other in linear fashion before reading and writing for
meaningful purposes was ever considered. Teachers required little if any official teacher
preparation before entering the classroom. A year of normal school, following high
school graduation was seen to adequately train teachers to educate their young charges. In
many rural and urban areas even that training was not viewed as necessary. Teachers
were expected to follow the instructions in the teacher manuals that accompanied
mandated basal reading programs. They were to use the answer booklets that
accompanied these programs to score the workbook and test sheets that named their
students as successfully literate or not. Children who were unable to grow literate in this
way were thought to be deliberately resistant to learning or to be of low intelligence.
Programs or the views of literacy learning behind them were not questioned.

Today children and their teachers live in a world vastly different from the children
of the Dick and Jane era. Their worlds are full of new technologies such as iPods, cell
phones, video games and computers. All of these technologies offer new forms of
literacies such as social networking, interactive websites, texting, i-movies and video
games. Schools have become desegregated since the Dick and Jane program, representing
pristine, white, middle class life, first made its way into public schools. Today’s
classrooms are made up of children from many different ethnicities and cultural
backgrounds. Although the teaching profession is still made up of primarily white,
English-speaking teachers, this is slowly changing. Women and men of color, different
cultures and native languages are taking their place as educators in classrooms throughout
the United States. Today’s teachers are expected to be well educated; many of them (like
those in my Language Arts Seminar Class) seek a Masters degree early in their teaching
careers. Yet these well educated teachers living and teaching in a world immensely
different than their counterparts of fifty and sixty years ago are still mandated to teach
from scripted reading and writing programs based on the same notions of literacy
learning that dominated the classrooms of generations ago. Children who are not
successful are often still thought to have something cognitively wrong with them. More
often these days teachers too are thought to have something wrong with them and how
they teach. Yet the scripted reading programs and the high stakes tests that mark children
and teachers alike as inadequate in our twenty-first century schools remain unquestioned
at virtually every level of the public school system.

Eisner (2003) says that bringing about change in public school is difficult
because:

All of us have served an apprenticeship in them- and from an early age. Indeed
teaching is the only profession I know in which professional socialization begins
at age 5 or 6. Students, even those of so tender an age, learn what it takes to “do
school.” They learn early what a teacher does in a classroom. They learn early
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how they must behave in order to get on. In fact, aside from their sleeping hours, most children spend more time in the presence of their teachers than they spend in the presence of their parents. In short, students and parents, like the rest of us, know what to expect of schools. Those expectations, rooted as they are in our past, also shape our future. (p.648)

The graduate students in my study learned to “do school” through their own public schooling years. They believe they became literate in a similar fashion to the way that they are required to teach the children in their classrooms. Although some were considered strong readers, while others may have struggled, ultimately all of them succeeded in attaining literacy levels that allowed them entry into undergraduate and graduate college programs. Those who struggled rarely saw the problem existing outside of themselves. They thought there was something about them that made them poor readers, in spite of the fact they remember the skill and drill sessions in their classroom as the only literacy that was offered to them. As Eisner suggests, these teachers shaped their expectations of their literacy teaching though the roots of their past. They believed they only needed to teach the programs better, care more about their students and they would see success in their students’ test scores and consequently their abilities as literate human beings.

Teachers who are discursively positioned by the discourses and practices of the mandates of the institutions in which they do their work acquire particular discourses that allow them to function successfully within the ideologies of that institution. Examples of this can be seen in my students’ statements about their literacy beliefs found at the beginning of this paper. Sandra’s comments may underscore this most poignantly when she says “That is what we are told to do when we teach, so I guess that is what I believe literacy is and how we should teach it.”

Gee’s Discourse theory helps us further understand why teachers’ assumptions about schools and learning go unexamined and consequently why changes that might align literacy teaching and learning with more current research understandings do not get taken up by concerned educators (Eisner, 2003). Gee (2005) explains Discourse in this way: “Think of discourse as an “identity kit” which comes complete with the appropriate
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costume and instructions on how to act and talk so as to take on a particular role that others will recognize” (p.1).

The identity kit afforded teachers in this study came through mandated reading programs that had not only shaped their understandings of their own early literacy learning but also, now scripted their own instruction as teachers. It came from administering local and state tests and being held accountable to the results of those tests. It came from professional development days where teachers were instructed on how to work to present the scripts better and raise their students’ test scores. It came through admonishments by senior educators in the schools and Districts for poor test results or veering away from anything but the legislated curriculum. It came from filing out report cards that correlated completely with test results and curricular outcomes. It came from conversations with parents about the progress or failures of their children. It came from the local, national and international media. The official discourses and practices of the school attired these teachers in costumes of compliance, instructing them to act and talk as rote-knowers of something they had not truly come to know for themselves.

Gee’s (1990) Acquisition Principle and Learning Principles offer us a way to explore what happens to teachers who are told to practice without theory.

The Acquisition Principle

Any Discourse (primary or secondary) is for most people most of the time only mastered through acquisition, not learning. Thus literacy (fluent control or mastery of a secondary Discourse) is a product of acquisition, not learning; that is, it requires exposure to models in natural, meaningful and functional settings, and (overt) teaching is not liable to be very successful – it may even initially get in the way. Time spent on learning and not acquisition is time not well spent if the goal is mastery in performance.

The Learning Principle
One cannot critique one Discourse with another one (which is the only way seriously to criticize and thus change a Discourse) unless one has meta-level knowledge about both Discourses. This meta-knowledge is best developed through learning, though often learning applied to a Discourse one has to a certain extent already acquired. Thus ‘liberating literacy’, as defined above, almost always involves learning, and not just acquisition. (p. 154)

The goal I had for my teaching and my students’ learning was to have them learn about literacy theories. And I did not expect to do this through overt teaching. I wanted them to do more than simply acquire an alternate discourse about literacy learning to the one they were operating in as teachers. I wanted them to develop meta-knowledge that might become a part of who they were as learners and teachers, giving them a different discourse and sets of practices to consider in response to their articulated concerns about the state of failure and boredom in their classrooms. As Gee (1990) says: “Meta-knowledge is power, because it leads to the ability to manipulate, to analyze, to resist while advancing” (p. 148).

When the students first entered my Language Arts Seminar they had not identified the need to analyze or resist the discourses of literacy teaching in which they were caught up. Although they wanted the power to have their students become more successful, that equated to wanting them to have higher test scores. Their desires as teachers were firmly caught up in the ideologies of unexamined school discourses and practice. Meanwhile, although they were adults living in the 21st century, participating in at least some of the twenty first century literacy practices themselves, these teachers had yet to explore how these new literacies were an integral part of their own students’ lives. It was expected by the school system that these integral parts of students’ lives would be extricated from who they were as literate human beings and be left outside the school-house doors each morning. There was a fear that these practices would distract the students from the only learning valued by the institution; rote school learning.

Moving into the Twenty-first Century: Some Theoretical Perspectives
We are ten years into the twenty-first century and there is no shortage of research that offers a much broader knowledge of literacy than we had decades ago (Compton-Lilly, 2003, 2007; Gee, 2003, 2005; Hull & Schultz, 2007; Lewis, 2001; Purcell- Gates, 2007). New Literacy research presents an abundance of examples of literate practices that look and function very differently than today’s school literacy practices (Finders, 1997; Gee, 2000; Hicks, 2002; Lankshear & Knobel, 2003; Pitt, 2000). Focusing on rich descriptions of these practices in real life situations, this research finds a plethora of opportunities to conceptualize literacies as multiple, successful and always enacted within social contexts. Although New Literacy Studies are often thought these days to be solely about the world of digital texts, I take a broader view for this paper. Here I discuss the changes in understandings about literacy brought about by anthropologists such as Heath (1983) and Street (1984) in the latter part of the twentieth century. I also discuss the work of Critical Literacy researchers who build on the work of Brazilian educator and philosopher Paulo Friere explicating the rationale behind including this body of work under New Literacies. Finally I discuss digital texts and new technologies and how this rapidly changing field is impacting what literacy looks like in the lived lives of 21st century peoples. New Literacy Studies then encompasses broad understandings of literacy. The fields of Family Literacy Studies, Out-of-School Literacy studies, Critical Literacy Studies and New Literacy Studies in the age of digital texts often intersect and overlap, but always show us that literacy can no longer be narrowly defined if our children, indeed our citizens are to inhabit this century as fluent, modern, literate human beings.

Assuming the goal of public schooling is to provide equitable education and opportunities for all children, there would seem to be little excuse for ignoring this current research. However today’s schools, teachers and students, driven by government mandates and definitions of accountability trudge onward entrenched in out-dated practices that continue to name many children as deficit. These are the same children research has found to be productively and successfully literate in their homes and out-of-school practices (Compton-Lilly, 2003, 2007; Finders, 1997; Skilton-Sylvester, 2007). Yet their teachers rarely, if ever are drawn to the understandings that literacy can mean something beyond what they have been told they must teach.
Over the years Street has repeatedly raised the question: When there are so many different types of literacy practices, why is it that school literacy has come to be seen as the defining form of reading and writing. He describes the pedagogization of literacy or the defining of literacy solely in terms of school-based notions of teaching and learning while marginalizing other forms of literacy. 

(Hull & Schultz, 2007, p. 23)

The late twentieth century saw a shift in how some researchers wanted to understand literacy. In the 1960’s and 1970’s anthropologists and linguistics looked to ethnographic studies as a way of documenting what literacy looked like and what it did for people living and using literacy in the real world. (Heath, 1983, 1986, 1991). There was a growing concern for how particular groups of students (Blacks, and children from lower socio economic homes) consistently failed to meet with school success. This research moved away from the scientific kinds of research that measured literacy by means of assessments that showed successful or unsuccessful acquisition of isolated skills. This qualitative research, relatively new to the field of literacy education, moved instead to understand literacy by studying the complexities of literate lives in the real world.

Brian Street’s work was seminal to the evolution of early theoretical understandings of New Literacies, challenging the narrow vision of literacy held by Western schools. Street (1984) spent time documenting three different types of literacy he found existing among adults and young people in Iran. His research discovered that many who had been considered illiterate by the state schools were in fact most successful with the literacies tied to their country’s economic changes and success. These were literacies learned outside of school. Such examples of powerful out-of-school literacies suggest how important it is that governments and schools validate rather than marginalize these ‘other forms of literacy’. Yet, as is clear from the stories of teachers such as Sandra, Jennifer, Dawn, Kelly and others in this study, such literacies are rendered invisible in their California classrooms.

Compton-Lilly (2007) says: “As we move through our daily routines, we are caught up with the curricular expectations and school policies and it is easy to miss the stories children and their families tell (p.113). Teachers held accountable for fast paced
Ignoring First New Literacies is Not an Option

programs and raising test scores have not been given time to listen and validate the stories their students have to tell. Yet many of these stories are the very source of information and understandings that have the potential to change how we practice literacies in our schools.

American philosopher John Dewey saw schools as a site of wasted human potential almost a century ago.

Dewey (1899/1998) argued many years ago that there is much we can learn about successful pedagogies and curricula by foregrounding the relationship between formal education and ordinary life. “From the standpoint of the child, “ he observed, “the great waste in the school comes from his inability to utilize the experiences he gets outside of the school in any complete and free way within the school itself; while, on the other hand he is unable to apply in daily life what he is learning at school (pp. 76-78).” (Hull & Schultz, 2007, p. 3)

Dewey’s suggestion that schools utilize children’s out of school lives to inform pedagogy in such a way that school was about their lived lives would appear to have made little impact on the world of education at the time. Today, many decades later, with research such as Street, (1984, 1995, 2001; Gee, 2004, 2008) demonstrating how fully and differently literate children can be in their everyday lives we continue to see little if any change in policies and mandates that drive school curriculum and assessments.

Critical Literacy takes its place under the New Literacies umbrella because it addresses the stories of children and families consistently left on the sidelines through school practices (Compton-Lilly 2003, 2006, 2007). Paulo Friere (1971) argued that schools needed to draw on the culture and knowledge of its students. He explicitly criticized school pedagogy that treated children as passive learners with minds like empty vessels. Friere likened such learning to a banking system, where learning was regarded as little more than deposits of piece meal information. He considered such education to be silencing and repressive.

Critical Literacy has an explicitly political agenda. It questions a world of truths and singular ways of viewing the world. Taking a post-modern perspective, critical literacy seeks to make visible how privilege is constructed in our schools and in our world. It offers ways to look at discourses and practices to understand the marginalizing
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work they do. Critical literacy expects uncomfortable questions to be asked as previously unexamined but taken for granted ways of the world become open for interrogation. Under such theories and practices, children and teachers should be able to inquire about school and how they are being positioned through hegemonic discourses and practices. Critical literacy makes a place for the stories of marginalized children and families legitimizing them as successful learners in a world that has long silenced them.

According to Greene (2008), social justice teaching means three things: access to materials and rigorous work, engaging study, and "a learning environment that promotes critical thinking and agency for social change, and that views students and teachers as actors in the struggle for social justice" (p. 4-5).

State standards, regimented curriculum and high stakes tests allow no space in the school day for rigorous work and engaging study. Students and teachers are given no time to engage in the critical work associated with the social justice issues that permeate their twenty-first century everyday lives.

Leu, Kinzer, Corio & Cammack (2004) say that critical literacy is even more important for young people in today’s world if they are to understand how the vast array of messages and images are targeting them as consumers in an economically competitive world. They write: “During an age of information, any theoretical perspective that seeks to capture the changes taking place to literacy must include these essential critical literacies” (p. 1587).

Young people in classrooms today were born in the digital age. Twenty-first century students are actively engaged in such literacies as video casting, emailing, video gaming, photo sharing, texting, face book, blogging, fan fiction and more. It is the age of information, where children must not only be aware of how they are targeted as consumers of literacies broadly distributed through the world-wide web, they must also be aware of themselves and their responsibilities as producers of digital information. With the majority of these literacy practices taking place beyond classroom walls, there is little opportunity for young people to be engaged in the kinds of rigorous thinking associated with critical analysis of such texts in schools. As previously stated, these are the literacies that are more often than not prohibited in schools.
While theories behind new literacies associated with digital technologies are still under construction (Leu et al. 2004), well-known researchers such as Black (2008), Gee (2007) Lankshear and Knobel (2006) view these practices through a sociocultural perspective. Lankshear and Knobel (2007) write: “Understanding literacies from a sociocultural perspective means that reading and writing can only be understood in the contexts of social, cultural, political, economic, historical practices to which they are integral, of which they are a part (p.1). The new literacies associated with the digital age are then meaning-making events, where understandings of the world are negotiated, contested, constructed and reconstructed.

The Language Arts Seminar Class and Action Research

The purpose of the study was to examine whether requiring graduate students to engage in Action Research that juxtaposed traditional classroom theory and practices with new literacy theory and practices would help them understand the most prominent competing literacy theories existing in the field today. The research sought to discover whether students would come to know the theoretical perspectives behind twenty-first century literacies and whether they would be able to use these understandings as a lens to explore the questions they asked of their own teaching practices. This study focused on the major assignment for The Language Arts Seminar Class.

The Language Arts Seminar was a compulsory course for Masters of Arts students in both the Curriculum and Instruction pathway and the Language and Literacy pathway. There were twelve students in the Language Arts Seminar class. All of them were elementary or middle school teachers. Seven of the students in this study were from the Language and Literacy pathway; five were from Curriculum and Instruction. All of the students were female.

The Action Research Project was embedded in a sixteen week, three-unit class that met once a week for three hours. The Action Research assignment was one of a number of assignments in the course. Prior to and during the research, students read a number of peer-reviewed articles and theoretical papers, which discussed learning theories. They responded to them through writing and discussion.
I selected one book as the focus for reading for the Action Research. That book, edited by Janet Evans (2005) was *Literacy Moves On*. The book is divided into three themes each of them connected to ways Literacies in the Twenty First Century are conceptualized and practiced. The three themes are: “New” Literacies and Children’s Ways of Using Them; Focusing on Texts with a Critical Eye: Critical Literacy in the Primary School and Bridging the Gap Between Children’s Personal Interests and Teachers’ School-Based Curriculum Demands. Each of the themes contains from three to five teacher-research articles. These articles allow readers to see the different ways New Literacies are taken up in practice.

The Evans text itself does not go into theory in an extensive way. Hass Dyson’s Foreword and Evan’s Introduction contextualize the themes and the research included in them through brief discussions of what we have learned in the past few decades about how children learn.

Students began to read the Evans book by the second week of class. They were required to react to it in writing. The writing was handed in to me each week for my written response. Students also used their responses for group discussions. Following group discussions, the students would bring their most urgent questions, concerns or aha moments to the whole class for further discussion.

The Action Research Project (Appendix A) was introduced and discussed in Week Six, just as students completed reading the final theme in the Evans’ book. They were also given a proposal prompt. (Appendix B) During the sixth and seventh weeks of class, students emailed their proposals for comments and suggestions. I approved them when I believed they were focused with a manageable plan for the five weeks allocated for the research.

Students began researching in their classrooms during the eighth week of the seminar and finished collecting data on the thirteenth week. They wrote up their research over a two-week period, presenting it to the class during weeks fifteen and sixteen. They submitted their Action Research papers on the final day of class.

The data I collected consisted of the ‘free writes’ about Literacy Learning, collected after the first class, my reflective notes after classes, the proposals, the Action
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Research Papers submitted by students and notes taken during the class presentations of the Action Research.

Findings

Conflicted Proposals

The research proposals presented early data indicating that by weeks six and seven (when the proposals were written, revised and approved) students had not moved to an understanding of socio-cultural theories of twenty-first century literacies. The three examples below are representative of the thoughts and research planning of students in the class.

Loretta: There are two students in my class who have very low reading capabilities. I teach second grade, where students should already know how to read, whereas these two don’t. They even get confused with certain letter sounds. I don’t have enough time in my day to teach them how to read. I am using Open Court but they are too far behind the second grade program. I try my best to work in small groups with them but I feel like it is not enough for them to catch up. I was thinking I could use the Internet as a technological tool in helping them learn to read. There is a web site that I have looked over (starfall.com) and I think it may serve them well, perhaps have them use the computer about twenty minutes a day on this. I can have them on the site during silent reading (with the rest of the class) so that I can monitor and make sure they are effectively using the site. I have to consider if they will work alone or together. I assume they will enjoy this since it is an interactive site. What do you think?

Maria: My students are bored when I try to teach them the sounds of the letters the way Open Court has me do it. I would like to teach letter/sound recognition by having students take pictures or bring in pictures of things that they are interested in popular culture and then having them sort them by the letter that they start with and then they can make their own alphabet book. I believe this would motivate children because they would be producers of their own educational material.
Christina: The question I am asking is how can I motivate my “low” readers to be excited about and pay attention during reading group time. I teach from the Houghton Mifflin series and I teach first grade. There are five readers in each group. In my three higher groups I do not have a problem keeping students on task and they seem to enjoy reading. However when it comes to my lowest reading group they are constantly showing signs of disengagement. I want to use Bridging the Gap theme and I hope by doing this I will learn about my students’ interests and I can use that to create a Big Book together that they will really want to read. I will ask them to bring toys or books from home that they would like to write about.

Clearly students had not taken up a discourse or developed understandings that allowed them to critique the theoretical perspectives that were the underpinnings of the teaching they did in their classrooms. Loretta looked to a website that taught phonics to children through a cute program on the computer, Maria wanted to teach the sounds of the letters and letter recognition through a popular culture alphabet book and Christina wanted her low group of readers to be more motivated with their first grade reading basal readers.

Teachers’ concerns for their students’ progress in reading and writing still resided with the children themselves. They did not question the practices or associated theories that compelled them to break language down into its smallest parts to teach their young charges to become literate. They may have thought activities associated with New Literacies that they had read in the Evans book would offer them new ways to teach the isolated skills but certainly at this point they were not understanding literacy as a social act. Loretta, for example was going to use a computer to teach phonics (taken as her understanding of “new modalities’ in theme one). Maria drew on theme two (popular culture) as her way of fixing the boredom she witnessed with her students as she tried to teach them letter names and sounds. A cultural alphabet book was to address that skill. Christina was the only one who appeared to move away from the prescribed curriculum slightly to look at the low motivation of her first grade struggling readers. She planned to have them produce a book based on their interests (taken from her understanding of theme three; bridging the gap).
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Six weeks was clearly not long enough to expect students to learn new theory (the meta-cognitive kind of learning Gee references). They had not had a lot of time to read theory. The Evans’ book, while offering some rich examples of new literacies in practice, did not ground these practices strongly in theory. For teachers who had never been expected to have ideas of their own about how to teach reading and writing, it should not be surprising they saw the activities presented in the Evans’ book as their source for new ideas to solve the learning problems they worried about in their classrooms.

Most of the teachers expressed concerns that this assignment would interfere with their mandated pacing plans. Their proposals indicated to me that they were trying to marry my expectations of them as graduate students with the expectations of their schools and School Districts.

The Action Research

Once teachers began their research most appeared to find space to create curriculum with their students in ways they had not appeared to imagine possible when they submitted their proposals. Of course, none of these teachers were able to change the curriculum and associated practices they had been mandated to teach each day. However, many of them found ways to make spaces for exploration into the world of New Literacies’ theories and practices.

The following summaries allow a glimpse into the action these teachers took in their classrooms.

Nancy had a concern about her more privileged students. Their writing was filled with experiences of taken-for-granted treats and lifestyle. Like the children in Evans’ chapter about Beanie Babies, Nancy felt her students’ lives were propelled by desires to buy and consume what the media told them they needed to have. She had her children research ingredients in the popular cereals they ate. They explored what those ingredients were and what they did to their bodies. These second grade students identified the reasons they had wanted these cereals in the first place and then began to design provocative looking boxes for more nutritional kinds of cereals. They
created television commercials that spoke back to the tantalizing advertisements of the sugary sweet cereals they had begged their parents to purchase.

Katriana could not step aside from using books associated with the Open Court program, but she was able to address concerns about what she identified as her students’ shallow comprehension skills. She had her students use Plaster of Paris, sand, clay, paints, charcoal and pastels to respond to the books they had to read. She encouraged discussions, questions, and critique among her students as they worked in new mediums to create broader understandings of their readings.

Ariel responded to her own concerns about shutting out her students’ interests when they came to school eager to share them with her each day. She noted in her research paper: “I had always felt that listening to them was wasting our time. I had so much curriculum to cover. But as soon as I told them we needed to be quiet and get to work on reading and writing, their eager voices became quiet. They weren’t the same kids anymore. It was like nothing I was doing with them counted compared to all the things they were excited about doing outside of school.” Ariel decided to capitalize on her students’ interests. She had them interview one another about their out-of-school interests and she created video clips of their interviews. They viewed them together and she opened discussion inviting them to talk about what it was that made them so interested in all of these television shows, Pokémon cards, video games and computer websites. Ariel’s students begged her to create more video clips about things they could talk about together as a class.

**Graduate Students’ Reflections**

This research afforded me the opportunity to look at an important goal I’d set for my teaching. I wanted the teachers who came to my Language Arts seminar to understand that different theories of literacy learning were tied to very different literacy practices. I wanted the teachers to know there were other ways to look at literacy than those they experienced each day and those they expressed in their free writes at the beginning of the semester. I wanted them to know that literacy had moved on, and to
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offer them the opportunity to explore their practices through a new lens. I hoped the teachers would find different questions to ask about practice, than the ones they’d brought to class originally when they wanted ways to teach the skills. I hoped that these teachers would realize they could construct knowledge that was valuable and important to their practices.

The following reflections are taken from the Action Research papers. They offer a look into the understandings teachers took from their research and reading. They suggest analytical thinking, surprises, questions and hope for teaching and learning.

Miranda: This action research left me with hope for the future of our children’s education. I think that there really can be a space for critical literacy in the classroom using multimodal texts. If a curriculum is created with the integration of critical literacy we will have expressive students who inquire about social injustices in the world around them and these injustices will not have to be perpetuated in society.

Ariel: I have come to realize that the way to my students’ hearts and minds is through their own interests. I feel that I have unlocked their minds that they keep separate from school. I will continue to incorporate things that are of personal interest to my students. I have already shared my research findings with my grade level as well as with the literacy coach at school. This action research is the beginning of my experience of incorporating popular culture into the curriculum. I look forward to exploring this concept in many new ways.

Jenny: This study left me with much to consider. Television and video games are a tremendous part of today’s popular culture. Many believe that it is a waste of time. However we cannot ignore the fact that they are the teachers of our society and as literacy is changing so must we. Teachers are the facilitators in their students’ education and if they can’t understand the many faces of literacy they cannot help their students learn or think critically of the world around them. Mario is a child of the twenty-first century who is “fervent about new technologies” (Evans 2005). I now
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understand that the great imagination has been molded by his experiences with
technology and popular culture, and it is imperative that I incorporate his knowledge
into my curriculum. My next goal will be to understand and teach Mario and students
like him.

Christina: I couldn’t believe it. They went from slumping in their seats to leaning
over the reading and trying to get closer to me as we created their Big Book. Their
interest levels were piqued and with this motivation levels and willingness to go
above and beyond skyrocketed. My top groups all wanted to join the ‘low” reading
group. They said: “They have more fun learning than we do.”

These teachers moved from a place of thinking of themselves solely as ‘doers’ of
prescribed literacy curriculum. Their primary thoughts about their teaching was no longer
focused on how to do what they were already doing better so their students’ test scores
would improve. These teachers speak of thoughts and ideas about their students’ learning.
They speak of children who are showing them what is important in their lives and why
it’s essential teachers listen. They have set goals to try and understand teaching and
learning differently. Jenny says: “This study has given me much to consider.” Ariel says
she looks forward to exploring ‘this concept’ in many new ways. Miranda gave a
presentation to her grade level at school and shared what she had learned with the literacy
coach.

Not all of the teachers were able or willing to find the spaces to take the risks. For
example Donna decided to research whether her children could identify their sight word
better if she put Pokémon cards on the back of sight word flash cards. After talking to
her students about out of school interests, Susanna created comprehension worksheets for
her Open Court unit. She adorned the work sheets in popular culture images that her
students had told her they liked. Donna and Susanna both believed they had used the
New Literacies’ theme ‘bridging the gap’ for their research project and did not see that
they had not brushed with the socio-cultural theories underlying New Literacies’ theory
at all. It was not clear whether these teachers chose not to engage more fully in the
assignment because they did not understand it, because they were worried about their
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safety as teachers if they digressed from the everyday expectations of their administration or whether they were simply more comfortable getting the course assignment done while doing what they always did in their classrooms. The papers and presentations of these declared excitement and learning had taken place as a result of the infusion of popular culture icons in their curriculum.

**Teachers’ New Concerns**

Miranda, Ariel, Jenny, Christina and others like them who found the research exciting and hopeful for their teaching raised other concerns that had not surfaced in their scripted programs. They recognized the theories that took them to these new practices did not align themselves with the assessments they were required to give regularly in their schools. What follows are examples of serious issues these teachers faced as they began to consider the implications of teaching from the socio-cultural perspective, while working in a school that valued only the standardized measurement of children’s learning.

*Miranda: How do I assess my students with multimodal texts? I need to ensure that my children are learning but how do I assess that they are?*

*Christina: How can I grade this project based on so many different factors?*

*Nicole: Another big question I have is regarding assessment, which is a major requirement at most schools. I would not want to put more pressure on my students by telling them I have to grade them on exciting projects they just did but then how do I measure learning?*

*Andrea: We are pressured nowadays to demonstrate with tangible numbers and scores that learning has taken place. How to obtain a score or a number from lessons like this one represents a real challenge for me. However I feel strongly that literacy is a personal manifestation of our lives and therefore it needs to be lived and experienced. How do I justify this is a world of accountability through test scores?*
The teachers’ concerns are representative of many who work and do research in the field of New Literacies. Hull & Schultz (2002) discuss researchers who found that when schools imposed white, male genre of writing it marginalized the kind of writing women had historically used to fulfill their personal needs at home and in their communities.

When we attempt to bridge the gap by bringing children’s family and out-of-school literacies into school we run the risk of turning the vibrant literacy practices of our students into everyday school literacies. We domesticate them, changing what they were, to what they have to be ‘to fit’ school. (Finn, 1999) Children become bored and often unhappy with the way their interests have been made to look like school. In today’s world it is far more likely that the out-of-school literacy will get changed to fit school, rather than school changing because of the new literacies the children bring to it.

Finn (1999) says: “… there is domesticating education which leads to functional literacy, literacy that makes a person productive and dependable, but not troublesome” (p. ix-x). He identifies some of the features of domesticating education in the following way:

1. Teachers are gatekeepers. They focus on correctness, before expression.
2. Students are rarely given the opportunities to express their own ideas.
3. Students are rewarded for their passivity and obedience, not for initiative and inquisitiveness.
4. Both teachers and students focus on good grades and a diploma as the objective of schooling.

The teachers who brought forth concerns about accountability to a system that didn’t fit the kind of teaching they wanted to do were conflicted. They saw that they were held accountable to gate keeping, correctness and good grades or test scores. They realized their school’s expectations of them did not fit with teaching that allowed children to express their own ideas, encouraging inquisitiveness and initiative. They had reached a place with their learning that showed them the theory of learning guiding their mandated scripted reading programs and the theory of learning that had provoked their Action Research were mutually exclusive. It left them in an uncomfortable place.

**Implications for Teacher Educators**
All of the teachers in the Language Arts Seminar taught in public schools, which required they teach to scripts and administer high stakes tests. This research found that teachers who read theory and do research could learn to think of literacy differently. The research also found that asking teachers to change or find spaces in their tightly scripted days could be stressful. Their desires to do well as teachers and their desires to do well as graduate students in my class created dilemmas for those who feared reprisals from their schools or from me. The schools and I expected outcomes that were polar opposites of one another. While, I knew I had to give students enough leeway to be safe in their jobs, while urging them onward with their research, the lengths I was willing to go to make those compromises was never articulated. Rather, it was negotiated on a one-to-one basis through on-going conversations during the proposal stage. Once the research began, I played no part in what they actually carried out in their classrooms.

The majority of the teachers did come to question their practices and wanted to teach in ways they found to be different and more meaningful for their students. Their research findings left them with unresolved struggles related to the realities of where they worked and what was required of them in that setting. Many were angry that they now had knowledge they could not easily use in their classrooms.

I did not collect data after the students turned in their final papers and the semester ended. I do not know how the students took their learning into their practices after the course ended or in fact whether they were able to at all. I am left with questions about the responsibility of professors who teach new literacies to their students. What happens when these students go back to their classrooms, feeling frustrated that they cannot take all that have learned with them? What happens when they feel alienated without the support of their classmates in graduate studies and their professors who pushed them to learn new things?

Corvetti, Damico and Pearson (2006) remind us that teaching teachers about multiple literacies comes with many complexities. Teachers must be prepared to work in schools as they are, while learning and preparing for schools, as they will become. The teachers, who were part of this study, demonstrate how difficult that can be
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References

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Skilton-Sylverster, E. (2002). Literate at Home but Not at School: A Cambodian Girls’
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Appendix A

Action Research Paper and Presentation

The action research you will undertake for this assignment is imbedded in the theme of Twenty-First Century Literacies. You will create and carry out a mini action research project, which is situated within questions you have about teaching and learning in your classroom and also within one of the themes in your “Literacy Moves On” text. Those themes are 1. New Literacies and Children’s ways of Using Them; 2) Focusing on Texts with a Critical Eye: Critical Literacy in the Primary School and 3) Bridging the Gap Between Children’s Personal Interests and Teachers’ School-based Curriculum.

NB. While you will draw on the theories and see ideas through the examples given in the chapters of Evans book, the questions you ask must come from your own teaching and the research you undertake must be your own original action research project.

Your Action Research Question:
You will need to select a question relating to teaching and learning in your classroom. You must be explicit about the question. State what it is that is concerning you about literacy practices and learning in your classroom. (Focusing on a small group to explore your question is fine.) You will then respond to the pedagogical questions you have by choosing a theme from the Evans text to use as a lens for examining and taking action on that question. You will need to be explicit about the question and how you see it connecting to the theme you have selected. You will also need to be clear on how this question is important to you right now as a teacher. This mini action research must take place over a minimum of five weeks. It will be important to demonstrate the evolution of this research over this period of time. (Dated journal entries, data collection etc.) Be explicit about the context within which the action research will take place. (School, grade, literacy program and practices currently in place, technology/new literacies currently in use, support/resistance known or assumed to bringing ‘new literacies’ into the classroom).

Preparation:
You will need to be specific about the groundwork you did to begin the research. (For example did you have to access equipment, obtain approval from parents, administrators etc; make a new space in your daily agenda to incorporate the new literacies practices or were you able to assimilate it into something you were doing?) This of course is not a ‘one-shot effort”. Remember the project is to take place over a period of at least five weeks. As with any lesson plan it is expected that you will need to bring in and/or implement new things on an on-going basis as you undertake the teaching involved in the ‘discovery; processes of this action research. Make the beginnings and the processes of these plans explicit in the presentation of
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your work.

**Data:**
You will need to gather data to see how the ‘action-plan’ you initiated is evolving. You should consider anything that helps you undertake and understand the action research, as it relates to your questions as data. Your data should be dated and referenced by date, as you present it in your paper or class presentation. (This could include anything from journal notes, student samples, lesson plan artifacts or realia, audio/video taping sessions etc.) You will want to talk about how you decided what was data and what was not. Was the method of data collection effective? Did you change your methods of data collection over time (eliminating some? adding others?) Show how the data you collected informed the decisions you made in the planning processes. As a culminating reflection on the action research how did the data inform your thinking on the question you pursued?

**Research Literature:**
You are expected to refer to the section in your text that influenced your thinking in pursuing this project. Additionally you should read, discuss and reference a minimum of five other pieces of professional literature, theory or research, which will connect to the theme you are exploring in your research. These readings (including the selected sections of Evans text) must be referenced appropriately in your paper and must also show how they influenced your understandings of your own research. Of course all literature must also appear in your bibliography.

**Conclusions and Reflective Statement:**
Where has this action research left you in your thinking? This should be a clear, culminating statement, which pulls together all of the components of your research to tell the story of what you have learned through doing this project. Additionally you will want to discuss what the obstacles were, what your current questions are, where you would like to go (if anywhere) with the investigation you began here. Make this a well-connected and clear conclusion ‘statement’ on where you are in your thinking regarding the questions you had/have and on the process itself. Be certain to include any frustrations, concerns, limitations or hopes you experienced.

**Presentation:**
You are expected to present your research in a professional manner to the other members of your class. During this presentation you will discuss your question (it’s origin) and the theme you decided to use to explore the question through a new lens. You will show pertinent pieces of data that helped you see your practice and your question differently. You will discuss changes you made in your practice, along with any concerns that arose as a result of the process or end result. As part of your conclusion you will discuss how your questions have changed or been reshaped as a
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result of engaging in this research. It will also include new questions to which your research has led you.

It is expected that you will use some form of new literacies technology to enhance the presentation of this research to your classmates. (i.e. power point, video, CD, Inspiration etc.)
Appendix B

Proposals for Your Action Research

1. What is the concern or problem with your student(s)' literacy learning right now? (Describe in a few sentences).

2. What is the instructional technique (theory and practice) you are enacting at the time you cite your students(s)' difficulties? (Describe in a couple of sentences).

3. What theme/theory are you going to use for the action research? Show you know something about the theory/theme and give a brief rationale for why you would want to offer this 'new literacy' practice to your student(s). For example in your rationale talk about why you think implementing literacy engagements & lessons from this particular theme might support your student(s)' learning.
Title
Developing Students’ Capacity for Innovation, Creativity and Critical Thinking through Contemporary forms of Assessment.

Topic area
Higher education
Teacher Education

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Abstract
In continuing with the forms and methods of assessment that for decades have pervaded higher education, are we devaluing the education we provide and disengaging students in the process? Why do we assess? What is our purpose and for whose benefit do we assess? Are these benefits achieved through current practices? These are the questions that need to be addressed.
The demands on educators to provide valuable, student-centred assessment and feedback have never been greater. Feedback is one of the most powerful influences on learning and achievement (Hattie & Timperley, 2007), and how we construct and evaluate these tasks to provide feedback determines the potency of such feedback.
The focus of tertiary education needs to be on developing students’ capacity for innovation, creativity and critical thinking. The perpetuation of the dichotomy in universities between traditional approaches and the ideals of critical and lateral thinking, autonomy, and thoughtfulness in education, make current traditional practices impractical and unacceptable.
The arbitrary nature of creating, marking and providing feedback for tasks without consideration for the learning that should result from the task seems illogical and counter-productive to the purpose of assessment. Peer assessment, self-assessment and the democratization of assessment for learning all need to become part of the repertoire of the university tutor, lecturer and professor if we want students to be engaged with and value their learning.

Key Words
Higher education, Assessment, Innovation, Self-Assessment, Peer-Assessment
Introduction

Current trends for reform in the tertiary sector are focused on meeting the needs of 21st century learners (Australian Government, 2009) through new, innovative forms of assessment (Boud & Associates, 2010). In addressing the shift from traditional forms of assessment to new, innovative assessment practices that are both summative (assessment of learning) and formative (assessment for learning) it is important to recognise the need for pedagogical approaches that can facilitate and ease this change.

This paper illustrates some of the key ideas surrounding assessment in higher education in Australia; gives an overview of the Australian context with regards to reform in the tertiary sector; and, presents a new, innovative model of assessment that addresses the key features of reform in higher education assessment. The model presented has multiple components that form the assessment process: Authentic Assessment for Sustainable Learning (AASL) is the assessment model; and, Authentic Self & Peer Assessment for Learning (ASPAL) is the delivery method for the implementation of AASL.

Although the model presented has undergone trials at the University of Notre Dame, Australia this past semester, this paper concerns the conceptual and theoretical development of the model and its justification. Through a review of relevant literature we were able to address our key questions that formed the basis of the research:

- Why do we assess?
- What is our purpose and for whose benefit do we assess?
- Are these achieved through current practices?

In the development of the AASL and ASPAL models we drew inspiration from the Australian Teaching and Learning Council and the paper: Assessment 2020 Seven propositions for assessment reform in higher education, in which the authors contend: in which, Boud & Associates contend:

Universities face substantial change in a rapidly evolving global context. The challenges of meeting new expectations about academic standards in the next decade and beyond mean that assessment will need to be rethought and renewed (2010, p.1).

The idea of sustainable assessment has been described by Boud (2000) as “the knowledge, skills and predispositions that underpin lifelong learning activities” (p.151). Lifelong learning is at the heart of the Australian government’s goals for higher education: ‘self-fulfilment, personal development and the pursuit of knowledge as an end in itself;’ (Australian Government, 2009, p.7) this reflects the ideals sustainable learning is based upon. Through the implementation of sustainable assessment what we endeavour to achieve is assessment that, “meets the needs of the present without compromising the ability of students to meet their own future learning needs” (Boud, 2000).

Research has shown strong links between the implementation of authentic assessment and high quality learning (Darling-Hammond & Snyder, 2000; Ridley & Stern 1998; Brown, Collins & Duguid, 1989). The use and implementation of authentic assessment has two significant features; it has the ability to re-engage students in the development of content-based knowledge through strengthened links with the outside world; and, it has the capacity to enhance student learning through the provision of skills such as critical thinking and creativity.
This paper seeks to open a discourse about the level of engagement we currently face in our lecture halls and tutorials and to provide colleagues with ideas about innovative assessment practices that can be incorporated into their own teaching and learning to enhance the learning experience and increase engagement among their students.

Key Features from Recent Research

Recognition of the importance of assessment for learning and assessment of learning has been central in research concerning recommendations for reform in higher education in recent years (Boud & Associates, 2010; Lamprianou & Athanasou, 2009; Elwood & Klenowski, 2002; James, McInnis & Devlin, 2002). The literature makes clear that assessment is a driving force of learning (Lamprianou & Athanasou, 2009; Boud, 1990); there is simply nothing else in the learning continuum that garners as much student attention than what the student will be assessed on (Lamprianou & Athanasou, 2009). Lamprianou and Athanasou (2009) make the assertion that according to student diaries, less than 10% of students’ time is spent on non-assessable activities; if assessment has the ability to drive learning it seems logical that curriculum should be designed around assessment that encourages the skills necessary for success, both within their course and in life. The idea of authentic, sustainable assessment is one that not only can meet the needs and skills required for success in the 21st century, but also has the ability to engage interest and enhance student learning (Boud 2000; Vu & Dall’Alba, 2008).

Learning, and indeed assessment, have changed focus in recent years. Traditional education assessment was seen as a way to evaluate learning; now assessment is considered to be an integral part of the teaching and learning cycle (Elwood & Klenowski, 2002). As far back as 1999, the research was promoting the development of professional skills such as problem-solving, critical thinking, creativity, autonomy in learning, and authenticity in learning through innovative forms of assessment (Dochy, Segers & Sluijsmans, 1999). If this ‘new era’ in assessment started over a decade ago, we should be thoroughly entrenched in the practice of authentic learning and sustainable assessment, but sadly this is not the case. Instead we have, “overall dissatisfaction with educational attainment” (Klenowski 2006 cited in Chen & Klenowski 2008 p.) and the desire to raise the quality of education to be competitive in the global context (Murphy 2007). The suggestion of enhancing the quality of education through assessment has been building and evolving over the past two decades. Torrance noted in 1996 that, “real change will not take place in schooling until a significant change happens to assessment” (p.i).

The Australian Context

The Australian government’s position with regards to higher education is in line with the current international trends which are focusing on authentic and sustainable assessment that has relevance beyond the classroom (Boud & Falchikov, 2005; Segers, Dochy & Cascallar, 2003).

Self-fulfilment, personal development and the pursuit of knowledge as an end in itself; the provision of skills of critical analysis and independent thought to support full participation in a civil society; the preparation of leaders for diverse, global environments; and support for a highly productive and professional labour force should be key features of Australian higher education (Australian Government 2009, 7).

The government’s contention about the key features of Australian higher education are dichotomous in nature: On the one hand, they emphasize the importance of knowledge for the sake of knowledge, critical thinking, and independent thought; however, on the other hand they believe that universities should instil the skills necessary for students to become members of a highly productive and professional labour force. While the two ideals are not mutually exclusive, it does present a challenge to the higher education sector. That challenge can be met through authentic learning and authentic assessment of learning.
There are currently 37 public universities, 2 private universities and 150 or so other providers of higher education in Australia. In their reform of higher education, the Australian government is seeking to increase the number of 25-34-year-olds holding a bachelor-level qualification to 40% by 2020; this is an 11% increase over current attainment levels (Bradley et al. 2008). If this intended increase transpires, the higher education sector in Australia will see an additional 217,000 graduates by 2025; this will place an enormous amount of pressure on institutions that already struggle with retention rates in the present environment.

Currently, the student attrition rate in the tertiary sector in Australia is approximately 28%. To keep Australia competitive in the modern global market and meet government targets, universities and other higher education institutions will need to address this high proportion of student attrition. The government recognizes this challenge and makes comments with regards to student engagement in higher education:

Although student satisfaction levels remain high, Australia has fallen behind its major competitor countries on key teaching and student experience indicators and drop-out rates remain high at 28 per cent in 2005. Similarly, the dramatic rise in student-to-staff ratios—from about 15:1 in 1996 to over 20:1 in 2006—is probably a significant contributor to the relatively low levels of student engagement (Australian Government 2009, p.14).

Student engagement is the key to reform in the education sector, not only to ameliorate attrition rates, but also to enhance the development of critical skills necessary for students to prosper in a technology driven, global world. It is our contention that students need to develop skills such as: creativity, innovation, critical and lateral thinking and autonomy to flourish in an unpredictable global market. The disappointing level of engagement of students in higher education is a problem that must be overcome if government targets can be met. Students need to be engaged through a means in which they have an investment, one that they understand and respect; assessment has that capacity (Lamprianou & Athanasou, 2009).

While the government argues that a “highly productive and professional labour force should be key features of Australian higher education,” (Australian Government 2009, p. 7), we believe that such a labour force is a by-product of a high quality education that fosters the growth of the individual learner by teaching those skills that are crucial to the development of sustainable learning.

**Student Perceptions of Assessment in Higher Education**

The research on student engagement in higher education is prolific; however, one feature that the research continually highlights is that assessment, rates very highly in importance according to students (Boud, 2000, Lamprianou & Athanasou, 2009, Elwood & Klenowski, 2002; James et al., 2002). According to Lamprianou and Athanasou (2009):

As far as students are concerned, there is nothing more central to the learning experience than assessment. Some learning researchers call this the backwash effect. The type of assessment students know will be coming determines when they “tune in” to a lecture and when they “tune out.” Evidence from student diaries indicates that students spend less than 10 percent of their time on non-assessed academic work (15).

For most students, assessment is the most important aspect of their coursework (Lamprianou & Athanasou, 2009; James et.al, 2002); therefore, we as educators need to use this element of student perception to maximise the learning potential it harbours. If we can engage students through what they value in our courses and ensure that the assessments we assign are authentic and inspire the development of innovation, creativity and the skills of critical and lateral thinking, we can maximise the potential for our students’ future success. Boud (1990) asserts that students focus on what is assessed; therefore, assessment has the power to drive student learning. This same contention was echoed by James et al (2002):
For most students, assessment requirement literally define the curriculum. Assessment is a potent strategic tool for educators with which to spell out the learning that will be rewarded and to guide students into effective approaches to study (James et al., 2002, 7).

Additionally, Taylor (2008) has found that courses with the highest retention rates are those that employ formative assessment that also count towards a student’s final mark. The AASL and ASPAL models incorporate the best aspects of both formative and summative assessment by informing student learning throughout the process and counting towards their final mark. Taylor suggests that formative assessment, while very good in both practice and principle, cannot by itself engage students: “students will not necessarily value and thence undertake [assessment] unless it is worth something more concrete in their eyes” (2008, 22).

Gibbs (2003) points out that the issues associated with measuring student achievement and meeting standards are addressed at the expense of engaging student learning. If assessment drives student learning, yet it is also responsible for disengaging students, then current methods of assessment need to change. If it can be agreed that students value assessment, albeit possibly for the wrong reasons, we can utilize the value they accord it to positively impact their learning experience. By ignoring this ‘driving force’ we perpetuate the inauthenticity in learning and continue to actively disengage our students by ignoring what they value.

Through the implementation of innovative forms of assessment, such as AASL and ASPAL, educators hold the key to enhanced learning (Elwood & Klenowski, 2002).

Are current assessment practices achieving the goals of the assessment process?

Why we assess is one of the most important questions surrounding issues pertaining to effective teaching and learning and engaging student interest in their coursework.

The Australian Commonwealth Government (2009, p.7)) states that, “self-fulfilment, personal development and the pursuit of knowledge is an end in itself.” If this is the case, why do we assess? In basic terms the education sector assesses students for accountability purposes; to ensure that the degree they tender at the end of a course has meaning. James et al (2002) contend that:

Assessment is often treated merely as the endpoint of the teaching and learning process. There remains a strong culture of ‘testing’ and an enduring emphasis on the final examination, leaving the focus predominantly on the judgmental role of assessment rather than its potential to shape student development (1).

Assessment at the tertiary level should not only assist the lecturer to evaluate students against a set of criteria required to pass a course, rather it should also provide an opportunity for students to monitor and evaluate their own learning (Boud & Falchikov 2005). The forms of self and peer assessment that are employed in the ASPAL model aim to create a ‘learning community’ in which assessment is no longer something that happens to students, but instead draws the entire class into a cohesive group that learns together. By incorporating aspects of both self and peer assessment the aim is to engage students in assessment, through assessment. What is essential is that students are part of the assessment discourse and that they are given the opportunity as well as the responsibility to learn the language and skills of assessment, as these skills form a fundamental component of their tertiary studies. In the particular case of pre-service teachers, these skills are even more relevant; as they form part of the professional skill-set students will require when they enter the profession.

Assessment offers us, as educators, the opportunity to reengage students in their learning and help to foster those critical skills our students will need in the workplace. What is proposed through the implementation of these models is that all assessment, whether diagnostic, formative or summative, focuses on student learning more explicitly than student evaluations suggest it currently does (Lamprianou and Athanasou, 2009). What we hope to foster through the implementation of this model...
is the encouragement of 21st century skills: innovation, critical thinking, reflection and autonomous learning.

The AASL & ASPAL Models

The development of the models of assessment presented was based on the seven propositions for assessment reform in higher education made in the Assessment 2020 paper by Boud & Associates (2009). Through an intensive literature review on assessment, with specific emphasis on the implementation of self and peer assessment at the tertiary level; informal interviews with undergraduate education students; and, our own perceptions of the limited levels of engagement in our units, we sought to develop a model of assessment that could have the potential to shift the ways in which students regarded assessment and transform the manner in which assessment occurs.

The key questions that the researchers sought to answer in the development of an innovative assessment model were:

- Why do we assess?
- What is our purpose and for whose benefit do we assess?
- Are these achieved through current practices?

The answers to these questions were not difficult to determine, and in answering the questions, the path towards a new model of assessment became evident. The short answers to these questions are:

We assess firstly to inform student learning, and secondly to evaluate that learning against a set of standards or outcomes. In ensuring that student learning is paramount and evaluation secondary, we change the traditional focal point of assessment from assessment of learning to assessment for learning.

Our purpose of assessment, in differentiating this question from the first, is our contention that assessment, and indeed all aspects of the teaching and learning continuum, should be directed towards engaging students in the professional discourse of the unit or course they are undertaking. Therefore, we assess for the benefit of the student and ourselves, not exclusively in an evaluative way, although this is one component of assessment, but rather to engage students in the authentic manifestation of their course with regards to the world outside of the classroom. And, for ourselves, assessment should guide and direct our teaching.

Whether or not these outcomes are being achieved by current practice is open to conjecture. However, what is clear, both in our experience and in the literature, is that while innovative forms of assessment have been gaining traction in recent years, there is still a significant sector of the tertiary community that has not relinquished its hold on traditional assessment practices that have the potential to disengage students and have a negative impact on their learning (James et al. 2002).

In creating these models we relied heavily on the ideas of communities of practice, situated learning and legitimate peripheral participation (e.g. Lave & Wenger 1991; Wenger 1998) and sought to develop learning communities within our courses. The introduction of learning communities is an essential aspect of the successful implementation of the models as we are seeking to share knowledge and experience with our students as a part of their induction into the teaching profession. By democratising the assessment process and allowing our students to be integral in the development of assessment, the marking of the assessment and providing feedback on the assessment, we are not only reengaging them in their course content, but also providing them with the professional skills they need when they enter the workforce. Additionally, we are seeking to instil in our students the capacity for the development of innovative ideas and to demonstrate to them how the successful implementation of those ideas can change the educative process so that they can be creative in their own pedagogical approach to teaching.
AASL – Authentic Assessment for Sustainable Learning (see appendix 1a)

In the AASL model, self-assessment, peer assessment and lecturer assessment are combined to produce a summative grade for the student. In this model:

- Lecturer assessment accounts for 40% of the overall mark, allowing it to act as a moderator for the self and peer assessment.
- Two peers will collaboratively mark another student’s anonymous task. While the peers must collaborate during the process, with verbal communication being an integral aspect, they do not have to agree on the mark given. Each peer’s mark will account for 15% and the total peer assessment accounts for 30% of the overall mark.
- Lastly, the student will mark their own task against the set criteria. The self-assessment will account for 30% of the overall mark, thus empowering the student to critically reflect on their work in relation to their peers.

ASPAL – Authentic Self & Peer Assessment for Learning (1) (see appendix 1b)

While the AASL model is our model for assessment, ASPAL constitutes the delivery method for the AASL model. In our research at UNDA, we have also compartmentalised this process into various stages and have differentiated the process for individual assessment tasks and group assessment tasks, but the premise of the model is as follows:

In the delivery of AASL, we begin with a formal survey of the students to ascertain their attitudes and perceptions of engagement at the tertiary level; their level of satisfaction with the current assessment practices at the institution; and, their preliminary thoughts with regards to the AASL and ASPAL model of assessment which they have explored theoretically prior to the actual process. The next stage in the process is collaboratively developing marking criteria for their task. In an ideal environment, the task itself would also be collaboratively developed, but current institutional requirements restrict this. The next stage in the process is the pilot marking session. This provides the students the opportunity to mark assignments similar to the one they have been asked to produce and serves multiple purposes: it builds confidence in the students with regards to their ability to mark their peers’ work; it allows them the opportunity to see what constitutes a ‘good’ and ‘bad’ mark on a task similar to the one they will hand in; it helps to develop a mutual understanding of the marking criteria and how it is applied to the task; and finally, it helps the student to develop the skills of judgement with regards to their own work and the work of others. The next stage of the process is the marking itself; while detailed plans have been created to deal with this part of the process these will not be discussed at this time. Accurate and timely feedback is a crucial component to assessment (Hattie & Timperley, 2007), and this process facilitates this by allowing the immediate return of peer assessed papers containing written feedback and grades. Students will receive feedback - both quantitative marks and qualitative comments - from each of the peers who marked their paper and from the lecturer. Those three forms of feedback, along with their own reflections from their self-assessment, enhance the depth and breadth of the feedback they receive and form the basis for improved performance in the future. The students are then surveyed at the end of the semester to note any changes in their perceptions.

1 While extensive research has been conducted with regards to self and peer assessment and the implementation of those assessments, this paper concerns the development and theoretical justification for the development of these models and does not seek to justify their validity at this time. These models have been implemented in undergraduate education units in both the primary and secondary courses at the University of Notre Dame, Australia and the results of those trials will be published separately.
Implications

The propositions put forth in this document are in-line with what the current research suggests from around the world: traditional assessment practices in the tertiary sector are not meeting the needs of 21st century learners (Lamprianou & Athanasou, 2009; James et al., 2002; Falchikov & Thomas, 2008).

Shepard (2000) suggests that traditional forms of assessment perspectives emphasise a theoretical framework of ‘scientific measurement’ and were aligned with the traditional ideas and beliefs about learning. The problem with this type of conceptual framework is that it seems to be the prominent ideology in many courses in higher education today, and it does not align with current ideas with regards to constructivist learning that is focused on critical thinking, creativity, and autonomous learning. In specific relation to pre-service teacher education, it is imperative that we cultivate the educational and pedagogical environments that our students are accustomed to and will be working within, in the teaching profession.

The conceptual development of these two models occurred over the length of a semester and we are currently trialling these models with approximately 300 undergraduate education students. There are considerable implications in the implementation of these models that could make it unsuitable for many university courses. The size of courses and the absence of tutorials in certain courses may not suit this model of assessment. We believe that this model of assessment is suitable in all faculties; however, we do recognise our bias towards education students and the development of professional skills that are required for the teaching profession. That said, we consider that the skills encouraged throughout this assessment process: critical thinking, judgement, autonomous learning are skills increasingly required by all students entering the 21st century workplace and should be promoted in all courses of study.

The development, evaluation and implementation of pedagogical practices which engage students is a never-ending process that must be revisited in order to ensure that we are providing a useful, authentic and sustainable education to our students that will have value throughout their lives. Our focus in the development of this model has been with regards to engagement and our fundamental belief that education is about building relationships with students. Through the development of learning communities in higher education we invite students into the world in which we operate, and in which they will operate upon completion of their degree. As educators we are initiating our students into an understanding of the professional skills and attributes they will require in their careers.

In pursuing the objectives of authentic and sustainable assessment, it is paramount that the focus be on enhancing the students’ capacity for learning and engagement with the curriculum. Through a shared understanding of the assessment process and the criteria for success, we open up the educative realm to the students and invite them to be a part of the process rather than an observer on the periphery seemingly subject to arbitrary pronouncements. If we can encourage students to become part of the assessment process we are encouraging them to become autonomous in their learning and then educative transformation can occur.
References


Appendix 1

a. Authentic Assessment for Sustainable Learning (AASL Model)

b. Authentic Self and Peer Assessment for Learning (ASPAL Model)
Meeting the Needs of the Stakeholders through Effective Communication: What Teachers Can Do

In a climate of high-stakes testing, teachers feel a great deal of pressure to have students meet benchmarks and state standards as student learning comes first. Building principals are concerned about students’ overall performance and the need to communicate student performance to parents. Parents/guardians are concerned about how their children are behaving at school, their grades, and their social interactions. Yet, there are many are concerned about spending taxpayers’ dollars, while others are concerned about high school graduates’ acceptance into college. These individuals are stakeholders in what happens in the classroom. This paper will focus on the four groups of individuals who have a vested interest in students’ learning and school success, will provide ideas that teachers can do to communicate with those individuals, and will illustrate ways to support each group’s efforts to make school a meaningful place for students to learn.
Analyzing The Cost-Effectiveness of Instruction Expenditures Towards High School Completion Among Oahu’s Public School Districts

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ABSTRACT

The following study attempted to ascertain the instructional cost-effectiveness of public high school teachers towards high school completion through a financially based econometric analysis. Essentially, public high school instruction expenditures and completer data were collected from 2000 to 2007 and bivariate interaction analyzed through a correlation and linear regression procedure. Based on the collective results, with the exception of the Leeward District that reported a statistically significant positive relationship, a statistically insignificant positive relationship was noted for the Central District; and a statistically insignificant negative relationship noted for both the Honolulu and the Windward District. Consequently, based on the findings of this study, public high school teachers in the Leeward District had a more economically positive influence towards high school completers in contrast to the other school districts on Hawaii’s Island of Oahu from 2000 to 2007.

INTRODUCTION

Instruction is one of the most critically important factors that contribute to high school completion, where it is the teachers that facilitate the transfer of knowledge necessary for students to graduate high school (Westfall, Peltier, Sheehan, & Weber, 2006). Although there are many techniques to measure the productivity of educational instruction, assessing its effectiveness through a financial perspective remains one practical way to accomplish this task (Beard, 2009). Consequently, this study will specifically analyze Hawaii’s Department of Education’s (DOE) high school instruction expenditures (i.e., teacher salaries and benefits, substitutes, instructional paraprofessionals, pupil-use technology, software and instructional materials, trips, and supplies) and its econometric relationship with high school completers among the four school districts on Hawaii’s Island of Oahu (Hawaii Department of Education, n.d.). With this research, it is hoped that the findings will provide a current snapshot of the effectiveness of Hawaii’s DOE high school teachers in fostering completion within the four school districts on Oahu from an economics perspective.

INSTRUCTION EXPENDITURES, GRADUATION CLASSES, AND COMPLETERS

The following section will go over the DOE’s high school instruction expenditures, size of its graduation classes, and high school completers for the four school districts on Oahu from 2000 to 2007.
Historical Results: Honolulu District

Table A1 summarizes the DOE’s inflation adjusted (i.e., Base Year = 2000) high school instruction expenditures, size of graduation classes, and high school completers in the Honolulu District from 2000 to 2007. Based on Table A1, high school instruction expenditures have been consistently increasing on an average of 6.3% with a standard deviation of $5,777,270 per year, respectively. The lowest increase in high school instruction expenditures was actually a decrease occurring during 2000 to 2001 and its highest increase seen during 2002 to 2003. Graduating classes has been slowly declining during this period and had an overall negative average growth rate of -0.7% with a standard deviation of 96 students per year, respectively. The smallest graduating class was reported in 2003 and its largest reported in 2000. Completers also experienced a similar trend during this time frame with a negative average growth rate of -0.7% and a standard deviation of 99 students per year, respectively. The lowest number of completers was recorded in 2003 and its highest recorded in 2000.

Historical Results: Central District

Table A2 summarizes the DOE’s inflation adjusted (i.e., Base Year = 2000) high school instruction expenditures, size of graduation classes, and high school completers in the Central District from 2000 to 2007. Based on Table A2, high school instruction expenditures have been consistently increasing on an average of 7.6% with a standard deviation of $6,225,588 per year, respectively. The lowest increase in high school instruction expenditures was actually a decrease occurring during 2000 to 2001 and its highest increase seen during 2002 to 2003. Graduating classes has been slowly increasing during this period and had a low average growth rate of 1.2% with a standard deviation of 71 students per year, respectively. The smallest graduating class was reported in 2001 and its largest reported in 2007. Completers also experienced similar growth during this time frame with a low average growth rate of 1.2% and a standard deviation of 77 students per year, respectively. The lowest number of completers was recorded in 2003 and its highest recorded in 2007.

Historical Results: Windward District

Table A3 summarizes the DOE’s inflation adjusted (i.e., Base Year = 2000) high school instruction expenditures, size of graduation classes, and high school completers in the Windward District from 2000 to 2007. Based on Table A3, high school instruction expenditures have been consistently increasing on an average of 7.3% with a standard deviation of $4,333,084 per year, respectively. The lowest increase in high school instruction expenditures was actually a decrease occurring during 2000 to 2001 and its highest increase seen during 2002 to 2003. Graduating classes has been slowly declining during this period and had a negative average growth rate of -0.5% with a standard deviation of 37 students per year, respectively. The smallest graduating class was reported in 2003 and its largest reported as a tie in 2001 and 2002. Completers also experienced similar slow declining growth during this time frame with a negative average growth rate of -0.5% and a standard deviation of 36 students per year, respectively. The lowest number of completers was recorded in 2005 and its highest recorded in 2001.

Historical Results: Leeward District

Table A4 summarizes the DOE’s inflation adjusted (i.e., Base Year = 2000) high school instruction expenditures, size of graduation classes, and high school completers in the Leeward District from 2000 to 2007. Based on Table A4, high school instruction expenditures have been
consistently increasing on an average of 9.7% with a standard deviation of $9,535,619 per year, respectively. The lowest increase in high school instruction expenditures was seen during 2000 to 2001 and its highest increase seen during 2002 to 2003. Graduating classes has seen much consistency during this period and had a low average growth rate of 2.7% with a standard deviation of 185 students per year, respectively. The smallest graduating class was reported in 2001 and its largest reported in 2006. Completers also experienced similar consistency during this time frame with a low average growth rate of 2.8% and a standard deviation of 162 students per year, respectively. The lowest number of completers was recorded in 2000 and its highest recorded in 2006.

METHODOLOGY

In order to investigate the econometric relationship of high school instruction expenditures towards high school completion among the DOE’s four school districts on Oahu, this research employed the following methodology. The study initially acquired the DOE’s high school instruction expenditures and completer data from 2000 to 2007. Upon separating the data by high school and adjusting instruction expenditures for inflation (i.e., Base Year = 2000), econometric techniques consisting of both correlation and linear regression were utilized and key statistics recorded. The study then analyzed the statistical relationship between high school instruction expenditures and completers. Data used for these analyses were acquired from Hawaii’s DOE websites and the study’s econometric results were generated with the use of PASW 18.0 for Windows.

RESULTS

The following will initially present the econometric results of both the correlation and linear regression analyses that were utilized to ascertain the statistical relationship of the DOE’s high school instruction expenditures towards completers among the four school districts on Oahu.

Quantitative Results: Honolulu District

Based on Table A5, the Pearson correlation coefficient was -0.333 and found statistically insignificant. This figure suggests that there was a weak negative correlation between the DOE’s high school instruction expenditures and completers from 2000 to 2007. In looking at the results of the linear regression, an \( R^2 \) of 0.111, ANOVA significance value of 0.420, and an unstandardized coefficient of \(-0.000005707\) were reported (See Table A5). Hence, although the results of the linear regression revealed the existence of a negative relationship between the DOE’s high school instruction expenditures and completers, it was not a statistically significant relationship during 2000 to 2007.

Quantitative Results: Central District

Based on Table A5, the Pearson correlation coefficient was 0.544 and found statistically insignificant. This figure suggests that there was a moderate positive correlation between the DOE’s high school instruction expenditures and completers from 2000 to 2007. In looking at the results of the linear regression, an \( R^2 \) of 0.296, ANOVA significance value of 0.163, and an unstandardized coefficient of \(0.000006762\) were reported (See Table A5). Hence, although the
results of the linear regression revealed the existence of a positive relationship between the DOE’s high school instruction expenditures and completers, it was not a statistically significant relationship during 2000 to 2007.

Quantitative Results: Windward District

Based on Table A5, the Pearson correlation coefficient was -0.587 and found statistically insignificant. This figure suggests that there was a moderately negative correlation between the DOE’s high school instruction expenditures and completers from 2000 to 2007. In looking at the results of the linear regression, an $R^2$ of 0.344, ANOVA significance value of 0.126, and an unstandardized coefficient of -0.000004837 were reported (See Table A5). Hence, although the results of the linear regression revealed the existence of a negative relationship between the DOE’s high school instruction expenditures and completers, it was not a statistically significant relationship during 2000 to 2007.

Quantitative Results: Leeward District

Based on Table A5, the Pearson correlation coefficient was 0.889 and found statistically significant. This figure suggests that there was a very strong positive correlation between the DOE’s high school instruction expenditures and completers from 2000 to 2007. In looking at the results of the linear regression, an $R^2$ of 0.791, ANOVA significance value of 0.003, and an unstandardized coefficient of 0.00001512 were reported (See Table A5). Hence, there was a very strong statistically significant positive relationship between high school instruction expenditures and completers during 2000 to 2007.

CONCLUSIONS

The following will present this study’s major findings/implications, limitations, and areas for future research.

Major Findings / Implications

The results of this study provided an econometric view of the nature of the relationship between the DOE’s high school instruction expenditures and completers among Oahu’s four school districts from 2000 to 2007. From a historical standpoint, although instruction expenditures had increased in each case, the expected symbiotic increases in completion did not positively correlate for both the Honolulu and Windward Districts during that period. Based on the econometric analysis, only in the Central and Leeward Districts did positive linear relationships were observed and with only the Leeward District having any kind of statistical significance. In summary, instruction expenditures were statistically observed as cost-effective for only the Leeward District, but seen as a marginal influence in the Central District and actually observed as a negative influence towards high school completion in the Honolulu and Windward District from 2000 to 2007.

Based on the results, it would appear from this study that instruction expenditures had lackluster influence on high school completion in only half of the school districts on Oahu. Given the current budgetary crises facing Hawaii, it would behoove DOE officials and State lawmakers to begin assessing and refocusing their efforts in making those deciding on the use of district and high school funds for instruction more accountable to the benchmark goals set forth
by the DOE in conjunction with their communities. Fiscal accountability to the parents whose children attend public school is one of the major keys in sustaining quality education. Hence, active scrutiny from both the DOE and its community partners must be practiced to ensure what little educational funds are available are maximized in the public school students’ interest.

**Study Limitations**

The first major limitation of this study revolved around the issue of representation. The independent variables of this study were more of a vector rather than scalar in nature. In particular, the aggregated values for each of the examined Oahu school district does not actually represent the actual data for each of its high schools; hence, possibly giving the wrong impression that all the high schools within the district as having the same performance with the district as a whole. The second major limitation of this research lies with the complexity of measuring instructional effectiveness. In any assessment oriented quantitative studies that are undertaken, it is not sufficient to gauge instructional effectiveness by quantitative means alone. Consequently, this study should serve as but one quantitative study in a succession of other studies that tries to assess the cost-effectiveness of instruction towards high school completion.

**Areas for Future Research**

This study compared the econometric relationship of the DOE’s high school instruction expenditures towards completers among the school district’s located on Oahu. However, similar studies on the individual high schools should be conducted. Such studies would allow for a clearer picture on what schools were seen as being most influential in steering the current trends for their respective school district. In addition, research that seeks to uncover the econometric relationship between the other functional areas of the DOE’s educational expenditures (i.e., instructional support, leadership, operations, and other commitments) towards high school completion should be conducted (Hawaii Department of Education, n.d.). Such studies would provide a cross-expenditure effectiveness perspective as well as illustrate how the other functional expenditure areas of the DOE contribute to high school completion. Finally, given the budget shortfall besieging Hawaii, the suggestions above should be undertaken with a sense of urgency by educational, legislative, as well as community researchers. Such research would ultimately work making sure that educational quality is not being circumvented, despite the current financial situation.
REFERENCES


APPENDIX

Table A1. Honolulu District High School Instruction Expenditures, Graduation Class, and Completers

<table>
<thead>
<tr>
<th>School Year</th>
<th>Instruction Expenditures</th>
<th>Percentage Change</th>
<th>Graduation Class Size</th>
<th>Percentage Change</th>
<th>Total Completers</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>$28,061,137</td>
<td>N.A.</td>
<td>2,171</td>
<td>N.A.</td>
<td>2,072</td>
<td>N.A.</td>
</tr>
<tr>
<td>2000-01</td>
<td>$26,080,230</td>
<td>-7.1%</td>
<td>1,916</td>
<td>-11.7%</td>
<td>1,827</td>
<td>-11.8%</td>
</tr>
<tr>
<td>2001-02</td>
<td>$28,647,440</td>
<td>9.8%</td>
<td>2,047</td>
<td>6.8%</td>
<td>1,994</td>
<td>9.1%</td>
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<td>2002-03</td>
<td>$35,226,920</td>
<td>23.0%</td>
<td>1,880</td>
<td>-8.2%</td>
<td>1,785</td>
<td>-10.5%</td>
</tr>
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<td>2003-04</td>
<td>$35,546,550</td>
<td>0.9%</td>
<td>1,908</td>
<td>1.5%</td>
<td>1,836</td>
<td>2.9%</td>
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<td>2004-05</td>
<td>$37,736,230</td>
<td>6.2%</td>
<td>1,953</td>
<td>2.4%</td>
<td>1,824</td>
<td>-0.7%</td>
</tr>
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<td>2005-06</td>
<td>$38,733,640</td>
<td>2.6%</td>
<td>1,961</td>
<td>0.4%</td>
<td>1,870</td>
<td>2.5%</td>
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<tr>
<td>2006-07</td>
<td>$42,169,230</td>
<td>8.9%</td>
<td>2,036</td>
<td>3.8%</td>
<td>1,934</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$272,201,377</strong></td>
<td>N.A.</td>
<td><strong>15,872</strong></td>
<td>N.A.</td>
<td><strong>15,142</strong></td>
<td>N.A.</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>$34,025,172</strong></td>
<td>6.3%</td>
<td><strong>1,984</strong></td>
<td>-0.7%</td>
<td><strong>1,893</strong></td>
<td>-0.7%</td>
</tr>
<tr>
<td><strong>Std. Dev.</strong></td>
<td><strong>$5,777,270</strong></td>
<td>9.3%</td>
<td>96</td>
<td>6.7%</td>
<td>99</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

*Note.* Hawaii DOE high school instruction expenditure data are from *Reports, Expenditures by School* [Data file], n.d.a, Hawaii Department of Education at http://doe.k12.hi.us/reports/expenditures.htm, while graduating class size and completer data are from *Reports, High School Completer Statistics* [Data file], n.d.b, Hawaii Department of Education at http://doe.k12.hi.us/reports/highschoolcompleter.htm; and all collectively retrieved on July 1, 2009.
### Table A2. Central District High School Instruction Expenditures, Graduation Class, and Completers

<table>
<thead>
<tr>
<th>School Year</th>
<th>Instruction Expenditures</th>
<th>Percentage Change</th>
<th>Graduation Class Size</th>
<th>Percentage Change</th>
<th>Total Completers</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>$23,738,256</td>
<td>N.A.</td>
<td>1,981</td>
<td>N.A.</td>
<td>1,956</td>
<td>N.A.</td>
</tr>
<tr>
<td>2000-01</td>
<td>$21,971,510</td>
<td>-7.4%</td>
<td>1,895</td>
<td>-4.3%</td>
<td>1,879</td>
<td>-3.9%</td>
</tr>
<tr>
<td>2001-02</td>
<td>$24,922,000</td>
<td>13.4%</td>
<td>1,975</td>
<td>4.2%</td>
<td>1,955</td>
<td>4.0%</td>
</tr>
<tr>
<td>2002-03</td>
<td>$32,078,330</td>
<td>28.7%</td>
<td>1,988</td>
<td>0.7%</td>
<td>1,862</td>
<td>-4.8%</td>
</tr>
<tr>
<td>2003-04</td>
<td>$32,582,120</td>
<td>1.6%</td>
<td>1,947</td>
<td>-2.1%</td>
<td>1,901</td>
<td>2.1%</td>
</tr>
<tr>
<td>2004-05</td>
<td>$34,706,080</td>
<td>6.5%</td>
<td>2,022</td>
<td>3.9%</td>
<td>1,978</td>
<td>4.1%</td>
</tr>
<tr>
<td>2005-06</td>
<td>$36,438,040</td>
<td>5.0%</td>
<td>2,019</td>
<td>-0.1%</td>
<td>1,980</td>
<td>0.1%</td>
</tr>
<tr>
<td>2006-07</td>
<td>$38,376,550</td>
<td>5.3%</td>
<td>2,139</td>
<td>5.9%</td>
<td>2,108</td>
<td>6.5%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$244,812,886</strong></td>
<td>N.A.</td>
<td><strong>15,966</strong></td>
<td>N.A.</td>
<td><strong>15,619</strong></td>
<td>N.A.</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>$30,601,611</strong></td>
<td>7.6%</td>
<td><strong>1,996</strong></td>
<td>1.2%</td>
<td><strong>1,952</strong></td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>Std. Dev.</strong></td>
<td><strong>$6,225,588</strong></td>
<td>11.2%</td>
<td>71</td>
<td>3.7%</td>
<td>77</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Note. Hawaii DOE high school instruction expenditure data are from Reports, Expenditures by School [Data file], n.d.a, Hawaii Department of Education at http://doe.k12.hi.us/reports/expenditures.htm, while graduating class size and completer data are from Reports, High School Completer Statistics [Data file], n.d.b, Hawaii Department of Education at http://doe.k12.hi.us/reports/highschoolcompleter.htm; and all collectively retrieved on July 1, 2009.

### Table A3. Windward District High School Instruction Expenditures, Graduation Class, and Completers

<table>
<thead>
<tr>
<th>School Year</th>
<th>Instruction Expenditures</th>
<th>Percentage Change</th>
<th>Graduation Class Size</th>
<th>Percentage Change</th>
<th>Total Completers</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>$18,192,436</td>
<td>N.A.</td>
<td>1,142</td>
<td>N.A.</td>
<td>1,067</td>
<td>N.A.</td>
</tr>
<tr>
<td>2000-01</td>
<td>$17,394,830</td>
<td>-4.4%</td>
<td>1,167</td>
<td>2.2%</td>
<td>1,095</td>
<td>2.6%</td>
</tr>
<tr>
<td>2001-02</td>
<td>$19,044,220</td>
<td>9.5%</td>
<td>1,167</td>
<td>0.0%</td>
<td>1,091</td>
<td>-0.4%</td>
</tr>
<tr>
<td>2002-03</td>
<td>$23,662,920</td>
<td>24.3%</td>
<td>1,069</td>
<td>-8.4%</td>
<td>1,017</td>
<td>-6.8%</td>
</tr>
<tr>
<td>2003-04</td>
<td>$23,938,160</td>
<td>1.2%</td>
<td>1,150</td>
<td>7.6%</td>
<td>1,086</td>
<td>6.8%</td>
</tr>
<tr>
<td>2004-05</td>
<td>$25,591,820</td>
<td>6.9%</td>
<td>1,101</td>
<td>-4.3%</td>
<td>1,012</td>
<td>-6.8%</td>
</tr>
<tr>
<td>2005-06</td>
<td>$26,849,640</td>
<td>4.9%</td>
<td>1,147</td>
<td>4.2%</td>
<td>1,081</td>
<td>6.8%</td>
</tr>
<tr>
<td>2006-07</td>
<td>$29,196,430</td>
<td>8.7%</td>
<td>1,091</td>
<td>-4.9%</td>
<td>1,022</td>
<td>-5.5%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$183,870,456</strong></td>
<td>N.A.</td>
<td><strong>9,034</strong></td>
<td>N.A.</td>
<td><strong>8,471</strong></td>
<td>N.A.</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>$22,983,807</strong></td>
<td>7.3%</td>
<td><strong>1,129</strong></td>
<td>-0.5%</td>
<td><strong>1,059</strong></td>
<td>-0.5%</td>
</tr>
<tr>
<td><strong>Std. Dev.</strong></td>
<td><strong>$4,333,084</strong></td>
<td>8.9%</td>
<td>37</td>
<td>5.6%</td>
<td>36</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Note. Hawaii DOE high school instruction expenditure data are from Reports, Expenditures by School [Data file], n.d.a, Hawaii Department of Education at http://doe.k12.hi.us/reports/expenditures.htm, while graduating class size and completer data are from Reports, High School Completer Statistics [Data file], n.d.b, Hawaii Department of Education at http://doe.k12.hi.us/reports/highschoolcompleter.htm; and all collectively retrieved on July 1, 2009.
Table A4. Leeward District High School Instruction Expenditures, Graduation Class, and Completers

<table>
<thead>
<tr>
<th>School Year</th>
<th>Instruction Expenditures</th>
<th>Percentage Change</th>
<th>Graduation Class Size</th>
<th>Percentage Change</th>
<th>Total Completers</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>$27,599,848</td>
<td>N.A.</td>
<td>1,872</td>
<td>N.A.</td>
<td>1,779</td>
<td>N.A.</td>
</tr>
<tr>
<td>2000-01</td>
<td>$28,309,690</td>
<td>2.6%</td>
<td>1,854</td>
<td>-1.0%</td>
<td>1,793</td>
<td>0.8%</td>
</tr>
<tr>
<td>2001-02</td>
<td>$31,279,600</td>
<td>10.5%</td>
<td>1,884</td>
<td>1.6%</td>
<td>1,818</td>
<td>1.4%</td>
</tr>
<tr>
<td>2002-03</td>
<td>$40,771,380</td>
<td>30.3%</td>
<td>1,901</td>
<td>0.9%</td>
<td>1,838</td>
<td>1.1%</td>
</tr>
<tr>
<td>2003-04</td>
<td>$43,151,300</td>
<td>5.8%</td>
<td>2,145</td>
<td>12.8%</td>
<td>2,060</td>
<td>12.1%</td>
</tr>
<tr>
<td>2004-05</td>
<td>$46,586,500</td>
<td>8.0%</td>
<td>2,152</td>
<td>0.3%</td>
<td>1,961</td>
<td>-4.8%</td>
</tr>
<tr>
<td>2005-06</td>
<td>$48,727,980</td>
<td>4.6%</td>
<td>2,307</td>
<td>7.2%</td>
<td>2,186</td>
<td>11.5%</td>
</tr>
<tr>
<td>2006-07</td>
<td>$51,845,330</td>
<td>6.4%</td>
<td>2,235</td>
<td>-3.1%</td>
<td>2,130</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Totals</td>
<td>$318,271,628</td>
<td>N.A.</td>
<td>16,350</td>
<td>N.A.</td>
<td>15,565</td>
<td>N.A.</td>
</tr>
<tr>
<td>Mean</td>
<td>$39,783,953</td>
<td>9.7%</td>
<td>2,044</td>
<td>2.7%</td>
<td>1,946</td>
<td>2.8%</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>$9,535,619</td>
<td>9.4%</td>
<td>185</td>
<td>5.5%</td>
<td>162</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Note. Hawaii DOE high school instruction expenditure data are from Reports, Expenditures by School [Data file], n.d.a, Hawaii Department of Education at http://doe.k12.hi.us/reports/expenditures.htm, while graduating class size and completer data are from Reports, High School Completer Statistics [Data file], n.d.b, Hawaii Department of Education at http://doe.k12.hi.us/reports/highschoolcompleter.htm; and all collectively retrieved on July 1, 2009.

Table A5. Econometric Results: Instruction Expenditures and Completers (2000-2007)

<table>
<thead>
<tr>
<th></th>
<th>Honolulu District</th>
<th>Central District</th>
<th>Windward District</th>
<th>Leeward District</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORRELATION ANALYSIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Coefficient</td>
<td>-0.333</td>
<td>0.544</td>
<td>-0.587</td>
<td>0.889</td>
</tr>
<tr>
<td><strong>LINEAR REGRESSION ANALYSIS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.111</td>
<td>0.296</td>
<td>0.344</td>
<td>0.791</td>
</tr>
<tr>
<td>ANOVA Significance Value</td>
<td>0.420</td>
<td>0.163</td>
<td>0.126</td>
<td>0.003</td>
</tr>
<tr>
<td>Unstandardized Coefficient</td>
<td>-0.000005707</td>
<td>0.000006762</td>
<td>-0.000004837</td>
<td>0.00001512</td>
</tr>
</tbody>
</table>

Note. Correlation and linear regression results were generated with PASW 18.0 for Windows.
Abstract

Beginning teacher induction is an important process in acculturating teachers to their new profession (Kearney, 2010). Researchers argue that the first year of teaching is crucial in the success, retention and development of teachers (Smith & Ingersoll 2004). The aim of this research is to ascertain the effectiveness of induction programmes in Catholic Independent High Schools in NSW; establish whether those programmes are congruent with what the literature deems as best practice; and to determine the implications this has for policy for the independent school sector. The study will comprise: an extensive literature review; a document review of induction/mentoring policies in NSW and in the schools chosen for the research; and in-depth interviews with administrators and participants of induction programmes. Researchers point out that the support and guidance in the first year of teaching is critical in arresting growing attrition rates and enabling the capacity to establish beginning teachers as valuable members of the profession (Smith & Ingersoll 2004, Wong 2004). With a looming teacher shortage crisis in NSW, effective induction programmes could be the answer; however, there has been insufficient research, especially in the independent sector, with regards to these programmes.

Key Words
Induction, Beginning Teacher, Teacher Attrition, Mentoring
Introduction
The art of becoming a successful and effective educator is not one that happens overnight; however, in most cases this is what beginning teachers are faced with. Recent graduates who apply for a teaching position and get offered a job are often required to carry out the same responsibilities and function as the seasoned veteran in the next classroom, on the first day of their new career. Can this be right? Is there another profession that demands of its new recruits what it expects of their more experienced colleagues?

It is no wonder that in New South Wales, in particular, we are facing a teacher shortage crisis (Australian Associated Press [AAP], 2008). With the baby-boom generation of teachers nearing retirement and an estimated 40% of the teaching community retiring in the next five years, coupled with a 25% attrition rate of teachers within their first five years of teaching (Department of Education, Science & Training, 2003), we face an uncertain future. Is New South Wales, or Australia, any different from the United States or Britain? In the U.S., Ingersoll & Smith (2004) found that up to 40-50% of beginning teachers leave the profession in the first five years. The numbers are similar in the U.K. where 30% of teachers leave in the first five years (Adams, 2003).

There seems to be a growing trend in Australia for teachers to abandon their training and move on to other fields. While this was also the case in the United States, this trend has slowed significantly since the Global Financial Crisis and growing unemployment rates in the U.S.; however, it is possible that this trend will continue once the economy has improved and unemployment rates are low and steady. While it is difficult to speculate about the varying reasons teachers are leaving the profession, Smith and Ingersoll (2004) report a correlating link between teachers who are inducted into their workplace and attrition rates; they say that involvement in an induction program reduces the probability of teachers leaving the school or the profession by up to 20%. Noting this link between attrition and induction, and the ‘looming teacher crisis’ in New South Wales, it would seem practical and reasonable to suggest that implementing effective induction could help to improve the situation in the long-term.

The promotion of effective on-going induction is not new, nor is it unfamiliar in the New South Wales public school system. In 2002, the Australian commonwealth Government published, An Ethic of Care: Effective Programs for Beginning Teachers, which recommended induction and mentoring for all beginning teachers in Australia, and subsequently, NSW has instituted policy that mandates some aspects of the recommendations. This however, is not the case in many independent schools. Because all registered schools, public, independent, and Catholic systemic in Australia receive funding, there is scope to ensure that government recommendations are upheld; however, because of the lack of government monitoring and bureaucracy in independent schools, this does not seem to be the case.

This paper presents initial findings from research currently being conducted and will illustrate some of the key issues surrounding the problems faced by beginning teachers and how, through the implementation of effective on-going induction, these problems may be ameliorated. First, key ideas from the research and the literature in both the United States and Australia regarding induction will be presented. Second, findings from the literature review with regards to what constitutes effective induction will be presented and justified. Lastly, a discussion of the proposed methodology and expected outcomes of the research will be presented followed by concluding comments.

Key Findings from the Research
Defining Induction
If one inference can be made from the literature, it is that induction has various meanings and can be described in many different ways. Definitions of induction range from simple orientation (Martinez, 1994) to system-wide, on-going support that becomes part of an integrated professional development program (Wong, 2004). With such varying degrees of interpretation it is difficult for schools, and teachers, to understand what constitutes effective induction and for school leaders to implement...
programs. In Australia, the Department of Education, Science and Training (2002), notes that the term induction denotes a ‘critical phase’ in a ‘continuum of professional development’ (p.11).

Martinez (1994) says that the term induction needs to be considered very carefully to avoid an interpretation that results in orientation to the workplace. Therefore, for the purpose of this research project it was essential to determine what constitutes effective induction as a starting point in analysing current programs. The operational definition of induction for this research is based on the Australian Commonwealth Government’s recommendations and the Victorian state government’s definition, which is founded on the premise of developing learning communities:

Beginning teacher induction is defined as, “the primary phase in the continuum of beginning teacher professional development towards their progression into the learning community and continuing professional development throughout their career” (Kearney, 2010).

Problems Faced by Beginning Teachers

The difficulties beginning teachers face in commencing their career are well documented in the literature: failure to receive mentoring and supervision, receiving support for behaviour management, excessive responsibilities and lack of recognition for professional growth (McCormack, 2005; Ramsey, 2000) are all common issues raised by beginning teachers. While many of these same dilemmas might be faced in similar professions among newcomers, the extent to which teaching happens in isolation from professional peers, as well as the obvious variables of dealing with up to thirty students simultaneously, compounds these problems to the point that teachers face burnout (Wojnowski et al., 2003).

King and Newman (2000) report a correlating link between the extreme challenges faced by beginning teachers and the quality of teaching and learning that is occurring in those classrooms where teachers struggle. This is not a problem realised solely by academics and those conducting research, most of this criticism comes from anecdotal feedback received and research concerning the perceptions of teachers in their early career who indicate that professional development and support, specifically in their early years of teaching, would help alleviate some of the difficulties faced during this time (Desimone, Porter, Garet, Suk Yoon & Birman, 2001).

Attrition and Retention

Although the alarming attrition rates amongst teachers have been discussed, it is important to look at this from an alternate point of view, teacher retention. What is the responsibility of the profession with regards to teacher retention? Smith and Ingersoll (2004) found a correlating link between induction and a 20% increase in retention of teachers who were inducted into their workplace. The DEST in Australia, has stated that an on-going induction process “is essential for effective teaching” (2002, p.11). If the research confirms that induction is successful at retaining teachers, why do Smith and Ingersoll (2004) point out that in many cases, beginning teachers are left on their own, “to either succeed or fail in their own classrooms?” (p.682).

In 2002 the DEST found that administrative supervisors reported that 82.6% of teachers were mentored, while only 39.9% reported that they received mentoring. The overall findings in this study indicate, “variation and inconsistency in the management of induction” (DEST, 2002 p.16). The Australian Education Union has been conducting surveys of beginning teacher over the past few years and they have found that in each of the past three years, there has been an increase in the number of beginning teachers who report not having participated in either on-going induction or formal mentoring. In 2007 they found that 55.3% of teachers in their first three years of teaching had not had on-going induction and 52.7% had not had formal mentoring; this was a 7% increase from the findings of the previous year. These findings are in stark contrast to the recommendations of the Australian DEST (2002), which states that all beginning teachers should undergo an induction process that includes mentoring and on-going support. According to the Ramsey Report (2000) this systematic ambivalence towards recommendations is not uncommon in Australia:
Teaching is the most reviewed profession in Australia ... since 1980 there have been 20 significant national and state reviews of teacher education. The most common characteristic of these reviews has been the lack of action on their recommendations. This situation contrasts markedly with other professions (par. 35).

These findings are astounding when compounded with the current rates of attrition amongst beginning teachers. Induction programs for beginning teachers are thought to be the most useful practice to assist new teachers and prevent attrition and burnout (Serpell, 2000; Wojnowski et al., 2003), yet we ignore this aspect and complain about the looming ‘teacher shortage crisis’. Attrition however, should not be the sole justification for the introduction of induction, rather, there should be a focus on support, longevity and the subsequent effect it will have on the quality of teaching and learning in the classroom.

Theoretical Underpinnings of Induction

The conceptual groundwork for this research project relied heavily on Lave and Wenger’s Situated Learning (1991), which further relates to Vygotsky’s theory that learning is a social construct and that people best learn through social interaction. Based on the premise of social cognition, Situated Learning and Legitimate Peripheral Participation (Lave & Wenger, 1991) form the basis for the construction of learning communities in schools and amongst staff. Lave and Wenger (1991) suggest that such learning is situated in a specific context and embedded within a particular social and physical environment; in this case the school. Through a process of Legitimate Peripheral Participation, the beginning teacher becomes accustomed to the community (teaching profession) they have newly entered and through participation in that community they move from the periphery into full participation in that community; in this instance, through the process of on-going induction.

The transformation to a learning community is the purpose of an effective on-going induction program not only designed to relieve the stress of early career teachers, but also to acculturate that teacher into an organisation that is focused on professional learning and quality teaching and learning in the classroom (Kearney, 2010).

Characteristics of Effective Induction

A review of five relevant studies1 was conducted to determine what constitutes effective induction: AEU 2006, which surveyed beginning teachers across Australia; NCTAF 2005, which examined induction into learning communities in schools across the U.S.; Smith and Ingersoll (2004), which investigated the effects of induction on beginning teacher attrition; Wong (2004), which considered the ways that induction programmes help improve beginning teacher practice; and, DEST (2002), which examined effective programmes for beginning teachers in Australia. Of the fifteen elements of induction mentioned in the five studies, the elements that were chosen to denote effective induction for the purpose of this project had to be represented in three of the five studies. Only one element of induction was advocated by all five of the studies as being essential for effective induction, Provision of a Mentor. Structured time release, external meetings and seminars, and being part of a larger professional development program were deemed essential by four of the five studies. Lesson observation and multi-dimensionality scored lowest, only being mentioned by one of the five studies. The other three elements that make up the seven ‘best practice’ characteristics for effective induction are: professional support, collaboration with staff and beginning teacher conferences.

The seven characteristics of ‘best practice induction’ for the purpose of this research are:

- Professional Support
- Structured Time Release
- Collaboration with Staff

---

1 Wong 2004; Ingersoll & Smith 2004; NCTAF 2005; AEU 2006; DEST 2002
• External Meetings or Seminars
• Beginning Teacher Conferences
• Provision of a Mentor
• Induction as part of a larger school, district, or state based programme of learning

Methodology
A qualitative, collective case study has been selected for this research project to examine the nature of effective induction in the particular schools chosen. Because this study specifically involves independent Catholic schools, it will be important for the researcher to focus solely on the particular characteristics of those schools and their programs in the given context. Stake (2000) states that collective case studies are chosen because it is believed that, “understanding them [the various cases] will lead to a better understanding perhaps better theorizing, about a still larger collection of cases” (p.437). While this study will concentrate on the six cases chosen, it is not intended that these cases will be typical of the norm; rather, it is the exceptionality of these cases that will be showcased. This project is concerned with the process and nature of induction on a broader scale throughout the independent education sector; therefore, it hopes to present the nature of effective induction and make recommendations to apply this on a broader scale.

The study will comprise four phases:

• The first phase is an extensive literature review, the purpose of which is twofold:
  o to develop an operational definition of induction for the purpose of the study, and
  o to determine the critical elements for ‘best practice’ induction, which will establish the schools that are selected for the study and their congruence with the literature.

• The second phase will be the selection of the schools to be part of the collective case study.
  o This will be done through purposive sampling. The researcher has worked in the Independent Catholic education sector and will use contacts at particular schools, the AIS (Association of Independent Schools) and the IEU (Independent Education Union) to ascertain what schools are conducting effective induction.
  o The collective case study will comprise of three boys’ and three girls’ Catholic Independent high schools in the Sydney region. Sydney was chosen because it has the densest population of these schools in NSW. And single gender schools were chosen because there are only two co-educational Catholic independent high schools in Sydney, and therefore are not typical of the population.

• The third phase is a policy review.
  o An examination of policies and policy statement of administrators of induction programs and/or executive boards of the schools that are chosen for the study.
  o An extensive review of policies, documents, recommendations and procedures regarding induction by government departments, unions, and other organisations that work in conjunction with the independent education sector, i.e. IEU, AEU, AIS.

• The final phase of the research will be interviews with the administrators of the induction program and beginning teacher participants of those programs.
  o In-depth interviews will first be conducted with administrators of the program to ensure that the program selected meets the criteria for ‘best practice’ induction.

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2 The first phase has been completed and has been reported in this paper
These interviews will be used to identify: congruency with administrative expectation and teacher goals; compatibility with best practice; how the programs were developed; and, how the program is evaluated and improved.

- In-depth interviews with teachers who are or have participated in the program.
- These interviews will be used to determine the nature of the program implemented, specifically: purpose, success factors, limitations and the processes of administration of the program.

**Expected Outcomes & Implications**

This study hopes to ascertain the nature of effective induction in independent Catholic high schools in NSW and make policy recommendations to the AIS (Association of Independent Schools) to implement professional development programs for school administrators to instruct them with regards to the value of implementing induction for their beginning teachers. A central aim in this research project is to give teachers a voice with regards to what they think and what they need to support them through those critical first few years in their careers so that they may flourish as educators and provide the best educational experience to their students. Lastly, this study can provide a platform for further research within the independent education sector nation-wide in Australia to ensure that there is more monitoring in these schools, and government recommendations and policies are being implemented and adhered to. Further research could examine the positive and negative effects of the programs in this study, to validate the findings that these programs are successful.

**Concluding Comments**

The definition of induction can be determined through a review of the literature; however, further research is needed to determine how schools in the independent sector define and implement induction. The finding by the DEST (2002) about the discrepancy between what is reported and what is actually happening suggests that induction is not fully understood by administrators or inductees. The research also reveals that many systems fail to differentiate between the terms mentoring and induction and often use the terms interchangeably (Wong 2004). This fundamental misunderstanding of the rationale and objective of induction makes further research necessary.

While significant research has been conducted in induction, most of the pre-eminent studies in Australia are nation-wide studies, which, while significant, have not focussed on any particular system in order to propose detailed modifications to improve current practice. What is needed is additional rigorous and specific research that examines the nature and context of beginning teacher induction in particular sectors of education so that policy proposals can be made where current policy is either inadequate or does not currently exist. The independent sector of education, because it is the least regulated by both federal and state agencies and has no bureaucratic hierarchy, can potentially be seen as the sector that may be the most non-compliant with current trends, suggestions and mandates by the governing institutions.

In NSW, the governing body for teacher certification is the NSW Institute of Teachers. While this body does not implement policy, they have the capacity to mandate certain criteria for beginning teachers before they become ‘professionally competent’. In 2005 the Institute welcomed the Australian Government’s establishment of a National Institute of Quality Teaching and School Leadership, which listed induction and mentoring as key elements for improving teaching across Australia; this however, has not resulted in mandating any such programmes or requirements for beginning teachers in NSW.

The successful development of early career teachers into effective educators needs to be at the forefront of educational reform. If we acknowledge that quality teaching is one of the most, if not the most, significant factor effecting student achievement levels (Hattie 2003), then ensuring that teachers are capable of delivering quality education has to be at the forefront of educational reform.

This paper seeks to open the discussion with regards to the importance of induction and mentoring to new teachers. The ‘sink or swim’ mentality of the 20th century needs to be revolutionised to foster the
career and the development of our young teachers, to make them effective educators of the next generation. By ignoring our teachers’ development into successful and effective educators, we are subsequently overlooking their impact on future generations.
References


Department of Education Science and Training. (2002). An Ethic of Care: Effective Programs for Beginning Teachers. Canberra AGPS.


The Implementation of Kindergarten-Primary Transitional Strategy on Children of the New Immigrant in Remote Preschool Educational Institutions in Taiwan Area

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Abstract

The purpose of this study is to investigate the implementation of kindergarten-primary transitional strategies on children of the new immigrant in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County. The study adopts literature analytic method and questionnaire survey. The results of the study are as follows:

1. The implementation of kindergarten-primary transitional strategy of "School adaption": the result of the dimension in "Life adaption" is “good”, and the results of the dimensions in "Curricular content", “Learning attitude” and “Learning methods” are “normal”.

2. The implementation of kindergarten-primary transitional strategy of "Life adaption": the result of the dimension in “Adaption for self-life-management” is “very good”, the results of the dimensions in “Adaption for regulations” and “Adaption for interpersonal relationship” are “good”.

3. The implementation of kindergarten-primary transitional strategy of “Special assistance for children of the new immigrant”: the results of the dimensions in “Link between kindergarten and primary school”, “the link among family, school and the community”, and “personal needs of children of the new immigrant” are "remain to be improved”.

4. The implementation of the kindergarten-primary transitional strategy of “School life adaption”, “Life adaption” and “Special assistance for the children of the new immigrant” reaches significant difference on variable “Scale of the preschool educational institution”, “Number of teachers”, “Number of students in top class in kindergarten”, “Number of children of the new immigrant”, “Implementation of the subsidiary service of after-school nursery” and so on.

Keywords: Kindergarten-primary transitional education, Education for children of the new immigrant, School adaption, Life adaption
I  Preface

The purpose of preface is to explore the related study background and the main focus of the study, including: (1) Study background and motivation (2) Purpose of the study (3) Study questions.

1. Study motivation and study background

In Taiwan, post-industrialization has widened the difference in personal income and enlarged the gap between the rich and the poor. What’s worse, the influence of globalization has resulted in more violent competition in trading, increasing unemployment rate and the deterioration of gap between the rich and the poor; therefore, students with deficient social resources have greater difficulty adapting themselves to this society. In the process of fulfilling the dreams, it happens that some children can’t make their dreams come true, such as the physically-challenged, the poor or children living in a remote area. These children are categorized as those who have deficiency in physical condition, economic status, living environment, cultural incentives and access to information. Lin(2009) specifically pointed out that education is the only effective way to get these children out of poverty and help them catch up with others in their studies regardless of the fact that they come from either the new poor family or the near poor family. Chen(2009) also put forward that school along with the social administrative organization can work together to help disadvantaged students to maintain equal opportunity and quality in learning; besides, to help them study in class without worrying their basic living quality has become the top priority.

In Taiwan, some countries in remote areas are surely categorized as disadvantaged school district. They have to face the problem of increasing outward migration of population. Lin(2009) pointed out that the formation of disadvantaged school district usually derived from the outward migration of economy as well as population. The gradual lack of economic capital and cultural capital year by year causes the serious problem in outward migration of outstanding students. As a result, the situation of the disadvantaged school districts has become worse and worse.

Hung(2009) pointed out that in the context of globalization, formation of international enterprises, and global labor market cause the international movement of working population and the immigration of foreign workers. Besides, the revolution of transportation has made the international marriage and multiple nationalities much more common. Thus, when speaking of education for immigrants, we should put emphasis on the following issues, such as social and cultural adaption, the education on children of the new immigrant, the understanding and acceptance of multiple cultural differences. (Hung, 2002)

Ryan and Grieshaber(2005) advocated that more globalized issues be emphasized in our child education, such as racial and economic subjects. The existing elements of active, heterogeneous, multi-linguistic, multi-cultural facts draw our attention to the upcoming child education. Page(2000) also hold the point that family, culture and community play an vital role in the development of skill, ability, life experience, value, and achievement in a child’s future life. Currently, in our educational reform, the understanding of both local racial culture and various kinds of
international cultures is being emphasized in the Nine-year Compulsory Education as well as seen as the required characteristic of a future citizen. The enforcement of multi-cultural education has become the top priority. (Hung, 2009) The child education and its system are part of the cultural environment which are constantly shaped and changed by the ongoing globalization. (Hsu, 2009)

The immigrant population from south-east Asia has increased in these two decades. (Hsu & Hsu, 2008) The former studies showed that the new south-east Asian immigrant will face a number of problems after moving to Taiwan, such as communicating problem, different eating habit, varied climate, confined interpersonal relationship, deviant family concepts, excessive self-protection, unstable family structure, and limitation on their educational degree and ability of Chinese, and so on. These studies also showed that the new immigrants not only face those personal problems but also their children may confront many educational difficulties (Yang, 2006; Chen & Chou & Huang & Huang, 2004; Ke, 2004), including problems in children’s mental development because their immigrant parents are lack of nursery information, problems in children’s school learning because their immigrant parents have difficulty in interpersonal communication. What’s worse, some immigrant marriage may fall into commodification. (Wang & Chang, 2001; Hsia, 2000) If these children of the new immigrant don’t get good care, or enough social stimulations, it’s highly possible that they will have problems in future adaption in the society. Therefore, preschool education should take responsibility for educating these new immigration children and help them adjust to the society well during the kindergarten-primary transitional period.

In Taiwan, the enrollment rate of children of the new immigrant has reached the climax since 2002. In schools of certain counties, the children of the new immigrant will occupy over 20 percent of the first grader in primary school. (Chinatimes, 2002) In addition, the number of children of the new immigrant of 2006 has transcend the number of aboriginal students and become the largest group subsidized by the government in nine-year compulsory education system. (Yang, 2006) Based on the statistics, the number of children of new immigrant from different cultural backgrounds is on the rise, at the meanwhile, the whole Taiwan society is now in the trend of the decline in birth-rates. The above-mentioned phenomenon has become an important part of Taiwan education.

As for the learning condition of children of the new immigrant in the preschool phase, Hsu and Hsu (2008) discovered that if we utilize after-school picture book reading method, the designed interventional guiding activities, their linguistic comprehensive competence, pronouncing ability, oral expression and other aspects of development in language will be greatly improved. Therefore, we can infer that the poor academic performance of these students result from limitation on the non-personal background, especially the lack of social stimulations. If we can be active in providing adequate support for these students in the kindergarten-primary transitional phase, that will be a great help for their adaption in learning.

Hsu (2009) also mentioned that the preschool education is essential to the children of the new immigrant especially in their communication skill, interpersonal interaction, social adaption and the formation of recognition, which pave the way to
get better competitive ability. Both government and civil organization all pay attention to the issue that how to effectively improve the linguistic ability of children of the new immigrant now.

The purpose of promoting the kindergarten-primary transitional education of the children of the new immigrant is to improve their adaption ability, which is greatly emphasized in top class of kindergarten. Sun(2005) proposed that the implementation of kindergarten-primary transitional education in top class should adopt gradual management for group regulation, rearrange the classroom tables and chairs, help them adapt to primary school classroom in advance and so on. Hsu(2009) also advocated that improvement of their adaption can be done by helping them adjust to the school bell rings and how to use the toilet, by guiding them to get familiar with the school surroundings, by the cooperation between kindergarten or primary teachers, even by teaching them Chinese spelling and word recognition in advance. However, as the parents’ excessive expectation come along with the test-oriented education system, our teaching may fall into the dull and repeated drill.

Chang(2003) pointed out that special children from kindergarten to primary school phase need the transitional educational measures which has at least five following features: 1. A well-designed and individualized transitional plan: which takes children’s individual differences into consideration, make good use of their critical time and can assess the implementation of various service of in-time intervention. 2. development of ones’ fundamental ability in adjusting to the environment: which includes ability of taking care of oneself, obeying regulations, managing one’s life, interacting with others and controlling one’s temper, ect. 3. the efficient use of family supporting system: which is the key element to successful transitional education. 4. system of providing supportive service in group work: which makes adquate project, has good filing management, cooperates with others well and provides various supportive and related transitional service. 5. Government’s providing measures of transitional service: which includes the enactment of regulation relating to kindergarten-primary school, establishment kindergarten-primary transitional system, opportunity offered to teachers for retraining, promoting of parenting education, providing resource room, professional assistance, individualized family service project and so on.

Hains, Rosenkoetter & Fowler(1991) once pointed out that during the transitional process, we need systematic planning, formative assessment, continual refinement and parental involvement to meet individual’s need. Although children of the new immigrant aren’t categorized as special children, in their growing process, they have to face plenty of limitation on language, culture, living surroundings and self-recognition. Therefore, compared with normal students, children of the new immigrant need more assistance for adaption, and that’s why the strategies of kindergarten-primary transitional education become so much more important.

In school adaption, Xu(1987) indicated that this issue should contain student-teacher relationship, adaption in learning, and peer relationship and so on. Tsai(1993) pointed out the problems of adaption in the first grader in primary school, including problems in curricular comprehension, adjusting to learning environment, learning style and learning pressure which make these children feel ill at ease in
school. Chen(1999) mentioned that the problems of adaption should include the aspects of learning behavior and attitude toward school. Sun(2004) also advocated that on one hand, with the change in curricular design in nine-year compulsory education, the teaching content has become more interesting and attracting, but on the other hand, more pressure in learning has increased. Other factors like the number of students of a class, the proportion between teacher and student, children’s cultural and social background and parents’ attitude toward education still affect the adaption to school and learning in the kindergarten-primary transitional phase. The main difference between kindergarten and primary school is the way of teaching, class management, regulation enactment, curricular design, assessment on learning, classroom decoration, communication between parents and teachers. The above-mentioned differences actually accounts for the difficulty in their adaption in the transitional phase.

Xu(1987) proposed that life adaption should include adaption for regulation and ability in self-management. Chen(1999) mentioned that the factors accounts for the poor life adaption should contain student-teacher relationship, and interpersonal relationship and so on. Sun(2004) also advocated that the main problem in adaption can be divided into three aspects: in life aspect, it includes adaption in regulation, interpersonal relationship, self-management; in learning aspect, it includes curricular content, learning environment, learning attitude, learning methods. The reasons to the problems may include the different type between kindergarten and primary school, personal problem as the first grader, parental attitude, and teaching staff in both two types of education institutions as well as the different learning surroundings.

Foreign studies showed that the early experience in school will affect the learning behavior, academic performance and peer relationship afterwards. (Alexander · Dauber & Entwisle · 1996; Kagan & Neuman · 1998) As a result, during the transitional process, the problem of the adaption in school and life can’t be overemphasized, of which the adaption of children of the new immigrant in disadvantaged school district requires much more active intervention to promote their study. In conclusion, the kindergarten-primary transitional education is more common in normal school district, but it doesn’t aim at meeting the need of children of the new immigrant and those disadvantaged school districts. Therefore, this study focus on how these kindergarten-primary transitional educational institutions in remote areas of Taoyuan, Hsinchu and Miaoli county provide more concrete assistance for improving their adaption in school and in daily life.

2. Purpose of Study

Based on the above-mentioned study background and motivation, the purposes of this study are as follow:

(1) To get a clear understanding of the implementation of kindergarten-primary transitional strategy on “School adaption” in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County.

(2) To get a clear understanding of the implementation of kindergarten-primary transitional strategy on “Life adaption” in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County.
(3) To get a clear understanding of the implementation of kindergarten-primary transitional strategy on children of the new immigrant in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County.

(4) To provide concrete strategies and suggestions for the implementation of kindergarten-primary transitional education as reference.

3. Study Questions
Based on the study purpose, the study questions are as follow:
(1) What’s the implementation of remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County?
(2) What’s the implementation of kindergarten-primary transitional strategy on “School adaption” in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County?
(3) What’s the implementation of kindergarten-primary transitional strategy on “Life adaption” in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County?
(4) What’s the implementation of kindergarten-primary transitional strategy for children of the new immigrant in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County?
(5) What’s the connection between the implementation of preschool educational institutions and the kindergarten-primary transitional strategy?

II. Study method

1. Study sample
The sampling of this study focuses on the 30 remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County, 10 schools for each county, including public and private ones. Questionnaire survey as the study method is mainly delivered to the president or owner of the preschool educational institution. The delivery of the questionnaire is handing in person by a designated agent. Thirty questionnaires is delivered and recycled; thus, the recycling rate reaches to 100%.

2. Study tool
This study adopts literature analytic method and focuses on the analysis of kindergarten-primary transitional education. These analyses are divided into four parts: (1) the implementation of preschool educational institutions; (2) scale for the school adaption; (3) scale for the life adaption; (4) scale for the special assistance for the new immigration students. The questionnaire survey is based on Likert-type scale. The higher scores one gets in mean, the more common it is in the implementation of this strategy. The mean scores between 4.01~5.00 represents that the condition of implementation is “very good”; the mean scores between 3.01~4.00 represents that the condition of implementation is “good”; the mean scores between 2.01~3.00 represents that the condition of implementation is “normal”; the mean scores between 1.00~2.00 represents that the condition of implementation is “remain to be improved”.

The pretest sample of this study is the 20 preschool educational institutions in Taoyuan, Hsinchu and Miaoli County. To examine the consistency of the questions in the questionnaire, the study adopts Factors Analysis approach to test the Construct Validity. Besides, to examine the consistency of the subject’s answers to the questions, the study adopts Cronbach’s α to test the Reliability. According to Nunnally (1979), ,
Cronbach’s $\alpha$ has to reach above 0.7 to get good internal consistency reliability. The fact that the Cronbach’s $\alpha$ of this study reaches 0.83 indicates that the study tool has good internal consistency reliability.

3. Procedure
The questionnaire survey is proceeded by designated agent during October, 2009. While recycling the questionnaire, this designated agent is asked to examine whether the questionnaire is missing or not finished. The result is that the recycling rate reaches 100% and the validity rate also reaches 100%.

4. Study analysis method
The information derived from questionnaire survey is then analyzed by SPSS 13.0 to get the mean, standard deviation, t-test, and one-way ANOVA. If the result reaches the significant difference on one-way ANOVA, then it will be examined by Scheffe method later.

III．Study Result
1. The implementation of remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County

(1) Scale of preschool educational institutions
Preschool educational institutions with only 1 bottom class, only 1 middle class and 1 top class in the kindergarten (or less than 3 classes in a kindergarten) are called small scale; ones with 2 classes in each level in the kindergarten (or less than 4~6 classes in a kindergarten) are called middle scale; ones with over 3 classes in each level in the kindergarten (or more than 7 classes in a kindergarten) are called large scale. The study subjects consist of 25 small scale ones, which occupy 83.3%, 4 middle scale ones, which occupy 13.3% and 1 large scale one, which occupies 3.3%. (See Chart 1)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of cases (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small scale</td>
<td>25</td>
<td>83.3</td>
</tr>
<tr>
<td>Middle scale</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Large scale</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(2) Number of teachers in preschool educational institutions
This study divides the number of teachers in preschool educational institutions into 5 groups, which are 1~3, 4~6, 7~9, 10~12 and over 12 teachers in one kindergarten. Of all the study subjects, there are 20 kindergartens with 1~3 teachers per school, which occupy 66.6%; 6 kindergartens with 4~6 teachers per school, which occupy 20%; 2 kindergartens with 7~9 teachers per school, which occupy 6.6%; 2 kindergartens with 10~12 teachers per school, which occupy 6.6%, but none with over 12 teachers. (See Chart 2)
Chart 2 **Number of teachers in preschool educational institutions**

<table>
<thead>
<tr>
<th>Number of teachers</th>
<th>Number of cases (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1~3</td>
<td>20</td>
<td>66.6</td>
</tr>
<tr>
<td>4~6</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>7~9</td>
<td>2</td>
<td>6.6</td>
</tr>
<tr>
<td>10~12</td>
<td>2</td>
<td>6.6</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

(3) **Number of students in the top class of preschool educational institution**

The study divides the number of students in top class in preschool educational institution into 5 groups, which are below 10, 11~15, 16~20, 21~25 and over 26 students in top class per school. Of all the study subjects, there are 15 kindergartens with 11~15 students in the top class, which occupy 50.0%, 6 kindergartens with below 10 students in the top class, which occupy 30.0%, 4 kindergartens with 16~20 students in the top class, which occupy 13.3%, 3 kindergartens with 21~25 students in the top class, which occupy 10.0% and 2 kindergartens with over 26 students in the top class, which occupy 6.6%. (See Chart3)

Chart 3 **Number of students in the top class of preschool educational institution**

<table>
<thead>
<tr>
<th>Number of students in the top class</th>
<th>Number of cases (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6</td>
<td>30.0</td>
</tr>
<tr>
<td>11~15</td>
<td>15</td>
<td>50.0</td>
</tr>
<tr>
<td>16~20</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>21~25</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>26</td>
<td>2</td>
<td>6.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

(4) **Number of children of the new immigrant in the preschool educational institutions**

The study divides the number of children of the new immigrant in the preschool educational institutions into 5 groups, which are below 10, 11~15, 16~20, 21~25 and over 26 children of the new immigrant per school. Of all the study subjects, there are 21 kindergartens with 16~20 students per school, which occupy 70.0%, 4 kindergartens with 21~25 students per school, which occupy 13.3%, 3 kindergartens with below 10 students per school, which occupy 10.0%, 2 kindergartens with 11~15 students per school, which occupy 6.6%, but none with over 26 students. (See Chart 4)
Chart 4 Number of new immigration student in the preschool educational institutions (N=30)

<table>
<thead>
<tr>
<th>Number of children of the new immigrant in the top class</th>
<th>Number of cases (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>11~15</td>
<td>2</td>
<td>6.6</td>
</tr>
<tr>
<td>16~20</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td>21~25</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>26</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(5) Implementation of the subsidiary service of after-school nursery in preschool educational institutions

The subsidiary service of after-school nursery is the same as the so-called day care center in Taiwan. Of all the study subjects, there are 18 kindergartens with the subsidiary service of after-school nursery, which occupy 60.0%, 12 kindergartens with no subsidiary service of after-school nursery, which occupy 40.0%. (See Chart 5)

Chart 5 Implementation of the subsidiary service of after-school nursery in preschool educational institutions (N=30)

<table>
<thead>
<tr>
<th>subsidiary service of after-school nursery</th>
<th>Number of cases (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Without</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

2. Implementation of kindergarten-primary transitional education in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County

(1) School adaption

1. Curricular content

Study on this variable contains dimension of “Increase in subject teaching and knowledge memorization” (M=3.55), “Increase in paper-based assignment” (M=3.87), “Learning scheduled assignment and lesson” (M=2.32), “Static activities more than dynamic activities” (M=2.05). The mean of “Overall assessment on variable Curricular content” is 2.94, which means the implementation is “normal”. (See Chart 6)

Chart 6 Curricular content in School adaption (N=30)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in subject teaching and knowledge memorization</td>
<td>3.55</td>
<td>2.08</td>
</tr>
<tr>
<td>Increase in paper-based assignment</td>
<td>3.87</td>
<td>3.12</td>
</tr>
<tr>
<td>Learning scheduled assignment and lesson</td>
<td>2.32</td>
<td>2.97</td>
</tr>
<tr>
<td>Static activities more than dynamic activities</td>
<td>2.05</td>
<td>2.88</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>2.94</td>
<td>2.91</td>
</tr>
</tbody>
</table>
2. Learning environment

Study on this variable contains dimensions of “Teaching facility based on the kindergarten-primary transitional pattern” (M=2.35), “Classroom arrangement based on static teaching” (M=4.33), “Arrangement of classroom tables and chairs based on pattern of primary school” (M=4.65), “Learning environment suitable for group lecturing” (M=4.03). The mean of “Overall assessment on variable Learning environment” is 3.82, which means the implementation is “good”. (See Chart 7)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching facility based on the kindergarten-primary transitional pattern</td>
<td>2.35</td>
<td>3.11</td>
</tr>
<tr>
<td>Classroom arrangement based on static teaching</td>
<td>4.33</td>
<td>3.45</td>
</tr>
<tr>
<td>Arrangement of classroom tables and chairs based on pattern of primary school</td>
<td>4.65</td>
<td>3.44</td>
</tr>
<tr>
<td>Learning environment suitable for group lecturing</td>
<td>4.03</td>
<td>3.64</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>3.82</td>
<td>3.32</td>
</tr>
</tbody>
</table>

3. Learning attitude

Study on this variable contains dimensions of “Assistance for developing students’ favorite subjects” (M=2.07), “Assistance for increasing the motivation to go to school” (M=1.89), “Inspection on the accomplishment of assignment” (M=3.57) and “Assistance for developing attention span and never-give-up attitude”. The mean of “Overall assessment on variable Learning attitude” is 2.13, which means the implementation is “normal”. (See Chart 8)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance for developing students’ favorite subjects</td>
<td>2.07</td>
<td>4.23</td>
</tr>
<tr>
<td>Assistance for increasing the motivation to go to school</td>
<td>1.89</td>
<td>2.78</td>
</tr>
<tr>
<td>Inspection on the accomplishment of assignment</td>
<td>3.57</td>
<td>3.98</td>
</tr>
<tr>
<td>Assistance for developing attention span and never-give-up attitude</td>
<td>1.90</td>
<td>4.01</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>2.13</td>
<td>3.99</td>
</tr>
</tbody>
</table>

4. Learning method

Study on this variable contains dimensions of “Assistance for learning to write paper-based assignment” (M=4.23), “Assistance for learning to arrange time” (M=1.33), and “Assistance for developing self-learning ability” (M=1.50), “Assistance for developing the learning skill in communicating between teacher and student and asking questions” (M=1.87). The mean of “Overall assessment on variable Learning method” is 2.22, which means the implementation is “normal”. (See Chart 9)
Chart 9 **Learning method in School adaptation** *(N=30)*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance for learning to write paper-based assignment</td>
<td>4.23</td>
<td>2.10</td>
</tr>
<tr>
<td>Assistance for learning to arrange time</td>
<td>1.33</td>
<td>3.34</td>
</tr>
<tr>
<td>Assistance for developing self-learning ability</td>
<td>1.50</td>
<td>3.48</td>
</tr>
<tr>
<td>Assistance for developing the learning skill in communicating between teacher and student and asking questions</td>
<td>1.87</td>
<td>3.95</td>
</tr>
<tr>
<td><strong>Overall assessment</strong></td>
<td>2.22</td>
<td>3.67</td>
</tr>
</tbody>
</table>

(2) **Life adaption**

**A. Adaption for regulation**

Study on this variable contains dimensions of “Not speaking or walking around at random during class” *(M=4.55)*, “Raising hands before talking and speaking with adequate volume” *(M=3.57)*, “Enacting class regulations and obeying the rules” *(M=2.33)*, and “Obeying class regulations and behave well” *(M=3.88)*. The mean of “Overall assessment on variable Adaption for regulation” is 3.58, which means the implementation is “good”. (See Chart 10)

Chart 10 **Adaption for regulation in Life adaption** *(N=30)*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not speaking or walking around at random during class</td>
<td>4.55</td>
<td>3.04</td>
</tr>
<tr>
<td>Raising hands before talking and speaking with adequate volume</td>
<td>3.57</td>
<td>2.12</td>
</tr>
<tr>
<td>Enacting class regulations and obeying the rules</td>
<td>2.33</td>
<td>4.34</td>
</tr>
<tr>
<td>Obeying class regulations and behave well</td>
<td>3.88</td>
<td>3.89</td>
</tr>
<tr>
<td><strong>Overall assessment</strong></td>
<td>3.58</td>
<td>3.44</td>
</tr>
</tbody>
</table>

**B. Adaption for interpersonal relationship**

Study on this variable contains dimensions of “Assistance for students in talking with teachers and asking questions bravely” *(M=4.55)*, “Assistance for students’ cooperation with each other” *(M=4.55)*, “Learning to make good friends or comforting classmates” *(M=4.55)*, and “Decreasing the argument with classmates and Accepting unwelcome classmates” *(M=4.55)*. The mean of “Overall assessment on variable Adaption for interpersonal relationship” is 3.58, which means the implementation is “good”. (See Chart 11)

Chart 11 **Adaption for interpersonal relationship in Life adaption** *(N=30)*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance for students in talking with teachers and asking questions bravely</td>
<td>1.25</td>
<td>2.97</td>
</tr>
<tr>
<td>Assistance for students’ cooperation with each other</td>
<td>3.55</td>
<td>3.79</td>
</tr>
<tr>
<td>Learning to make good friends or comforting classmates</td>
<td>2.75</td>
<td>2.33</td>
</tr>
<tr>
<td>Decreasing the argument with classmates and Accepting unwelcome classmates</td>
<td>2.56</td>
<td>3.45</td>
</tr>
</tbody>
</table>
C. Adaption for self-life-management

Study on this variable contains dimensions of “Adjustment in work-and-rest time” (M=4.50), “Assistance for adjusting the regularity of living” (M=2.20), “Checking and putting away personal items” (M=4.80), and “Self-management on basic living” (the build up of habits in dressing, dinning and hygiene) (M=4.75). The mean of “Overall assessment on variable Adaption for self-life-management” is 4.06, which means the implementation is “very good”. (See Chart 12)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustment in work-and-rest time</td>
<td>4.50</td>
<td>3.09</td>
</tr>
<tr>
<td>Assistance for adjusting the regularity of living</td>
<td>2.20</td>
<td>4.65</td>
</tr>
<tr>
<td>Checking and putting away personal items</td>
<td>4.80</td>
<td>3.33</td>
</tr>
<tr>
<td>Self-management on basic living</td>
<td>4.75</td>
<td>3.78</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>4.06</td>
<td>3.45</td>
</tr>
</tbody>
</table>

(3) Special assistance for children of new immigrant

A. Link between kindergarten and primary school

Study on this variable contains dimensions of “Holding transitional conference on the information of teaching staff” (M=1.25), “Letting children of new immigrant take part in the activities in primary school and get familiar with the system of primary school” (M=1.50), “Letting children of new immigrant visit the primary school and the learning condition in class” (M=1.30), and “Letting children of new immigrant in top class in kindergarten participate in the stimulate environment and work-and-rest pattern of primary school” (M=2.45). The mean of “Overall assessment on variable Link between kindergarten and primary school” is 1.62, which means the implementation is “remain to be improved”. (See Chart 13)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding transitional conference on the information of teaching staff</td>
<td>1.25</td>
<td>2.37</td>
</tr>
<tr>
<td>Letting children of new immigrant take part in the activities in primary school and get familiar with the system of primary school</td>
<td>1.50</td>
<td>2.79</td>
</tr>
<tr>
<td>Letting children of new immigrant visit the primary school and the learning condition in class</td>
<td>1.30</td>
<td>3.07</td>
</tr>
<tr>
<td>Letting children of new immigrant in top class in kindergarten participate in the stimulate environment and work-and-rest pattern of primary school</td>
<td>2.45</td>
<td>3.64</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>1.62</td>
<td>3.01</td>
</tr>
</tbody>
</table>
B. Link among family, school and community

Study on this variable contains dimensions of “Emphasizing parental education and understanding of the learning condition of the new immigration students” (M=2.35), “Assistance for parents in establishing correct concept on kindergarten-primary transitional education and setting adequate expectation on their children” (M=1.34), “Combining resources and activities in community for promoting kindergarten-primary transitional education” (M=1.20) and “Increasing opportunity in cooperation among parents, teachers in kindergarten and primary school, and people living in the community” (M=2.55). The mean of “Overall assessment on variable Link among family, school and community” is 1.86, which means the implementation is “remain to be improved”. (See Chart 14)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasizing parental education and understanding of the new immigration students</td>
<td>2.35</td>
<td>3.41</td>
</tr>
<tr>
<td>Assistance for parents in establishing correct concept on kindergarten-primary transitional education and setting adequate expectation on their children</td>
<td>1.34</td>
<td>2.44</td>
</tr>
<tr>
<td>Combining resources and activities in community for promoting kindergarten-primary transitional education</td>
<td>1.20</td>
<td>2.90</td>
</tr>
<tr>
<td>Increasing opportunity in cooperation among parents, teachers in kindergarten and primary school, and people living in the community</td>
<td>2.55</td>
<td>2.39</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>1.86</td>
<td>3.24</td>
</tr>
</tbody>
</table>

C. Individual need of children of new immigrant

Study on this variable contains dimensions of “Improvement on the linguistic and reading comprehensive ability” (M=3.50), “Attention on interpersonal interaction” (M=2.46), “Understanding the development of children of the new immigrant and providing individual-based education” (M=1.55), and “Involving the teaching on Chinese spelling, recognition on words and numbers randomly in the teaching process” (M=3.25). The mean of “Overall assessment on variable Individual need of children of the new immigrant” is 2.96, which means the implementation is “normal”. (See Chart 15)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement on the linguistic and reading comprehensive ability</td>
<td>3.50</td>
<td>4.33</td>
</tr>
<tr>
<td>attention on interpersonal interaction</td>
<td>2.46</td>
<td>3.76</td>
</tr>
<tr>
<td>Understanding the development of children of the new immigrant and providing individual-based education</td>
<td>1.55</td>
<td>3.53</td>
</tr>
<tr>
<td>Involving the teaching on Chinese spelling, recognition on words and numbers randomly in the</td>
<td>3.25</td>
<td>4.24</td>
</tr>
</tbody>
</table>
teaching process
Overall assessment  2.69  3.87

3. Connection between implementation of the remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli county and the kindergarten-primary transitional strategies

(1) School adaption
A. Scale of preschool educational institution

This study adopts one-way ANOVA to analyze the variable “Scale of preschool educational institution” on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, and “Learning method”. The result of the dimension of “Learning attitude” (F=2.14, p < .05) and “Learning method” (F=.79, p < .05) reaches the significant difference because of different scale of preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method (p > .05). (See Chart 16)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular content</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>1.62</td>
<td>--</td>
</tr>
<tr>
<td>Learning environment</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>.08</td>
<td>--</td>
</tr>
<tr>
<td>Learning attitude</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>2.14*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Learning method</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>.79*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>2.43</td>
<td>--</td>
</tr>
</tbody>
</table>

* p < .05   ** p < .01   *** p < .001

B. Number of teachers in preschool educational institutions

This study divides the number of teachers in preschool educational institutions into 5 groups, which are 1~3, 4~6, 7~9, 10~12 and over 12 teachers in one kindergarten. Of all the results, there is no preschool educational institution with over 12 teachers; thus, after deleting this group, this study adopts one-way ANOVA to analyze the variable “Number of teachers in preschool educational institution” on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, and “Learning method”. The result of the dimension of “Learning attitude” (F=2.14, p < .05) reaches the significant difference because of different number of teachers in preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffé method (p > .05). (See Chart 17)
C. Number of students in top class in preschool educational institution

This study adopts one-way ANOVA to analyze the variable “Number of students in top class in preschool educational institution” on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, “Learning method”. The result of the dimension of “Curricular content” (F=2.21, p<.05), “Learning environment” (F=4.40, p<.05), “Learning attitude” (F=1.63, p<.05), “Learning method” (F=1.05, p<.05) and “School adaption” (F=3.23, p<.05) will be different because of different number of students in senior class in preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method (p>.05). (See Chart 18)
children of the new immigrant in the preschool educational institutions” on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, and “Learning method”. The result of the dimension of “Curricular content” (F=1.38, p < .05), “Learning attitude” (F=.75, p < .05) and “Learning method” (F=.21, p < .05) reaches the significant difference because of different number of new immigration students in preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method (p > .05). (See Chart 19)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular content</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>1.38*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Learning environment</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>3.16</td>
<td>--</td>
</tr>
<tr>
<td>Learning attitude</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>.75*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Learning method</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>.21*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>2.66</td>
<td>--</td>
</tr>
</tbody>
</table>

* p < .05   ** p < .01   *** p < .001

E. Implementation of the subsidiary service of after-school nursery in preschool educational institutions

The study adopts T-test to analyze two groups “With subsidiary service of after-school nursery” and “Without subsidiary service of after-school nursery” on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, and “Learning method”. The result of “Curricular content”(t=9.55, p < .001), “Learning attitude”(t=8.31, p < .01) and “Learning method”(t=4.67, p < .05) reaches significant difference because of whether the preschool educational institution has subsidiary service of after-school nursery or not. (See Chart 20)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curricular content</td>
<td>Yes</td>
<td>4.05</td>
<td>2.53</td>
<td>9.55***</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1.27</td>
<td>3.66</td>
<td>1.27</td>
</tr>
<tr>
<td>Learning environment</td>
<td>Yes</td>
<td>3.85</td>
<td>1.87</td>
<td>12.43</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3.77</td>
<td>2.08</td>
<td></td>
</tr>
<tr>
<td>Learning attitude</td>
<td>Yes</td>
<td>2.73</td>
<td>2.63</td>
<td>8.31**</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1.23</td>
<td>3.94</td>
<td></td>
</tr>
<tr>
<td>Learning method</td>
<td>Yes</td>
<td>2.60</td>
<td>3.35</td>
<td>4.67*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1.65</td>
<td>2.13</td>
<td></td>
</tr>
<tr>
<td>Overall assessment</td>
<td></td>
<td>2.77</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05   ** p < .01   *** p < .001
(2) Life adaption

A. Scale of preschool educational institution

This study adopts one-way ANOVA to analyze the variable “Scale of preschool educational institution” on the dimensions of “Adaption for regulation”, “Adaption for interpersonal interaction”, “Adaption for self-life-management”. The result of the dimension of “Adaption for interpersonal interaction” ($F=2.13$, $p<.05$), and “Adaption for self-life-management” ($F=.75$, $p<.05$) reaches the significant difference because of different scale of preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method ($p>.05$). (See Chart 21)

Chart 21 Scale of preschool educational institution in Life adaption under ANOVA

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test($F$)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaption for regulation</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>.97</td>
<td>--</td>
</tr>
<tr>
<td>Adaption for interpersonal interaction</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>2.13*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for self-life-management</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>.75*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>1.08</td>
<td>--</td>
</tr>
</tbody>
</table>

* $p<.05$  ** $p<.01$  *** $p<.001$

B. Number of teachers in preschool educational institutions

This study divides the number of teachers in preschool educational institutions into 5 groups, which are 1~3, 4~6, 7~9, 10~12 and over 12 teachers in one kindergarten. Of all the results, there is no preschool educational institution with over 12 teachers in a kindergarten; thus, after deleting this group, this study adopts one-way ANOVA to analyze the variable “Number of teachers in preschool educational institutions” on the dimensions of “Adaption for regulation”, “Adaption for interpersonal interaction”, “Adaption for self-life-management”. The result of the dimension of “Adaption for regulation” ($F=2.32$, $p<.05$), “Adaption for interpersonal interaction” ($F=.68$, $p<.05$) and “Adaption for self-life-management” ($F=.99$, $p<.05$) reaches the significant difference because of different number of teachers in preschool educational institutions, but doesn’t reach significant difference after being analyzed by Scheffe method ($p>.05$). (See Chart 22)
Chart 22 Number of teachers in preschool educational institutions in Life adaptation under ANOVA

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaption for regulation</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>2.32*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for interpersonal interaction</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>.68*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for self-life-management</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>.99*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>2.43</td>
<td>--</td>
</tr>
</tbody>
</table>

* p < .05   ** p < .01   *** p < .001

C. Number of students in top class in preschool educational institution

The study divides the number of students in top class in preschool educational institution into 5 groups, which are below 10, 11~15, 16~20, 12~25 and over 26 students in top class per school. This study adopts one-way ANOVA to analyze the variable “Number of students in top class in preschool educational institution” on the dimensions of “Adaption for regulation”, “Adaption for interpersonal interaction”, “Adaption for self-life-management”. The result of the dimension of “Adaption for regulation” (F= 0.79, p < .01), “Adaption for interpersonal interaction” (F=2.11, p < .05), “Adaption for self-life-management” (F=4.09, p < .05) and “Whole life adaption” (F=2.12, p < .05) reaches the significant difference because of different number of students in top class in preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method (p > .05). (See Chart 23)

Chart 23 Number of students in top class in preschool educational institution in Life adaptation under ANOVA

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaption for regulation</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>.79**</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for interpersonal interaction</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>2.11*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for self-life-management</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>4.09*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>2.12*</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

* p < .05   ** p < .01   *** p < .001

D. Number of new immigration children in the preschool educational institutions

The study divides the number of children of new immigrant in the preschool educational institutions into 5 groups, which are below 10, 11~15, 16~20, 21~15 and over 26 children of the new immigrant per school. Of all the results, there is no preschool educational institution with over 26 new
children of the new immigrant in a kindergarten; thus, after deleting this group, this study adopts one-way ANOVA to analyze the variable “Number of children of the new immigrant in the preschool educational institutions” on the dimensions of “Adaption for regulation”, “Adaption for interpersonal interaction”, “Adaption for self-life-management”. The result of the dimension of “Adaption for regulation” ($F=2.46, p<.05$), “Adaption for interpersonal interaction” ($F=.76, p<.05$), and “Adaption for self-life-management” ($F=3.42, p<.05$) reaches the significant difference because of the different number of children of the new immigrant in the preschool educational institutions, but doesn’t reach significant difference after being analyzed by Scheffe method ($p>.05$). (See Chart 24)

Chart 24 Number of new immigration children in the preschool educational institutions in Life adaption under ANOVA

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaption for regulation</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>2.46*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for interpersonal interaction</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>.76*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Adaption for self-life-management</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>3.42*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>4.07</td>
<td>--</td>
</tr>
</tbody>
</table>

* $p<.05$  ** $p<.01$  *** $p<.001$

E. Implementation of the subsidiary service of after-school nursery in preschool educational institutions

The study adopts T-test to analyze two groups “With subsidiary service of after-school nursery” and “Without subsidiary service of after-school nursery” on the dimensions of “Adaption for regulation”, “Adaption for interpersonal interaction”, “Adaption for self-life-management”. The result of the dimension of “Adaption for regulation” ($t=7.35, p<.05$), and “Adaption for interpersonal interaction” ($t=9.14, p<.05$) reaches the significant difference because of whether the preschool educational institution has subsidiary service of after-school nursery or not. (See Chart 25)

Chart 25 Implementation of the subsidiary service of after-school nursery in preschool educational institutions in Life adaption under T-test

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaption for regulation</td>
<td>Yes</td>
<td>3.88</td>
<td>1.97</td>
<td>7.35*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3.13</td>
<td>2.86</td>
<td></td>
</tr>
<tr>
<td>Adaption for interpersonal interaction</td>
<td>Yes</td>
<td>2.65</td>
<td>2.77</td>
<td>9.14*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2.32</td>
<td>3.59</td>
<td></td>
</tr>
<tr>
<td>Adaption for self-life-management</td>
<td>Yes</td>
<td>4.08</td>
<td>4.23</td>
<td>7.67</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>4.03</td>
<td>3.77</td>
<td></td>
</tr>
</tbody>
</table>
(3) Assistance for children of the new immigrant

A. Scale of preschool educational institutions

This study adopts one-way ANOVA to analyze the variable “Scale of preschool educational institution” on the dimensions of “Link between kindergarten and primary school”, “Link among parents, schools, and community”, “Individual need of children of the new immigrant” and “Overall special assistance for children of the new immigrant”. The result of the dimension of “Link between kindergarten and primary school” (F=.71, \( p < .05 \)) and “Individual needs of children of new immigrant” (F=1.34, \( p < .05 \)) reaches the significant difference because of the different scale of preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method (\( p > .05 \)). (See Chart 26)

Chart 26 Scale of preschool educational institutions in Assistance for children of the new immigrant under ANOVA

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levene-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link between kindergarten and primary school</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>.71*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>1.68</td>
<td></td>
</tr>
<tr>
<td>Individual needs of children of the new immigrant</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>1.34*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Overall assessment</td>
<td>2</td>
<td>27</td>
<td>29</td>
<td>2.09</td>
<td></td>
</tr>
</tbody>
</table>

* \( p < .05 \)   ** \( p < .01 \)   *** \( p < .001 \)

B. Number of teachers in preschool educational institutions

This study divides the number of teachers in preschool educational institutions into 5 groups, which are 1~3, 4~6, 7~9, 10~12 and over 12 teachers in one kindergarten. Of all the results, there is no preschool educational institution with over 12 teachers; thus, after deleting this group, this study adopts one-way ANOVA to analyze the variable “Number of teachers in the preschool educational institutions” on the dimensions of “Link between kindergarten and primary school”, “Link among parents, schools, and community”, “Individual need of children of the new immigrant” and “Overall special assistance for children of the new immigrant”. The result of the dimension of “Link between kindergarten and primary school” (F=3.87, \( p < .05 \)), “Link among parents, schools, and community” (F=2.69, \( p < .05 \)), “Individual need of children of the new immigrant” (F=4.51, \( p < .05 \)) and “Overall special assistance for children of the new immigrant” (F=3.49, \( p < .05 \)) reaches the significant difference because of the different number of teachers in preschool educational institution. After being analyzed by Scheffe method, only the result of the
dimension of “Overall special assistance for children of the new immigrant” reaches significant difference ($p < .05$). Besides, the result of school with 4–6, 7–9, 10–12 teachers has much higher scores than that of school with 1–3 teachers. (See Chart 27)

**Chart 27 Number of teachers in preschool educational institutions in Assistance for children of the new immigrant under ANOVA**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link between kindergarten and primary school</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>3.87*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>2.69*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Individual needs of children of the new immigrant</td>
<td>3</td>
<td>26</td>
<td>29</td>
<td>4.51*</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$  ** $p < .01$  *** $p < .001$

**C. Number of students in top class in preschool educational institution**

The study divides the number of students in top class in preschool educational institution into 5 groups, which are below 10, 11~15, 16~20, 12~25 and over 26 students in top class per school. This study adopts one-way ANOVA to analyze the variable “Number of students in top class in preschool educational institution” on the dimensions of “Link between kindergarten and primary school”, “Link among parents, schools, and community”, “Individual need of children of the new immigrant” and “Overall special assistance for children of the new immigrant”. The result of the dimension of “Individual need of children of the new immigrant” (F=2.11, $p < .05$) reaches the significant difference because of different number of students in top class in preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method ($p > .05$). (See Chart 28)

**Chart 28 Number of students in top class in preschool educational institution in Assistance for children of the new immigrant under ANOVA**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Levenn-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link between kindergarten and primary school</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>1.45</td>
<td>--</td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>.94</td>
<td>--</td>
</tr>
<tr>
<td>Individual needs of</td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>2.11*</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
children of the new immigrant

Overall assessment 4 25 29 2.59 --

D. Number of children of new immigrant in the preschool educational institutions

The study divides the number of children of the new immigrant in the preschool educational institutions into 5 groups, which are below 10, 11~15, 16~20, 21~15 and over 26 children of the new immigrant per school. Of all the results, there is no preschool educational institution with over 26 new immigration children in a kindergarten; thus, after deleting this group, this study adopts one-way ANOVA to analyze the variable “Number of children of the new immigrant in the preschool educational institutions” on the dimensions of “Link between kindergarten and primary school”, “Link among parents, schools, and community”, “Individual need of children of the new immigrant” and “Overall special assistance for children of the new immigrant”. The result of the dimension of “Individual need of children of the new immigrant” ($F=1.89, p<.05$) reaches the significant difference because of different number of students in top class in preschool educational institution, but doesn’t reach significant difference after being analyzed by Scheffe method ($p>.05$). (See Chart 29)

Chart 29 Number of children of new immigrant in the preschool educational institutions in Assistance for children of the new immigrant under ANOVA

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Df(between groups)</th>
<th>Df(in group)</th>
<th>Df(total)</th>
<th>Leven-test(F)</th>
<th>Scheffe method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link between kindergarten and primary school</td>
<td>3 26 29</td>
<td>.86</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>3 26 29</td>
<td>2.24</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual needs of children of the new immigrant</td>
<td>3 26 29</td>
<td>1.89*</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall assessment</td>
<td>3 26 29</td>
<td>1.48</td>
<td>--</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E. Implementation of the subsidiary service of after-school nursery in preschool educational institutions

The study adopts T-test to analyze two groups “With subsidiary service of after-school nursery” and “Without subsidiary service of after-school nursery” on the dimensions of “Link between kindergarten and primary school”, “Link among parents, schools, and community”, “Individual need of children of the new immigrant” and “Overall special assistance for children of the new immigrant”. The result of the dimension of “Link between kindergarten and primary school” ($t=8.53, p<.05$),
“Link among parents, schools, and community” ($t=11.47$, $p<.01$) and “Individual need of children of the new immigrant” ($t=7.35$, $p<.001$) reaches the significant difference because of whether the preschool educational institution has subsidiary service of after-school nursery or not. (See Chart 30

**Chart 30** Implementation of the subsidiary service of after-school nursery in preschool educational institutions in Assistance for children of the new immigrant under T-test

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link between kindergarten and primary school</td>
<td>Yes</td>
<td>1.70</td>
<td>2.13</td>
<td>8.53*</td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>No</td>
<td>1.50</td>
<td>2.82</td>
<td></td>
</tr>
<tr>
<td>Individual needs of children of the new immigrant</td>
<td>Yes</td>
<td>2.03</td>
<td>3.79</td>
<td>11.47**</td>
</tr>
<tr>
<td>Link between kindergarten and primary school</td>
<td>No</td>
<td>1.65</td>
<td>3.01</td>
<td></td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>Yes</td>
<td>2.90</td>
<td>3.22</td>
<td>7.35***</td>
</tr>
<tr>
<td>Link among parents, schools, and community</td>
<td>No</td>
<td>2.37</td>
<td>2.98</td>
<td></td>
</tr>
</tbody>
</table>

* $p<.05$  ** $p<.01$  *** $p<.001$

**IV、Conclusion and Suggestion**

Based on the study results, the conclusion and the suggestion are as follow:

1. Conclusion

1. The implementation of the remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County

   A. The remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County are mainly in small scale.

   This study shows that the remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County are mainly in small scale, then in middle scale, then in large scale.

   B. The number of teacher in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County is mainly in the form of one teacher in one classroom.

   This study discovers that the number of teachers in each classroom is mainly in the form of 1~3 teachers in one classroom, then 4~6, then 7~9, then 10~12. Besides, the classroom with over 12 teachers is none. Based on the findings of this study, the number of teachers in the remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County is mainly in the form of one teacher in one classroom.

   C. The number of students in top class in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County is mainly in the
form of 11~15 students in one classroom.
This study discovers that the number of students in top class of kindergarten is mainly in the form of 11~15 students in one classroom, then below 10, then 16~20, then 21~25, then above 26.

D. The proportion of children of the new immigrant in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County is rather high.
This study shows that the number of children of the new immigrant in each classroom is mainly in the form of 16~20 children of the new immigrant in one classroom, then 21~25, then below 10, then 11~15. Besides, the classroom with above 26 ones is none.

E. The remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County mostly have subsidiary service of after-school nursery.
This study shows that the number of remote preschool educational institutions with subsidiary service of after-school nursery is much more than that with no subsidiary service of after-school nursery.

(2) The implementation of kindergarten-primary transitional strategy on remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County.

A. The implementation of kindergarten-primary transitional strategy on “School adaption”: the result of the dimension of “Learning environment” is “good”, the result of the dimension of “Curricular content”, “Learning attitude” and “Learning method” are “normal”; The result shows that the kindergarten-primary transitional education in remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County puts more emphasis on the planning of the learning environment; however, it still remain to be improved on the dimensions of “Curricular content”, “Learning attitude” and “Learning method”.

B. The implementation of kindergarten-primary transitional strategy on “Life Adaption”: the result of the dimension of “Life management” is “very good”, the result of the dimension of “Adaption for regulations” and “Adaption for interpersonal relationship” is “good”. As a result, the implementation of strategy on “Life adaption” is better than that on “School adaption”; Strategy on “Life management” receives more emphasis than strategy on “Adaption for regulations” and “Adaption for interpersonal relationship”.

C. The implementation of kindergarten-primary transitional strategy on “Special assistance for children of the new immigrant”: The result shows that the dimensions of “Link between kindergarten and primary school”, “Link among family, school and the community”, and “Individual needs of children of the new immigrant” are “remain to be improved”. It indicates that the proportion of children of the new immigrant enrolling in these remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County is rather high; however, these preschool educational institutions are not especially active in providing assistance for students of the new immigration. Therefore, the variable “Special assistance for children of the new immigrant” is “remain to be improved”.

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(3) The connection between the current implementation of the remote preschool educational institutions and the kindergarten-primary transitional strategy in Taoyuan, Hsinchu and Miaoli County.

A. The connection between the current implementation of the remote preschool educational institutions and the kindergarten-primary transitional strategy on “School adaption”:

a. The scale of the preschool educational institutions: the scale of the preschool educational institutions will affect the implementation of kindergarten-primary transitional strategy on dimensions of “Learning attitude” and “Learning method”.

b. The number of teachers in preschool educational institutions: the number of teachers in preschool educational institutions has significant difference on the implementation of the kindergarten-primary transitional strategy.

c. The number of students in top class in preschool educational institutions: the number of students in top class in preschool educational institutions has significant difference on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, “Learning methods” and the whole “School adaption”. The limitation that there is only one teacher in each classroom results in the difficulty of teachers in the implementation of kindergarten-primary transitional strategy in the sampling preschool educational institutions. Thus, the number of students in top class of kindergarten has become the key to the implementation of the kindergarten-primary transitional strategy.

d. The number of children of the new immigrant in preschool educational institutions: the number of children of the new immigrant in preschool educational institutions has significant difference on the dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, “Learning methods” under the limited number of teachers and the high proportion of children of the new immigrant.

e. The implementation of subsidiary service of after-school nursery in preschool educational institutions: whether the preschool educational institutions has subsidiary service of after-school nursery has significant difference on dimensions of “Curricular content”, “Learning environment”, “Learning attitude”, “Learning methods”. Besides, the school with subsidiary service of after-school nursery has better performance than those without subsidiary service of after-school nursery. The reason may be that school with subsidiary service of after-school nursery has better understanding on the educational system of primary school, but the exact reason still remains to be studied in the future.

B. The connection between the current implementation of the remote preschool educational institutions and the kindergarten-primary transitional strategy on “Life adaption”:

a. The scale of preschool educational institutions: the scale of preschool
educational institutions has significant difference on the dimensions of “Adaption for interpersonal relationship” and “Adaption for self-life-management”. This result indicates that the kindergarten-primary transitional strategy put varied degree of emphasis on “Learning attitude” and “Learning methods” because of different scale of the preschool educational institutions.

b. The number of teacher in preschool educational institutions: the number of teacher in preschool educational institutions has significant difference on dimensions of “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-life-management”. This result indicates that the number of teacher is one of the factors in affecting the adaption for these dimensions.

c. The number of students in top class of preschool educational institutions: the number of students in top class of preschool educational institutions has significant difference on dimensions “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-life-management”. When there are more students in top class of preschool educational institutions, the lack of teaching staff will cause difficulty in students’ life adaption; therefore, it may affect the effectiveness of the implementation of kindergarten-primary transitional strategy on dimensions of “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-life-management”.

d. The number of children of the new immigrant in preschool educational institutions: the number of children of the new immigrant in preschool educational institutions has significant difference on dimensions of “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-life-management”. The high proportion of children of the new immigrant in preschool educational institutions along with the one-teacher-to-one-class limitation will cause difficulty in the implementation of kindergarten-primary transitional strategy on dimensions of “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-life-management”.

e. The implementation of subsidiary service of after-school nursery in preschool educational institutions: the implementation of subsidiary service of after-school nursery in preschool educational institutions has significant difference on dimensions of “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-management”. We can infer that preschool educational institutions with subsidiary service of after-school nursery have more experience and put more emphasis on kindergarten-primary transitional strategy on “Adaption for regulation”, “Adaption for interpersonal relationship” and “Adaption for self-life-management”. The inference can be studied in afterwards research.

C. The connection between the implementation of preschool educational institutions and the kindergarten-primary transitional strategy.

a. The scale of preschool educational institutions: based on result of the study, in the kindergarten-primary transitional phase, the individual needs
of the children of the new immigrant vary from different scales of preschool educational institutions.

b. The number of teacher in preschool educational institutions: the number of teacher in preschool educational institutions has significant difference on dimensions of “Link between kindergarten and primary school”, “Link among family, school and the community”, “Individual needs of children of the new immigrant” and “special assistance for new immigration students”. The result indicates that schools with more teachers may provide more effective assistance in kindergarten-primary transitional phase.

c. The number of students in top class of preschool educational institutions: the number of students in top class of preschool educational institutions has significant difference on dimensions of “Individual needs of children of new immigrant”. When the preschool educational institutions with few teaching staff face too many students in senior class of kindergarten, the teachers may be unable to take care of each individual and meet their needs respectively.

d. The number of children of the new immigrant in preschool educational institutions: the number of children of the new immigrant in preschool educational institutions has significant difference on dimensions of “Individual needs of children of the new immigrant”. We may infer that teacher in class with more children of the new immigrant may be unable to focus on individual needs when teacher employs the kindergarten-primary transitional strategy.

e. The implementation of subsidiary service of after-school nursery in preschool educational institutions: the implementation of subsidiary service of after-school nursery in preschool educational institutions has significant difference on the dimensions of “Link between kindergarten and primary school”, “Link among family, school and the community”, “Individual needs of children of the new immigrant”. The result indicates that schools with subsidiary service of after-school nursery have more experience and understanding about kindergarten-primary transitional education.

2. Suggestion

(1) Suggestion for the preschool educational institutions

A. Increase the number of teacher in preschool educational institutions

This study discovers that the number of students in top class of preschool educational institutions is mainly about 11~15 students per classroom. However, due to the fact that there is usually only one teacher per classroom, teachers always face the problems in the implementation of kindergarten-primary transitional strategy in addition to their daily teaching and nursery task. The result of this study also shows that the increase in the number of teacher in preschool educational institutions has significant difference on dimensions of “Learning attitude”, “Adaption for regulation”, “Adaption of interpersonal relationship”, “Adaption for self-life-management”, “Link between kindergarten and primary school”, “Link among family, school and the community”, and “Individual needs of
children of the new immigrant”. In conclusion, to provide children of new immigrant good assistance for adaption in life and school by increasing the number of teaching staff has become the top priority.

B. Balance the proportion of teacher, student and the children of the new immigrant

This study shows that both the number of students in top class in kindergarten and the number of children of new immigrant have significant difference on the dimensions of “Learning attitude”, “Adaption for regulation”, “Adaption for interpersonal relationship”, “Adaption for self-life-management”, “Link between kindergarten and primary school”, “Link among family, school and the community”, “Individual needs of children of new immigrant” as well as the strategy on “Learning environment”. Although the number of teachers, around 11~15 per classroom, in preschool educational institutions of the sample schools meets the requirement of “Enforcement rule of the act of preschool education”, rule 8 “The number of students in kindergarten should be no more than 30 students per classroom”; however, the fact that there is only one teacher per classroom doesn’t meet the requirement of “Enforcement rule of the act of preschool education”, rule 7 “The class grouping should be base on the age of students in kindergarten and there should be two teachers in a classroom”. Thus, when it comes to the enrollment of many children of new immigrant and their poor learning condition, we should balance the proportion between teacher and student and adequately relief teachers’ amount of work in order to have better implementation of kindergarten-primary transitional strategy.

C. Increase the subsidiary service of after-school nursery in preschool educational institutions

This study reveals that the implementation of the subsidiary service of after-school nursery in preschool educational institutions has significant difference on dimensions of “Learning attitude”, “Adaption for regulation”, “Adaption for interpersonal relationship”, “Adaption for self-life-management”, “Link between kindergarten and primary school”, “Link among family, school and the community”, and “Individual needs of children of the new immigrant”. Schools with the subsidiary service of after-school nursery in preschool educational institutions may have more experience and better understanding of the educational system in primary school and, thus, can put more stress on the implementation of kindergarten-primary transitional strategy.

(2) Suggestion for the implementation of kindergarten-primary transitional Strategy

A. Emphasize more on curricular content, learning attitude and learning methods in “School adaption”

This study shows that the remote preschool educational institutions in Taoyuan, Hsinchu and Miaoli County put more emphasis on the dimension of “Learning environment”. However, implementation on the dimensions of
“Curricular content”, “Learning attitude”, and “Learning methods” still remains to be improved. The mean of the result of the following detailed dimensions - assignment on homework, learning according schedule, more static learning activities than dynamic ones, establishment of classroom facility based on the kindergarten-primary transitional pattern, as well as the assistance for developing their favorite subjects, enhancing their motivation to go to school, maintaining their attention span, arranging their learning time, developing the ability of self-learning, and skills in asking questions and communicating with teachers- is below 3.00. Therefore, these seem to be feasible strategies in the implementation of kindergarten-primary transitional education.

B. Emphasize more on the detailed items of “Life adaption”

The result of implementation on variable “Life adaption” is mainly “good”. However, as for the dimensions whose average is below 3.00, such as the enactment and obedience of class regulations, assistance for helping students ask questions and communicate with teachers, learning to make good friends, comforting classmates, decreasing the chances of argument with classmates, acceptance for unwelcome classmates, we should emphasize more on the implementation on these dimensions of “Life adaption”.

C. Strengthen the dimensions of “Link between kindergarten and primary school”, “Link among family, school and the community”, and “Individual needs of children of new immigrant” in variable “Special assistance for the children of the new immigrant”

In variable “Special assistance for children of the new immigrant”, the implementation of kindergarten-primary transitional strategy on the dimensions of “Link between kindergarten and primary school”, “Link among family, school and the community”, and “individual needs of children of the new immigrant” still remain to be improved. As for those whose average is below 3.00 are as follow:

a. Link between kindergarten and primary school: hold a transitional conference on the information of teaching staff for children of the new immigrant so that they can take part in the activities of primary school, and get familiar with the school system by letting them walk into the classroom in primary school to inspect and learn in a real context.

b. Link among family, school and the community: emphasize the importance of parental education so that parents of children of the new immigrant will get a better understanding about their children’s learning condition, the concept behind the kindergarten-primary transitional strategy and have a more adequate expectation on their children by combining the resources of the community and increasing the cooperation among family, school and community.

c. Individual needs of children of the new immigrant: focus on the promotion of appropriate education on interpersonal interaction and the development on every aspect of children of the new immigrant.

(3) Suggestion for parents, school and community

A. Suggestion for parents
a. Promote parents’ cooperation in the kindergarten-primary transitional phase: the study discovers that the kindergarten-primary transitional strategies which get lower mean scores in “School adaption, “Life adaption” or “Individual needs of children of the new immigrant” can be implemented at home; thus, it’s necessary to enhance the parents’ cooperation to stimulate more active involvement.

b. Promote parents’ active participation in parental activities and cooperation with teachers: the study indicates that the kindergarten-primary transitional strategies, including promotion of the parental education and the increase of parents’ understanding about their children’s learning condition, making adequate expectation, stimulation of cooperation among parents, teachers and community, are categorized as the parental dimension whose mean score isn’t over 3.00. It’s true that the implementation of strategies can’t be done only by school. We need parents’ involvement and cooperation. Thus, promotion in parents’ active participation in parental activities and emphasis on cooperation with teachers has become a top priority.

B. Suggestion for school
a. Promote active enforcement of kindergarten-primary transitional strategy in preschool educational institutions: the study shows that in variable “School adaption”, the mean scores of many dimensions are below 3.00. School need to be more active in enforcing related kindergarten-primary transitional strategies if the teaching staff and the arrangement of curriculum are permitted.

b. Emphasize the vertical connection between kindergarten and primary schools in preschool educational institutions: this study result indicates that preschool educational institutions with the subsidiary service of after-school nursery have significant difference on the implementation of kindergarten-primary transitional strategy. If preschool educational institutions can emphasize more on the vertical connection with the primary schools and its educational system, it’ll help to arrange feasible kindergarten-primary transitional strategy.

C. Suggestion for the community
a. Promote community’s providing resources and related activities to help children of the new immigrant: this study finds out that the mean scores of providing resources and related activities to promote the implementation of kindergarten-primary transitional strategy for children of the new immigrant is rather low (1.20). The mean scores indicate that the resources of community aren’t put to good use. If the preschool educational institutions can make good use of the resources in community, such as the places, activities or financial support, it’ll make the implementation of kindergarten-primary transitional strategy much more smooth and thorough.

b. Promote community’s Creation of safe and total acceptive mental environment to help children of the new immigrant: the study shows that the number of children of the new immigrant is one of the factors affecting the implementation of kindergarten-primary transitional
strategy in preschool educational institutions. To avoid the formation of bias, community should create a safe and total acceptive mental environment for these children of the new immigrant by holding activities, promoting the communication among parents, teachers, and people living in the community.

References


reading to the language tuition of the southeast Asia emigrants’ children in Taiwan. 


Sun, F.C. (2005). *Research on curriculum and teaching problems happened on the transition of kindergarten and primary school and what coping strategies are effective on these problems*. Chaoyang Journal of Humanities and Social Sciences, 3(1), 59-129.

Sun, F.C. (2004). *Research on curriculum and teaching problems happened on the transition of kindergarten and primary school and what coping strategies are effective on these problems*. Unpublished doctor’s thesis, National Taiwan Normal University, Department of Educational Psychology and Counseling, Taipei.


Training Pre-Service Teachers in Career Education

Abstract

This presentation will describe a program designed to train pre-service teachers in career development. An in-depth evaluation of this program will be discussed along with a presentation on the data gathered to date on this initiative. Implications for enhancing the career development of students in Grades 1-12 will be discussed.
Response to Call for Papers

Submission Title: How Job Corps Helps the Communities?
Topic Area: Vocational Institute – Education
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ABSTRACT

Motivation

Today's youth needs an opportunity to get proper training and education to support themselves and their families. Getting a second change at Job Corps can give youths an opportunity to acquire the education and training need to successfully obtain a job is essential for any community to function positively and prosper. Encouraging youth to continue their education in order to provide an adequate living for themselves not only help a community financially but also strengthens self-esteem and positive growth from within. Job training, along with the proper certificates and credentials ensures good matches for job expectations and quality work. Families that are self supporting are not on welfare and become a positive addition to the community. A win-win positive situation for all involved.

Problem statement

Several significant investigative studies release since January 2010 has exposed how unemployment is devastating for the uneducated, untrained and unqualified workers.

Job scarcity due to company closings and budget cuts are becoming a common occurrence. How can youth better prepared for the job market?

Approach

These finding were the genesis of a government call action in 1964 when President LB Johnson enacted the bill for programs. Job Corps was created in 1964 by Economic Opportunity Act (EOA). Sergeant Shriver, Director of the Office of Economic Opportunity, modeled the program on the Depression-era Civilian Conservation (CCC) which was established in 1930s as an emergency relief program. The CCC provided room, board, and employment to thousands of unemployed young people. Though the CCCs were discontinue after World War II, Job Corps built on many of its methods and strategies.

The first Job Corps center was opened on January 15, 1965, at Camp Catoctin, Maryland, near the Presidential retreat at Camp David. Although the Job Corps concept was originally designed to serve only men, Representative Edith Green of Oregon convinced Job Corps administrators that growing numbers of women were destined to become heads of households, and needed the skills to succeed in the workplace. The first women’s center was opened in Cleveland on April 9, 1965. By the end of 1965, 87 Job Corps centers serving 16,968 young people were operational.
Early Job Corps students typically attended more than one center to complete their training. Small rural centers provided basic education to 100 to 200 “corp members,” who graduated to larger center for more focused vocational training. “Women’s center” offered vocational training in food preparation, household service, health occupations, and clothing industries. Vocational offerings at men’s centers focused on construction trades. Over time, Job Corps’ training – and its student’s populations – have evolved. Co-educational was introduced at Tongue Point, Oregon in 1970; today, Job Corps centers are open to both men and women. Students can choose from more than 100 trades, including the following: infrastructure trades (carpentry, masonry, electrical, welding, etc.) including green trades, healthcare, apartment management, business, culinary arts, and many more.

Today, 123 Job Corps center in 48 states, the District of Columbia, and Puerto Rico, train nearly 60,000 students each year. Over 45 years, Job Corps has earned a reputation as the nation’s premier workforce training program for disadvantaged youth. By consistently being responsive to employer’s demands and the nation’s workforce needs, Job Corps has succeeded in meeting those needs by offering top-notch vocational training to students. As a testament to these successes, numerous bi-partisan political initiatives have supported Job Corps’ expansion to serve more disadvantaged young Americans with delivering results for the nation and the next generation. These programs led to reforms in many areas of education both academic and vocational.

**Results** - As a result of students attending Job Corps in Hawaii on Oahu:

- **2009** Hawaii Campus enrolled 241 trainees
- **2008** Nationally
  - GED 19.2%
  - High School 24.9%
  - Career Technical Trade 46.6%
  - Job or Military 51.8%
  - Average wage $8.85
  - School 10.4%
Community Projects:

Students and staff are involved in many community services projects and activities which includes the following:

- Kailua High School (painting)
- Aikahi Playground (constructed community playground)
- Academy of Pacific (fundraiser)
- Hawaii Food bank
- City and County of Honolulu
- City and County of Honolulu Parks and Recreation
- American Cancer Society
- Honolulu Police Department (traffic safety campaign)
- Harbor House (food distribution program)
- Salvation Army
- Senior Housing

Conclusions

As a result of Job Corp program today we have successfully educated youth who are now contributing back to the work force and to their communities. Professionals who owe their success to the program are famous alumni including George Foreman

References:

Creating Stories while Storytelling on Community TV
Poster Session ID # 261

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Abstract:

Storytelling can be an entertaining technique for education and language development in teaching English as a Second Language. Students often read stories in books, listen to stories from friends and watch stories on film. Storytelling becomes even more meaningful when students are asked to read folktales from their native countries in the classroom, the community and on community television. The practice and performance sessions of storytelling can lead to additional opportunities for language development. This poster session will share a storytelling project created for university ESL students from Japan studying in the U.S. This project was based on engagement theory which states when educators equip students with the tools to become self-motivated, real engagement in learning takes place (Wasserstein 1995) and when students see practice activities as meaningful, yet challenging, they will work harder to give their best performance (Schlechty 2002). The practice sessions were also given a product or performance focus, which Zorfass & Copel (1995) assert make them more meaningful to students. This approach led to successful opportunities for language development in listening/speaking and reading/writing classes. The poster will include examples of student Microsoft Publisher newsletters, photos, reflective writing samples, handouts for reading/writing and listening/speaking activities, CCTV student created program screenshots (“Japanese Folktales”), survey results and rubrics for project evaluation. Participants will leave with ideas for using technology in education and with pedagogical applications for various topics, and settings, and for teaching ESL.

References


Resident Faculty Leader Program at West Virginia University

By Scott Rubin
History 794 B – Dr. Michal McMahon

Started in 1996, the Resident Faculty Leader program at West Virginia University is a direct result of a Presidential Task Force charged with finding ways to improve student life on campus and making the Office of Student Life more student friendly. One of the major proposed recommendations of this task force was to include more faculty involvement in the residence halls in order to promote a more academically oriented environment. Supported by the central administration under the new President, David C. Hardesty Jr., a team of house masters, student resident assistants, and resident directors were assembled in February 1996 and empowered to redesign the freshman experience.¹ This group became the Resident Faculty Leader program we have in place today.

Upon taking office in July 1995, President Hardesty set out on his first day to put students at the center of the strategic thinking on the university. According to his book “Leading the Public University: Essays Speeches, and Commentary,” the goal of recentering the university on the student experience was set so that students would get off to a successful start and stay at the university for their entire college career. Retention numbers showed at the time that there had been a slow decrease in the number of West Virginia residents enrolling over the three years before Hardesty took office.²

There was also a sense of urgency to retain as many students as possible due to University figures predicting a continued decline of enrollment with in-state residents going along with a large decrease of high school students graduating from in state schools. The

¹ Re-Engineering the Freshman Experience at WVU. 1996
Western Interstate Commission on Higher Education posted a report in 1992 indicating that West Virginia would see a 21% drop in high school graduates by the year 2009.\footnote{Re-Engineering the Freshman Experience at WVU. 1996. It is also interesting to note that the number of high school graduates from surrounding states were all positive in this report and marked as “clear opportunities” for recruitment by WVU in 1994. Those states and their projected change in graduation numbers are: Maryland (59%), Virginia (38%), New Jersey (23%), and Pennsylvania (17%). These states are still today considered Primary Market States by the university.} This, along with changing state budget requirements for the university, forced the new administration to look at all options on the table for retaining first time freshman and recruiting new ones from in-state and the surrounding area in order to keep financially afloat.

In addition to these retention based problems, there were other issues the university had been dealing with for years that the new administration chose to investigate. Student housing was one of those areas that seemed to be key to retention efforts and to meeting the goals of the new President to make the university more student centered. What better place was there than where the students spent the majority of their out of class time to make an impact?

The idea of the university being more “Student Centered” was one that was mentioned frequently in the early days of the Hardesty administration. The West Virginia University Board of Trustees, as well as other university governance groups, urged the administration to “take on” the image of student centeredness as a way of returning the university to its roots as an institution that cared about its students. It was feared that the image of the school had shifted away from one that focuses on academic life and that the students seemed to value social
activities more than their educations. Part of the result of this new push was the creation of a new vision statement for the university which read:

“West Virginia University is a student-centered learning community meeting the changing needs of West Virginia and the nation through teaching, research, service, and technology.”

A considerable effort was made to apply this new vision to Student Affairs as this was seen as an area that immediate changes could be enacted. The residence halls were one area that the administration wanted to see fixed up as there had been behavioral problems and vandalism occurring that did not fit in well with the university’s new vision. Some university officials considered the residence halls to be out of control and unmonitored.

There were four downtown residence halls at the time (Arnold, Boreman, Stalnaker, and Dadisman) and the four halls part of the Evansdale Residential Complex (Bennett, Lyon, Braxton, and Brooke). According to multiple interviews done while compiling this paper, there seems to be a consensus that discipline was way too relaxed in the halls, rules were not adhered to, and quiet hours were not observed regularly across the campus. It was common for residents to break established policies, but continue living in the hall due to lack of policy enforcement or sanctions. Some estimates put vandalism damage to hall property at around $300,000 a year in the early 1990’s. Beds and dressers being thrown from windows and balconies, furniture disappearing from lounges, and holes punched through walls were some of the regular examples of some of the vandalism. It was felt that these problems led to an unruly atmosphere in the residence halls that were counterproductive to the goal of making the

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university more student centered. On top of this problem, leadership in the hall lacked an academic element and students seemed to not be getting the support they needed outside of the classroom.

In order to investigate ways to restructure and reorganize the residence hall experience, and Student Affairs in general, President Hardesty put together the Student Affairs Task Force on July 5, 1995 to study the current system in place and make recommendations on how to improve the residence hall atmosphere. This task force consisted of university officials as well as noncampus members and was charged with finding the biggest problem areas and offering ideas for improvement. Their preliminary report was submitted on September 6, 1995 and consisted of several recommendations to on how to move the university forward in a more student centered way. The task force listened to comments regarding their preliminary findings for several months and released their final report on January 16, 1996.

To live up to the new vision put in place by the administration, the Task Force recommended that a redesign of the residence halls could give students alternatives to going out, partying, or causing trouble inside the halls. By providing them with stable and entertaining programming in their residence hall, it was hoped that students would see there were different things to do on campus and that they would partake in some of the newly organized activities being provided to them by the residence hall staff.

In terms of addressing residence hall issues, one of the major recommendations made by the task force was to include more faculty involvement in residence hall life and to come up with a revised set of residence hall policies and sanctions to govern the every day conduct of

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5 Oral interviews with Dean of Students Dr. David Stewart and Housing Director Corey Farris. Completed March and April 2010.
students living on campus. It was felt that in order to reign in on the out of control nature of the halls, a stable judicial system was important to ensure the smooth operations of every day hall life.

Having been a Rhodes Scholar at Oxford University, President Hardesty decided that a good way to involve faculty in hall life would be to appoint a Hall Master to each residence. At Oxford, students live in one of several dozen colleges. These colleges not only house the dining facilities and residences of their students, but also provide much of the teaching responsibility for their residents. While it would not necessarily work to shift the academic course load to the residence hall staff, bringing a faculty member in as an authority figure and mentor was something that appealed to Hardesty and a decision was made to launch Operation Jumpstart in February 1996 to bring some of the University’s energetic, charismatic, senior faculty members to live in the residence halls as “house masters or leaders.”

This would be followed by Project 2000, an experimental program aimed at inserting faculty leaders into more permanent roles within the residence halls. According to Hardesty, “the basic, most fundamental thing we are changing, or exploring, is changing the way we run the residence halls and going to a ‘house master’ system. There would be a resident house master who would be a full tenured professor living in the residence halls.” The goal was to have the class of 2000 act as a trial group since they would be the first class to feel the benefits of the reworked residence hall program. These students would also fill out surveys and serve on focus groups giving feedback as to how the program was progressing.

The task force believed that there would be many benefits that could come from this program. One large anticipated benefit was that it would help with retention if students had a positive residence hall experience and chose to return to finish their college careers. Other projected benefits included student academic improvement, positive recruiting, parent confidence and contact, improved stewardship, and community building. It was also hoped there would be a large reduction in vandalism with the enactment of a more structured environment.

Operation Jumpstart was put in place to test the waters for seven months ending on September 1, 1996. During this period, informational meetings were held in Elizabeth Moore Hall for faculty who were interested in learning more about the Hall Master role. It was also during this time that President Hardesty approached Dr. David Stewart, of the English department, to inquire about his interest in taking one of these Hall Master positions. Stewart was also an Oxford graduate and was familiar with the idea behind having faculty involvement in various aspects of student life. He, along with six other faculty members were selected during this period to serve as Hall Masters for the new school year starting the fall semester 1996. By the time the test period of seven months were over, Project 2000 was started in its place and the title of Hall Master was changed to Resident Faculty Leader (RFL).

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8 These original faculty leaders were Dr. Richard Schreiber at Arnold Hall, Professor Augusto Paglialunga at Bennett Tower, Dr. David Stewart at Boreman Hall, Dr. Bernie Schultz at Braxton Tower, Elizabeth Doane at Brooke Tower, Dr. William Collins at Stalnaker and Dadisman Halls, and Dr. Dallas Branch at Lyon Tower.
Prior to the implementation of Project 2000, the Department of Housing and Residence Life (H&RL), which oversaw the residence halls, had not changed much through the 1980s or 90’s. Each residence hall on campus had a staff of Resident Assistants (RAs), a Community Advisor (CA), and a Resident Director (RD). There were also several graduate student assistants who oversaw the judicial board, learning center, and night staff. The RAs for each building were (and still are) full time students who act as the primary resource for residents living on their floor. The CA was a live-in staff member responsible for developing the community environment of the hall and planning social and educational activities. The RD for the hall was a graduate student responsible for supervising the RAs and CA as well as serving as a valuable resource handling counseling issues, student conduct, community development, administration, and emergency response situations.9 This in-hall leadership structure remained in place until 1993 when the CA role was eliminated.

In addition to these in-hall positions, the department also employed an Assistant Director for Residence Life, a Residence Educator, and two Area Coordinators. The Assistant Director was the one responsible for the overall operation of the program. The Residence Educator was in place to implement and supervise in-hall academic support services, and was responsible for hiring and training learning center staff. This person was also available for extended academic questions that the in-hall staff could not provide. Area Coordinators were

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assigned to each campus to directly hire and supervise the student staff and coordinate
disciplinary action on their respective campus.

The Department of Housing and Residence Life itself was split into several distinct
divisions, each with separate leadership. These divisions were Residence Life Division (outlined
above), the Housing Division, Food Service Division, Administrative Division, Custodial/
Maintenance Division, and Conference Divisions. Each unit was led by an Assistant Director
who answered to the Director of the Department of Housing and Residence Life. This Director
was responsible to the Dean of Student Affairs.

With the introduction of the RFLs in 1996, they would act as a
go between for the in-hall staff and the rest of the department. One of
the ways the RFLs were encouraged to get involved was to learn the
system and take ownership of their respective hall through the direct
supervision of their building’s staff. Any hall business would be
directed through them and relayed higher if necessary. The RAs were
supervised and still reported to the RD who in turn worked closely with
the RFL to set the tone of the hall in accordance with the RFLs individual hall plan. Along with
the RD and the RFL, an Assistant RFL, usually the RFLs spouse, would now make up the
leadership team for each individual hall. Over time, each hall began to take on an individual
personality as RFLs worked to hire and train staff in a way consistent with their ideas and
values.

To facilitate the RFL taking over as the leader of their hall, the Student Affairs Taks Force
recommended they do several things. Their overall role was to provide general leadership to
both the staff and residents of the hall. They were also tasked with creating a hall specific mission statement and helping the RD in the recruitment of RAs. It was recommended that they involve current and retired faculty in their programming and to establish the appropriate tone for the hall by being a live-in role model. It was hoped that through programming and regular contact, a positive atmosphere would develop and students would look forward to being active members of the campus community.

The RFL program, according to President Hardesty was one of the most significant efforts enacted early in his administration to give students a community within a larger institution. For each residence hall, the university constructed adjacent homes for faculty in-residence as well as new seminar rooms, computer labs, and meeting spaces for students. The RFL houses would be the setting for in-hall social and educational programs. These have ranged over the years from Super Bowl Parties to Hall Council meetings to sit down dinners with different faculty members. It was hoped that giving students a home-like environment run by staff that actually cared about their well being would promote a feeling of acceptance into the university community. By providing alternative programs that the students found interesting, there was anticipation that students would take advantage of them instead of going out and drinking.

This decision to have a faculty member closely tied to each residence hall was not unique to WVU. Other universities have used faculty to some extend in the past to include academic programming into dorm life. What did make the WVU plan unique was that the

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10 Re-Engineering the Freshman Experience at WVU. 1996
faculty really took ownership of their buildings and were instrumental in changing how the entire university worked with freshman.

One of the first things the RFLs and RDs began to look at were the policies in place and their effectiveness. Each year during the August student move in, new residents were handed a guide book to the residence halls called the Eyes & ’Eers (or the Lifesaver before the 1992-1993 school year). This book was, and still is, used by residents as a tool to answer many questions that a first time student may have. Included in the book is also a list of residence hall policies and sanctions for breaking those policies. The evolution of these policies and their respective sanctions can be seen by looking at each year’s book.

Going back to the 1988-1989 Lifesaver, the outline of the existing hall policies was very basic. One page was dedicated to simply listing out a set of “prohibited behaviors.” Some of these behaviors were: possession or use of firearms or weapons, noisy or disruptive behavior, interference with residence hall staff, tampering with fire equipment, setting fires, unlawful possession or consumption of alcohol or controlled substances, and harassment or assault. The visitation, quiet hours, and alcohol policies were the only listed behaviors that any additional information was given on. These three policies were given about three paragraphs of supplementary elaboration each.12

After this information, the Lifesaver listed the hearing and appeals process over a single page. The process consisted of a hearing officer, usually the RD, receiving an information report and scheduling a hearing with student judicial board. The board would decide on whether or not the resident was guilty of violating one or more of the residence hall policies

and would outline any sanctions to be placed on the violating resident. These sanctions were not explained, but simply listed in the Lifesaver. They consisted of restitution, educational projects, personal or academic referrals, written warnings, probation, relocation, filling out a behavioral contract, deferred removal, or removal. None of these sanctions were defined or attached to any specific policies.

For the 1991-1992 school year, simple one line sentences followed each of the listed prohibited behaviors and a computer use policy was added to the Lifesaver. Other than this minor change, the written rules for the halls did not experience much revision until a couple years later. The 1993-1994 book, now titled the Eyes & ‘Eers featured a bit more explanation of the process and included more definition to outline each policy and each sanction.

While the policies were rudimentarily listed in the Lifesaver and Eyes & ‘Eers up to this point, the process itself was part of the problem. Many times it appears that policy violations would go undocumented and unreported. If it was reported, hearings were not always set up and frequently, sanctions were not handed out at all. Another problem was that repeat policy offenders were often allowed to remain living in the residence halls because there was no clear written procedure for how to apply sanctions to specific policies. For example, someone might have broken the alcohol policy multiple times but would still be living in the hall because the case was either never reported or the judicial board did not assign uniform and consistent sanctions.

Another issue at hand was the ability of the hall RAs to control their floors and act as good role models. RAs were not consulted about any of the judicial proceedings taking place in

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their buildings or on their floors by the judicial board or hearing officers. A RA might have reported an incident, but there was no follow up with them after the case was closed. They were not given any information about the outcome of the case and were not made aware of any sanctions imposed on the residents. This often caused residents to have a lack of respect for the RAs in the hall since they often did not know what was going on surrounding the judicial process. This led to a general feeling by the residents that the RAs were powerless and ineffective.

To combat these problems with the judicial system, the Student Affairs Task force had recommended that the residence hall policies be looked at for revision. For the first year of Project 2000 with RFLs in place in each hall, not many changes were made to the format that had been in place previously. In the second year (1997-1998), however, noticeable changes started to be made that reflected the increased input of the RFLs in the establishing a new judicial process.

The *Eyes & ‘Eers* itself was significantly overhauled and revised into a full color publication that included much more additional information about student resources on campus. It also featured a “Community Standards of Conduct” section that broke down the residence hall judicial system in great detail. A marked improvement over previous editions, this section explained in relatively simple terms the entire process. Also added in this edition was a section on “Resident Rights” for the first time. These rights included:

1. To read, sleep, and study free from undue interference, unreasonable noise and other distractions;
2. To expect that others will respect your personal belongings;
3. To a clean environment in which to live;
4. To host visitors with the exception that you will explain to them the accepted behavioral standards and that visitors will respect the rights of your roommate(s) and fellow residents;
5. To discuss grievances with a residence hall staff member who can assist in addressing the concern;
6. To be free from fear of intimidation and physical and/or emotional harm;
7. To expect that all of these rights will be respected.

Along with these Resident Rights, there was also a clearer explanation on how sanctions would be assigned. When determining appropriate sanctions, the judicial body considered the willingness to accept responsibility for one’s behavior, previous judicial history, severity of the situation, and any recommendations made by the complainant/victim.\textsuperscript{14} At this point, it was still up to the judicial board to decide which of the possible sanctions to assign for each policy violation.

For the next two years, only minor changes were made to the *Eyes & ‘Eers* while the Residence Life staff evaluated the progress being made. The next set of major changes to the residence hall policies came during the 1999-2000 school year. While the hearing process did not see any major format change, what is substantial is the fact that for the first time the sanctions for specific violations were made more uniform. In addition to this, monetary fines, community service, and parental notification were added as sanctions to further emphasize the importance of residents understanding and complying with the residence hall policies.

Under the old procedures, two different students could meet with the judicial board and be assigned two completely different sets of sanctions for the same policy violation. This could have been due to differences of opinion, failure of the board to reach an agreement, or personal relationships amongst the judicial board members. There was now one set of

sanctions assigned to each specific policy. For example, a resident violating the Alcohol policy
the first time would be assigned as a minimum, residence hall probation, a $25.00 fine, 5 hours
of community service, parental notification, and a referral to the Student Assistance Program
educational session at the university. For a second alcohol policy violation, a student would be
put on deferred removal, given a $50.00 fine, 10 hours of community service, parental
notification, and a referral to the Student Assistance Program for an individual assessment and
counseling session.15

Emphasis was also placed on using different wording in handling judicial proceedings
with residents to make the new system seem more personal. The old system was frequently
looked at as a court type proceeding where the guilt or innocence of the offending resident
would take place. Emphasis was placed on using the terms “responsible” and “not responsible”
to determine guilt and stress was placed on the importance of making personal decisions that
allowed the entire community to live in peace.

While these changes to the policies and sanctions were rolled out over the course of
Project 2000, other developments to the department were occurring at the same time.

Partially due to the increased involvement of the RFLs in the hall community, the administrative
end of the Residence Life and the faculty members seemed to have difference of opinion on
how to treat students and run the program. The RFLs had been charged with taking on the
leadership of their respective residence hall but were still having to conform to the policies
being put in place by the administrative branch of Residence Life from 1996 to 1999. During

this period of tension, the RFLs reported up to Carole Henry, the Director of Housing and Residence Life.

To help the RFLs have more of a voice, David Stewart was appointed “Head RFL” in 1998 in order to manage faculty issues and to be the link between the RFLs and H&RL. Some of these issues revolved around consistency of policy enforcement and treatment of the RA staff, who the RFLs had come to rely on as a key link between them and their residents. Upon the departure of Henry in 1999, Stewart was appointed Director of the Resident Faculty Leader Program as well as the Residence Life division of H&RL in Henry’s place. This new position as director of both programs put Stewart in a place to make many policy decisions for the department without having to go through much administrative back and forth. Essentially, he and the RFLs were able to set the vision for the program and steer it in a direction they felt was appropriate. It was also around 1998 that the RD position title was changed to a new title, Residence Hall Coordinator (RHC).

The whole of H&RL was reorganized to make operations run more smoothly between the 2000 and 2001 school years. The Department of Housing and Residence Life was dismantled and each division was shifted into new areas of management under Student Affairs. The divisions of Residence Life and Housing were kept together under a single Residential Education division. Conference scheduling was placed under the new Housing section of Residential Education. The Food Service division which managed individual hall dining facilities was combined with Mountainlair Dining under the newly formed Dining Services division. Custodial/Maintenance services were initially placed into a new division as well, Student Affairs
Auxiliary Facilities which managed the residence halls, the Mountainlair, and the Student Recreation Center before being put completely under Facilities Management in 2005.

Dr. Stewart was promoted again in 2000 to Associate Dean of Student Affairs and kept his job working as Head RFL and Director of Residential Education. Many of the problems encountered during the Project 2000 years were now a thing of the past as the RFLs had a faculty member working with them to make any necessary changes that came up. A new mission statement for Residential Education was written to reflect the feelings of the faculty leaders. This statement reads:

The West Virginia University Residential Education program creates a student-centered learning experience leading to the academic, social, and personal success of students living in Residence Halls and offers support to students throughout the larger University community.

The basic philosophy behind the new Residential Education division of student affairs, still in place today, is that learning should be integrated with living and that informal learning and personal support in the residence halls is integral to an education at West Virginia University.\footnote{Residential Education Mission Statement} A list of goals and hopeful outcomes were also put together along with this mission statement to give further explanation of the goals of the restructured program.\footnote{For a full list of the goals of Residential Education, see Mission Statement at end.} Some of the goals set for residence hall students were an increased familiarity with the University and its resources, better grades than non residence hall students, a decrease in mid terms received, and better time management and study skill practices. To accomplish meeting these goals, RFLs took to planning a programming calendar around them.

Given a significant budget to assist in the planning of these programs, RFLs and RHCs worked with each residence hall’s Hall Council to set up, promote, and carry out activities. The
Hall Council is the student group from each building tasked with being the voice of the residents. Officers were, and still are, elected each year and worked with the hall leadership to hold events the student body of the building was interested in. These officers worked with the leadership team to help with educational, cultural, and social programming. Each hall has certain events that are unique to it and have become traditions that have carried through even with changing RFLs and RHCs in the halls.

To promote an academic environment, RFLs have been encouraged to plan around and promote educational activities wherever possible. Some of these programs have included over the years taking cultural trips to the ballet, opera, and theater in Pittsburgh and Creative Arts Center, holding study sessions for major groups in their buildings, taking trips to big cities like New York or Washington DC, and organizing and chaperoning study abroad trips over spring break to places like Italy and Greece. In addition to large trips, most RFLs have found that a big impact can also be made simply by sitting down one on one with individual residents and discussing their grades and overall experience at the university.

Social programming has been an important anchor of the RFL program. Many RFLs would say that it is through social events that most students choose to interact with the rest of the hall community. Through social programming, many residence hall students have been exposed to new activities and opportunities that before seemed foreign to them. The RAs of the building have taken on much of the responsibility in organizing these social events. Some of these social activities have included in-hall sporting competitions, community service oriented events, annual Halloween parties, and watch parties for football games being played away. Some of these social activities themselves provide some sort of educational and cultural value.
Many international students living in the halls have commented that just attending a football watch party had been culturally significant to them even though they had no idea what was happening on screen!

From 2000 to 2003, Dr. Stewart remained the director of the Residential Education program while also working as a RFL and the Dean of Students. In 2003, Arnold Hall RFL Robin Jones took over as director while Dr. Stewart remained as Head RFL and Dean. As the Dean, Stewarts behind the scenes activity included recruiting more faculty into the program when vacancies arose, renewing appointments for current RFLs, and managing their academic appointments.

A new director, Trish Cendena, took over in 2006 in place of Robin Jones, who remained the RFL at Arnold Hall. From the time of her appointment to the present, the program has undergone only minor changes in terms of functionality but some larger changes in terms of department philosophy. While the mission statement for Residential Education has remained unchanged, how to carry out that mission has been slightly altered. Where the RFLs, working with a faculty director, were the main people responsible for guiding the vision of the department during its first few years, additional non-faculty staff members have been hired who are now steering the department forward.

Additional associate and assistant directors, who had been former RDs and RHCs, have been hired to work with the director on various aspects of the department. Although their duties change from year to year, these assistant directors have been focusing their time over the last several years on evaluation and assessment of RFL program activities and surveying resident reaction and participation in these events. They have also been assigned to handle
advising different residence hall groups like the Residence Hall Association and Resident Assistant Council.

One considerable component added to the residence halls that took shape in 2006 was the addition of Lincoln Hall. This new hall was planned to be WVUs first Residential College. The idea behind Lincoln was to have increased faculty involvement, in addition to the RFL, and a greater focus on academic themes in the programming for the hall. Professors would come in and teach special freshman seminars specifically for Lincoln Hall students and serve as Faculty Fellows to the hall. In addition to the regular housing application process, students wanting to live in the new hall originally had to fill out an additional application outlining how they would contribute to the hall community. Since trying the programming model at Lincoln, other residence halls on campus have made changes to a Residential College model as well and have worked to incorporate additional academic themes into their programming.

Perhaps one of the most important roles only briefly mentioned in this paper that warrants additional attention is the role of the Assistant RFL. While considered to be only a part time job, many of these RFL/Assistant RFL teams have put in a considerable amount of time to their hall in terms of programming even after having worked their full time jobs, sometimes outside of the university, all day long. Assistant RFLs have taken on additional duties over the years ranging from advising the Hall Council to organizing large scale ongoing hall activities like coffee houses, study sessions, and clubs. Having become such an integral and visible part of the leadership team, many residents assume both the faculty leader and spouse are considered to be the RFLs of each hall.
While the hands on activity of the RFLs and the rest of the leadership team have varied from hall to hall over the years, and even though sometimes major changes have been made in terms of the structure of the department, the role the RFLs have had in changing the face of WVU residence halls is undeniable. This change is seen not only in the numbers but in the changing behavior of the students. Since the program was founded during the 1996-1997 school year, the number of residence halls on campus has risen from eight to thirteen (with a fourteenth briefly). Along with these additions, new leadership teams were needed to lead these halls. WVU has experienced an increase in enrollment from 15,042 undergraduates in 1995 to 21,720 undergraduates in 2009. With this growing university population, the number of students impacted by Resident Faculty Leader Program and through Residential Education has grown as well each year.

The residence halls have gone from a wild environment full of rule breaking and uncontrolled partying to a much more respectful and peaceful place to live and study. By many accounts, the reason for this is because of the success of the RFL program and Residential Education in establishing a more student centered program. When asked what are the most significant accomplishments of the program, all people surveyed while writing this paper indicated that by the far largest achievement was bringing the halls into a more controlled and student friendly mode of operation. Not only has the program established reasonable policies, but through sanctioning policy breakers and having the RAs educate their residents on how to

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18 Fieldcrest Hall, Pierpont Apartments, Summit Hall, and Spruce House were all added as residence halls in the 2003-2004 school year. That year several buildings at Sterling University Ridge (now just The Ridge) were also leased out but its use was discontinued for the 2009-2010 school year. Lincoln Hall opened in fall 2006. The Honors Hall opened fall 2009.
properly behave as members of the community, vandalism problems have declined and have saved the university hundreds of thousands of dollars over the last decade.

As the university continues to move forward, the RFL program has been forced to adapt as well. With so much effort being placed on social programming, a new challenge has been put out to the RFLs to start including even more academics related content into the halls. It is hoped that by doing this, the university may be able to raise its retention rate from approximately 80% to 85%. Planning meetings are still being held on how to accomplish this, but some of the ideas floating around at the moment consist of additional use of study halls and groups, cooperation with academic departments to bring faculty in to provide study sessions before large exams, and tracking class attendance as a way of making students more aware of their stake in their own education.

The restructuring of the residence halls have been a major contributor to helping students find the resources they need on campus and in getting started on the right footing. This was a part of the way in which President Hardesty wanted to accomplish his goal of making the university more student centered. By taking the recommendation of the 1995 Student Affairs Task Force into consideration, Hardesty’s administration showed that it was interested in pursuing an agenda of increased involvement in student life. In what would eventually be a complete departmental restructuring, Housing and Residence Life was transformed into Residential Education and full time faculty members found their way into the every day lives of thousands of residence hall students. Their continued academic support and guidance seems to be a positive thing each year in helping the university hang on to students and keep them enrolled at WVU.
Projected Change in High School Graduates
1992-2009

- Florida: 73%
- Maryland: 59%
- Delaware: 52%
- Georgia: 41%
- Texas: 39%
- Virginia: 38%
- North Carolina: 28%
- South Carolina: 26%
- New Jersey: 23%
- Pennsylvania: 17%
- Tennessee: 16%
- Kentucky: 12%
- Arkansas: 7%
- Mississippi: 6%
- Oklahoma: 6%
- Ohio: 5%
- Alabama: 4%
- Louisiana: -11%
- West Virginia: -21%

Source: Western Interstate Commission on Higher Education
RESIDENTIAL EDUCATION MISSION STATEMENT

Mission Statement
The West Virginia University Residential Education program creates a student-centered learning experience leading to the academic, social, and personal success of students living in Residence Halls and offers support to students throughout the larger University community.

Mission Philosophy
The essence of Residential Education is that learning should be integrated with living; that formal teaching, informal learning, and personal support in Residence Halls is integral to a WVU education. Residential Education programs build Residential Learning Communities within the larger University by extending the classroom into the Residence Halls. Residential Learning Communities complement the academic curriculum with activities and experiences essential to students’ preparation for a life of leadership, intellectual engagement, citizenship and service.

Goals of Residential Education
• Establish an integrated academic and residential learning experience.
• Create a climate and culture within the Residential Learning Communities that is conducive to academic success.
• Personalize the first year student experience.
• Provide clear expectations to students regarding academic achievement.
• Provide clear expectations to students regarding community standards in the Residential Learning Communities.
• Encourage high quality faculty, staff and student interaction in all Residential Learning Communities.
• Promote safety and security within the Residential Learning Communities.
• Create a framework for life-long learning skills.
• Foster the development of critical thinking skills.
• Encourage and support student involvement and leadership.
• Encourage responsible decision-making and accountability.
• Encourage healthy choices and personal well-being.
• Assist the University in recruiting and retaining quality students, faculty, and staff.

The learning objectives we expect for students in Residence Halls are:
• Students will develop and exercise responsible citizenship.
• Students will have a heightened awareness and appreciation of diversity and social justice.
• Students will have a greater appreciation for the arts and culture and their role in society.
• Students will be more successful academically.
• Students completing their first year will be well prepared for their future years at the University.

Intended Educational Outcomes:
• Students will be familiar with the University and its resources.
• Students will understand their rights & responsibilities as a Mountaineer and student living in Residence Halls at the University.
• Students will have learned time management and study skills practices.
• Students in Residence Halls will be less likely to receive multiple midterm reports or be placed on academic probation.
• Students in Residence Halls will earn relatively higher GPAs than non-residence hall students.
• Students will be more successful in moving from their freshmen to sophomore status.
• Students will understand their accountability to the University and the entire Residential Learning Communities and self-police their behavior to respect the rights of their peers.
• Students will engage in responsible decision-making and respect the physical conditions of their Residence Halls.
Perceived Freshman Experience
Student Affairs Task Force Findings – 1995

Students as Individuals

- Maturation Stress
- Academic Challenge
- Advising Center Graduate Student Advising
- Class: Use of TAs
- Quality of Residence Hall Experience Varies
- Relational Group Participation Problematic
- Mass Orientation
- Computer Recruiting
- Parent Fears
- Culture Shock

Academic Challenge

Maturation Stress

Students as Individuals
Title: Perception of Islam and Muslims among College Students

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Abstract

Islam is the second largest religion in the world after Christianity, and it is the fastest growing religion both globally and in the United States. There are an increasing number of American students who follow Islam; however, the religion is largely portrayed by many American political and religious leaders and in the popular media with false and negative stereotypes and as a religion of violence, terrorism, and extremism.

The primary goal of this study was to investigate American college students’ perception of Islam and Muslims. This study explored whether there was a correlation among individual’s perceptions and their knowledge of and exposure with Islam and Muslims. Furthermore, this study examined whether there were any gender differences in these perceptions. Finally, this study identified the influential factors that contributed to American college students’ overall attitude towards Islam and Muslims.

The total sample consisted of 398 students from a Western Pennsylvania University who were taking any prefix 100 level courses from the university in fall of 2010. The gender composition of the sample was 205 males and 193 females. The race distribution of the participants was: 325 white, 42 African-American, 10 Hispanic, five Asian, and 16 multiracial.
The median age of the participants was 19. The study used descriptive analysis, \( t \)-tests, correlation analysis, and multiple regression analysis.

The results of the study indicated that there was a significant positive correlation between students’ perception of Islam and Muslims and their knowledge about Islam and Muslims. Moreover, there were positive correlations between students’ knowledge of Islam and exposure to Islam; knowledge of Muslims and exposure to Muslims; exposure to Muslim and perception of Muslims; and exposure to Islam and perception about Islam. There were no significant gender differences for students’ perception of Islam or Muslims among this population. Multiple regression analysis indicated that perception of Islam and Muslims were the strongest predictor of the students’ overall attitude towards Islam and Muslims. Knowledge about Islam and Muslims and exposure to Muslims also had a significant impact on the overall attitude. However, gender, race, age, and the generations of family that were college-educated did not have any significant influence.

Educational institutions play a vital role in shaping perceptions and attitudes toward minority groups. Colleges and universities need to create more awareness about the religion of Islam by finding creative ways to integrate cross-cultural and religious studies across curriculums and actively seek high quality resources through local community organizations, students' families, and appropriate reading assignments.
Teacher Candidates and John Dewey: In the Context of NCLB and The Child and the Curriculum

One of the questions raised in educational discourse is whether education is for life or for the test scores. In other words, the focus in the former case is on “the child” and in the latter, on the curriculum. Historically, Dewey asked this question and gave his own answer. The same question is raised today in the context of No Child Left Behind. We, therefore, ask our teacher candidates: What relevance does John Dewey have for our children and teachers for the 21st century?

We are involved in teacher education at Dowling College as professors of undergraduate and graduate teacher candidates; and we use Dewey's works to give our students a strong
philosophical basis to guide their decisions in developing the curriculum for their pupils, particularly while doing their full time student teaching experiences in the public schools.

Our education students study in-depth Dewey's book *The Child and the Curriculum*; and they are able to discern his salient concepts of examining the logical and psychological aspects of experience. The logical part of the curriculum is the product of years of human experience logically and systematically synthesized into a final product. However, the psychological aspect of experiencing and “learning by doing” must also be included in the learning process for the immature learner.

Student candidates learn to look at the child and the curriculum in an interactive relationship and develop lesson plans based on their pupils' development, readiness, interests, and motivation. Dewey’s educational ideas guide them as they prepare lesson strategies for their own students. For example, when Dewey talks about education being a “continuing reconstruction of experience” our candidates learn that it is their responsibility to integrate the young child's prior knowledge and experiences into the new information they are trying to teach so the child is able to assimilate and accommodate as Piaget stated.

Dewey’s focus on the whole child and preparing her or him for critical thinking and creative problem solving are necessary in the 21st century. Our paper clearly identifies Dewey's relevance for today, especially in the context of NCLB. NCLB’s stress on the high stake accountability has created more tension and problems for teachers. Schools’ narrow focus on curriculum is worrisome for teacher candidates. Education has become a preparation for tests--not for real life. Our candidates are afraid that schools do not devote enough time and resources to subjects such as arts and science, or skills such as critical thinking and creative problem solving; and thus, do not prepare them properly for the 21st century.

In conclusion, we argue that Dewey’s perspective on the child and the curriculum is not a panacea for today’s educational problems; but he provides us with a set of lenses to look at contemporary educational issues. Dewey gives us some fundamental principles and good insights into the nature of the child and curriculum, as well as teaching and learning that are relevant for today.
Competitive and Collaborative Approach 
Towards a More Effective Education in 
Computer Science *

Tomas Cerny and Bozena Mannova

Abstract To provide a computer scientists with good materials and interesting topics 
in a class does not mean that their education is of a high quality, students need 
be motivated and evolve skills needed in a real-life employment. Social skills, 
communication, team work, collaboration and competition are valuable aspects they 
should know in other to be professionals in their future career. In this paper we 
look into experiences in competitive and collaborative learning in education and 
programming olympiads to improve a quality of education in our course. We provide 
criteria we applied for our course and present a student evaluation on the approach. 
Our approach showed increased motivation in students’ interest in the course. In 
addition students could handle a larger workload in the class as they were motivated 
to be better compare to others.

1 Introduction

Computer science has multiple disciplines where some may change and evolve quite 
quickly which is the trend of the industry where a five years old computer is seen as 
an archaic one. Computer science education in addition prompts for competition as 
many programs with different functionality, performance and interface are build by 
computer scientists every day. Schools produce a lot of students in the area but not 
all of the students are recruited as professionals, but rather as beginners in various

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companies. The goal for teacher is to prepare professionals that can succeed in the employment. It is not only important to train students in the knowledge of technologies, techniques, models and processes, but it is also important to build student’s social skills, communication capabilities, competitive nature and the ability to collaborate in a team which is in fact often the case in the employment. In this paper we present a competitive and collaborative approach towards more effective education in computer science. Based on previous research in the education we believe that our students can gain new abilities for their future career. In our computer science course we apply the research results and our rich experience we have from ACM International Collegiate Programming Contests (ICPC) [15]. We describe the way we applied the competitive and collaborative learning in our course and provide an evaluation and experience we received from the course.

This paper is organized as follows. In Section 2 we describe the background of computer science, competitive and collaborative learning in the programming olympiads and previous research in the approach. Next, we describe the way we applied the approach in our class in Section 3. Section 4 provides our experience and evaluation of the course. The last Section 5 concludes our work.

2 Background

Computer science has a long history which might be considered going back to ancient Summer and Babylon where a first tool we consider from that era abacus was invented. Simply rational behind this tool are lines drawn in sand with pebbles. Similar design is used even these days at modern machines [1]. The modern computer science as we build on started in 1936s with Church-Turing thesis where Alan Turing build a powerful computational model Turing machine [2]. Turing machine is an accurate model of general purpose computer and can do everything that a real computer can do. In addition, from this model we also find certain problems that cannot be solved by computers and are beyond the theoretical limits of computation. These days’ computer science spreads over a multiple disciplines such as theoretical computers science, algorithms, design patterns, databases, software engineering and many others. Education in these areas often involve math, graph theories, mathematical logic and statistics. For computer science courses often a lecturer follows a table-driven student evaluation. This often statistically distributes students in groups for grading. Table-driven system works and is proven by time, but we are raising a question if this is the right education direction for computer science.

Parallel to the institution education exists multiple competitions among institutions where students compete with each other or in groups and the best results are rewarded. In various locations we may see multiple programming olympiads [3] [13] [14] where among the well known world wide that we have extensive experience with is the ACM International Collegiate Programming Contest (ICPC) [15].

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2 Both authors are members of the competition organization where one since 1994
The ICPC contests are very popular instrument for the Association for Computing Machinery (ACM) [16] for younger generation besides it’s known scientific conferences. In the ICPC competitions students form institutional teams and compete with other teams by solving small algorithmic exercises where the team with the most solved problems in shortest time and with less wrong answers wins. There are in addition annually multiple contest tears where teams compete in specific regions, super regions and the best team can compete in the world finals. These competitions started back in 1977 and the participation has grown to several tens of thousands student from almost 2000 universities. The participation is high even that some universities requires fees. The key question might be what motivates students to attend the competition. With no doubt there is a competition among students and also collaboration within a team which involves student to student interaction. In addition the competition started with its own symposium Collaborative Learning Institute (CLI) at the world finals [17].

Our motivation is to apply similar key factors to motivate students in our computer science courses and compare the results with standard table-driven student evaluation.

Similar approaches were already applied in many study disciplines. In [5] authors look at how students interact with each other and with materials. Authors discuss that often the student to student interaction is ignored and the course focus is solely on teacher student interaction. Authors describe three patterns for student to student interaction. The first pattern is a competition to see who the best is. Second, there is an individual work where students do not need to pay attention at other students. The last pattern is a team cooperation where they explore each others contribution to the goal. From these patterns the competition is the key. In addition research in the U.S. shown the key motivation for students is a competition where they want to be better than others. This in fact might not apply for other schools as in the Czech Republic where our experiment is applied. In addition to competition the cooperation among students will support the overall work as the individual success is support to the whole team. Authors suggest “that the team cooperation encourage each other to do the assigned work, and learn to work together regardless of ethnic backgrounds or whether they are male or female, bright or struggling, disabled or not”. The work then details on five conditions that support cooperative learning as more productive than the competitive one. These conditions are:

**Listing 1** Five conditions to support cooperative learning

1. Perceived positive interdependence
2. Face-to-face interaction
3. Personal responsibility to achieve the group’s goals
4. Use of the relevant interpersonal and small-group skills
5. Group processing of current functioning to improve the group’s future effectiveness

Authors suggest to keep the team size small. Where the size impacts the individual accountability. In addition role assignment in the team might be beneficial for larger teams. From the individual accountability perspective it is important to let
students to teach the others about what they learned. This in addition supports students social skills. The authors discuss in the conclusion that in result of cooperation of students build and maintain stable marriages, families, careers, and friendships.

Similar work was done also at Berkley [4] where the research shows that the students learn best when they are actively involved in the process. Also students that collaborate in a group seems to be more satisfied with their course. In addition the work provides a road map to similar approaches to the collaborative learning such as peer learning, study groups, team learning, etc. This work provides a general recommendation and strategies for a collaborative environment where the focus is on assigning a team roles. Useful is a discussion how to deal with student and faculty concerns that may raise during the course.

Recent work applying competitive and collaborative learning in senior secondary schools is from Nigeria [6] where they investigate the effect of the cooperative and competitive learning on academic performance of students in mathematics. The findings revealed that cooperative learning strategy is more effective than the competitive one and that males performed significantly better than females in both learning strategies. From this research we consider that also ethnical and cultural aspects may play role and as we see from the ICPC competitions there is significantly more male contestants than female ones, in addition there is a huge community and interest in the competitions in Asia or Russian Federation compare to the interest in Europe or Africa. This in addition means that the applicability of Competitive and Collaborative learning will fit better to disciplines where is a majority of men which in our region are technical universities and computer science.

In order to prepare students for professional employment [7] provides a team-like cooperation in a competitive business-like environment. Students then cooperate and compete by structuring learning activities that require them to cooperate in teams that compete against one another. This paper also provides definitions of terms competition and collaboration (originally [8]):

**Competition:**

a social process that occurs when rewards are given to people on the basis of how their performances compare with the performances of others doing the same task or participating in the same event

**Cooperation:**

a social process through which performance is evaluated and rewarded in terms of the collective achievements of a group of people working together to reach a particular goal

The work discuss combination of both cooperation and competition approaches with the positive aspects of motivational competition through inter-group competition between collaborative team. Where the rational in the real world is that a competition is evident throughout our society, our lives, and our recorded history. Authors see the benefits to the students whose outcomes often exceed content-driven and application-based objectives which also prepares them better for the professional career. Computer science is an area that matches with its professional ex-
Competitive and Collaborative Approach Towards a More Effective Education in C.S.

Expectation to this type of learning. In the next section we describe results of the application at our course.

3 Experiment

Based on our previous experiences with ICPC competitions, multiple interesting articles on the competitive and collaborative learning and the real life competitive trends in computer science employment we decided to apply the approach in our course Architectures of SW systems at Czech Technical University which is an eligible course for the 6th semester for Bachelor degree. The size of the course was 56 students, where 39 students passed the course. The course was structured in optional lectures and mandatory practice, which is a way all the curses at our institution are structured. The lectures consisted of a talk on topic of software architectures [12] (a), design patterns [9] (b) and enterprise design pattern [11] (c) and documentation [10] (d) which in fact covers content from four text books. Practices where divided in even and odd weeks, where the students either handed out a small demonstration program on a specific architectural type (e) with documentation (f) or read a large research paper and prepared for a discussion (g). Every odd week students were given a programming challenge (h) to solve where the first few correct implementations were progressively rewarded with points. The requirements were very high for an eligible course.

To apply the collaboration, students built teams of two members where they were working together on the architectural programs (e) and documentation (f), presentation of an enterprise pattern (c) in front of all the class and programming challenges (h). Students could define their own strategy to work on tasks together or sharing the tasks as individuals. Students were also evaluated individually during the research paper discussion (g) (in English) and two tests (i).

The competition was given by the grading, where the final score would be assigned by the best score and distributed to equally from A to F based on the result of others. Simply who will have better score than others will have a better grade than others. The points were assigned in the manner as shown in Table 1. An individual could receive up to 45 points and in a team up to 61 points. Teams had multiple tasks (c)(e)(f)(h) so they received a soon feedback on their work. In addition the

<table>
<thead>
<tr>
<th>Task ID</th>
<th>Task Description</th>
<th>Points per task</th>
<th>Points total</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>(c)</td>
<td>presentation of an enterprise pattern</td>
<td>10+10</td>
<td>20</td>
<td>Team</td>
</tr>
<tr>
<td>(e)</td>
<td>architectural programs</td>
<td>4x2</td>
<td>8</td>
<td>Team</td>
</tr>
<tr>
<td>(f)</td>
<td>architectural program documentation</td>
<td>4x3</td>
<td>12</td>
<td>Team</td>
</tr>
<tr>
<td>(g)</td>
<td>paper discussion</td>
<td>5x1</td>
<td>5</td>
<td>Individual</td>
</tr>
<tr>
<td>(h)</td>
<td>challenges</td>
<td>7x3</td>
<td>21</td>
<td>Team</td>
</tr>
<tr>
<td>(i)</td>
<td>two tests (a)(b)(c)(d)(g)</td>
<td>20+20</td>
<td>40</td>
<td>Individual</td>
</tr>
</tbody>
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presentations (c) were graded by 10 point from the audience and 10 points from the teacher, so there existed also a communication and feedback from other teams. Students were directly involved in the education process as the tests contained questions form their presentations. Every team presentation was awarded with applause from the audience. Challenge winners were honorable announced every first upcoming lecture.

4 Experiment Evaluation

Our previous experience with the same class at Charles University where a table-driven evaluation took place shown that students were not interested much in the course and only a subset of topics were applied: (a)(c)(d) and a project. The application of competitive and collaborative approach brought more motivation to the course and allowed to extend the content of the course. The class with a lot of tasks and additional challenges made students feel a pace environment which they may face in real SW development. We mentioned earlier that students participated in the education process in form of patterns presentations. In our institution it is common that only a small group of students attend the lectures. In here it was about 35 students attending every lecture, because they seemed interested in the student presentations, their feedback and point evaluation of the other teams, second of all the results of challenges were announced at lectures.

Students had to collaborate in the team together in order to receive more points than other teams, often students split their tasks and solved them individually such as one did implementation part and one did documentation. If one team member in this case failed then both were punished with a low score on the other hand a good results were rewarded with full score, multiple tasks allowed a soon feedback for the team so they could improve in the next task. We believe that it is good to apply rather small projects with a soon feedback rather than a large project with the feedback at the end of the course. Many students had a problem with research papers as English is their second language, but often they said that after the first paper the rest was much simpler, in addition they had a chance to improve their English and lose the initial fear to talk. At the end of the course many student were able to understand the text and answer the questions.

From the perspective of our course we have applied all three patterns of communication in our course. First, students were collaborating in teams and evolving social skills, planning and collective strategies. Second, teams were competing in order the receive good grades and do better than others. Third, they had their individual responsibilities in reading and tests.

Our feeling form the lecturer perspective is that the students were positively motivated by the announcement of the challenge winners in the lecture and also by the applause for their presentation. With the students involved also in the grading process we believe that this motivated students to attend the lectures and learn multiple
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Fig. 1  Grade distribution in our course

Fig. 2  Popularity of competition

Fig. 3  Popularity of team work

Fig. 4  Popularity of challenges

Fig. 5  Popularity of research papers

disciplines which some of them might have learned in a passive way, such as the team work, planning and education other colleagues.

At the end of the course we passed evaluation forms for the class where individual elements were evaluated. All students that passed the class (A, B, C, D or E) could
fill out the evaluation. Students that canceled or failed the class (3) did not attend in the anonymous evaluation. Fig. 1 shows the grades distribution for the class.

Fig. 9 and Fig. 10 shows the attendance in the lecture and the practices. The evaluation of the student tasks from Table 1 can be seen on Fig. 4, Fig. 5, Fig. 7, Fig. 8 and Fig. 6. Fig. 3 and Fig. 2 shows how students likes team and competitions work.
5 Conclusion

In this paper describe application of competitive and collaborative learning known from programming olympiads and previous research in our computer science course. We have defined a specific tasks for students that were evaluated in this manner. At the end of the course we evaluated the course based on anonymous student feedback. From the feedback we see that majority of the students like to have a competitions for the grades and to work in teams where most of the A and B students liked the team work and most of the A students also liked the competition. Very popular among students shown to be challenges which directly support competition and also the presentation which is a place where students influence the education of others. Student projects shown to be positive as they played a role for both team and competition part. Tests and research papers had more balanced feedback in which we rather see a success because not many student like to do tests and read papers in foreign language. Something very positive we see is the attendance at lectures with is optional and in this case the distribution almost matches the practices attendance, we believe this has something to do with student presentations and their opportunity to influence the points of the presenter and also with the expectation from the challenge honorable mention. We believe that competitive and collaborative learning in education as we present in this papers have a positive effect on the course and will be applying it on our upcoming courses.

References

13. The British Informatics Olympiad
   http://www.olympiad.org.uk/ Cited summer 2010
14. Indian Computing Olympiad
   http://www.iarcs.org.in/inoi/ Cited summer 2010
15. ACM International Collegiate Programming Contest
   http://cm.baylor.edu/ Cited summer 2010
16. Association for Computing Machinery (ACM)
   http://acm.org/ Cited summer 2010
17. Collaborative Learning Institute (CLI)
   http://cm.baylor.edu/ICPCWiki/Wiki.jsp?page=CLI%20Schedule%20version%201 Cited summer 2010
The Relationship of Mothers’ Acceptance of their Children who are Disabled with Age, and Employment

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Abstract

This study discusses mothers’ acceptance of their children with disabilities. The subjects of the study were 405 mothers of children with disabilities registered in schools and centers of special education. One hundred sixty seven subjects were mothers of children with hearing impairment, ninety-six subjects were mothers of children with visual impairment, sixty-five subjects were mothers of children with cerebral palsy and seventy-seven subjects were mothers of children with mental disabilities. A questionnaire with 43 items was administrated to the mothers; the items were prepared based on literature and the experience with children with disabilities in the domains used in this study. The questionnaire was tested for validity and reliability.

The results of the study revealed statistically significant differences in mothers' acceptance of their disabled children related to the type of disability in favor of hearing and visual disabilities vis-à-vis mental retardation. However the findings of the study showed that there were no statistical significant differences in mother's acceptance of their hearing- impaired children, visually impaired, cerebral palsy, and mental disability due to mother's wok or age. This study also suggests conducting further research in other Arab countries, to further understanding of the phenomenon of disability since the results here are not conclusive.

Key words: acceptance; hearing impaired; visually impaired; children with cerebral palsy; mentally disabled.
Introduction

A Mother's acceptance of her child with disabilities is considered a civilized model for coping with and humanistic individual differences among her children. This acceptance has been seen in the social relations inside the family and even may extend outside the family. This also affects the psychological structure of family members including the person with disability. The mother is considered to be the source of education, passion, and socialization, which may positively or negatively affect children. The mother's demonstration of acceptance of, understanding of, and communication with her disabled child constitute a positive model for the sibling to follow while interacting and communicating. However, mother's anxiety about the future of a child with disability may have a negative effect on the psychological atmosphere of all the family members. The behaviors that result in anxiety may encourage the siblings to neglect, reject, and isolate their disabled brother/sister. Consequently, he/she might feel or act as a stranger in the family (Llewellyn, Thompson, Whybrow & McConnell, 2003; Blacher & Hatton, 2001).

The mother's acceptance of her child's impairment offers a positive climate for the child to grow socially, psychologically and behaviorally. It also provides him/her with opportunities for early intervention in the educational, social, psychological and medical aspects. This, in turn, helps in adaptation, development, and providing the child with the right stimuli at the right time (Al-khateeb, 2001; Al-qarsi, 2003; Fahmi, 1983). However, the mother's rejection of her child's impairment, and using of defensive mechanisms may increase the child's feeling of being different from others. It ensures his/her weakness, inability and dependence. It also affects negatively self-
esteem, acceptance of the impairment, and interaction and acceptance of others around him (Abed-Allah, 1999; Marwan, 2002).

The related literature indicates that Mother's acceptance of her child's impairment depends on a number of variables such as family's socio-economic status; parent's awareness level; and parent's health. Elsoon (2000), in her study, showed that the majority of families with severely disabled children reported challenges with some aspect of their daily activities, social life and financial needs. Some researcher found that economic hardship has negative impact on the parent's behavior toward the child with disability (Mcloyd, 1990; Books-Gunn& Duncan, 1997; Garett, Nq'andu& Ferron, 1994).

The disabled person, the type of disability, severeness, gender, personal traits and other capabilities may also affect the degree to which mothers accept a child with disability (Al-zeriqat, 2006; Masood et al 2005; Al-khateeb, et al 1992; Smith 2004).

According to researches in the field of disability, some families don't accept their handicapped children and they can't cope with the disabilities; like Down syndrome (Lee, 1986). Other studies referred to maladjustment among family members and psychological stress, loneliness and inability to participate with others due to having disabled child (Howaidi, 1996; Al-hadidi & Al-khateeb, 1996; Al-hadidi et al, 1994; Hodapp & Kranser, 1995; Singhi et al, 1990). Other studies show that the degree of acceptance of the disability depends on its type. For example, hearing and visual impairment are seen as more acceptable than a mental disability. Scientific arguments were presented in few studies that indicated greater acceptance of the female disabled children as opposed to the male; while others indicated a tolerance with male disability (Mohammed, 1998; Al-qaryouti, 2008; Hassal & McDonald, 2005; Baroun, 2006).
**Study Questions**

This study was designed to answer the following questions:

1. Will there be significant effects of age and employment on the mothers' acceptance of their hearing-impaired child?

2. Will there be significant effects of age and employment on the mothers' acceptance of their visually-impaired child?

3. Will there be significant effects of age and employment on the mothers' acceptance of their child with cerebral palsy?

4. Will there be significant effects of age and employment on the mothers' acceptance of their mentally disabled child?

5. Is there any differences in mothers acceptance of there disabled children according to there type of disability?

**Method**

The current study follows the analytical descriptive approach. A specifically designed questionnaire was administered to a sample of mothers who have children with disabilities and were registered in centers and special education private schools in four major cities in Jordan. The mothers were included in the study on voluntary basis. Mothers who agreed to participate in writing were sent the questionnaire by a group of graduate students who lived in those cities. The same group of graduate students collected the filled questionnaires from the centers. Social workers in the four centers cooperated in data collection.  Four hundred eighty questionnaires were distributed, of which 405 were valid while 75 were in complete:

a. 167 mothers of hearing impaired children.

b. 96 mothers of visually impaired children.

c. 65 mothers of children with cerebral palsy.
d. 77 mothers of mentally retarded children.

Instrument

The current study used a questionnaire as a tool designed to address acceptance of individuals with disability. The questionnaire was developed in light of the related literature (Al-khateeb, 2001; Al-magloth, 2002; Al-qars, 2003; Howaidy, 1996; Smith, 2004; Baroun, 2006) and in accordance with the definition provided above. Also, the researcher relied heavily on working experience with all groups of disabled persons, their families and training specialists at the undergraduate and graduate levels.

The questionnaire was validated by a group of special education referees from The Amman Arab University for Postgraduate Studies and Mo’otah University. The referees acknowledged that the items measure the respective construct and the items were linguistically well formulated. Their response was 98% in agreement. Also, the referees indicated that tool was relevant, indicating questionnaire context validity. The internal consisting analysis revealed an alpha cronbach of is acceptable for the purpose of this research.

Results

This study was designed to address the mother's acceptance of children with disabilities. It addressed five questions that will be presented next. First, ANOVA was conducted and revealed (Table1) no significant effects for mothers' age and employment on the acceptance of children with hearing impairment.

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Insert Table 1 about here
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Table 2 shows that there are no statistically significant effects for mother's age and employment on the mother's acceptance of children with visual impairment.

In order to answer the third question, ANOVA (Table 3) shows that there are no statistically significant effects for mother's age and employment on the mother's acceptance of children with cerebral palsy.

In order to answer the fourth question, ANOVA revealed no significant effects for age and employment on mother's acceptance of children with mental retardation, (Table 4).

In order to answer the fifth question the researcher count the means and standard deviation of the mothers responses according to the type of there child disability. Table 5 shows that there are differences in the means and standard deviation among, the types of disability.
And to be sure about the indications of these differences, the researcher estimated the value of (f) for One Way ANOVA explained in Table 6.

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Insert Table 6 about here
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According to Table (6), it was clear that there was a statistically significant difference related to the type of disability. To know the recourses of the differences, the researcher mad Scheffe's test explained in table 7.

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Insert Table 7 about here
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Table 7 shows a statistical significant differences in mother's acceptance of there hearing impaired children vis-à-vis mental retarded children, also there were a statistical significant differences in mother's acceptance of there visual impaired children vis-a-vis mental retarded children.

**Discussion**

The current study aimed at investigating mothers' acceptance of their children with a disability. The findings of the study showed that there were statistically significant differences in mothers' acceptance of their disabled children related to the type of disability in favor of hearing and visual disabilities vis-à-vis mental retardation.

The mother's acceptance of their hearing and visual disabled children more than the mental retarded children, this result maybe revealed to the differences of their cognitive abilities, and social characteristics, the IQ of the mentally retarded person's less 30 degree on I Q test, more than non-retarded persons, and they faced more
problems in social interaction with others, which affect negatively to their mothers and they feel shy of the social behavior of their children, especially if they deal with other persons in the community or in some social activities. Although some researchers have found that mother's acceptance of disabled child is associated with the type of disability (Al-zeriqat, 2006; Masood et al 2005; Al-khateeb, et al 1992; Smith 2004; Al-qaryouti, 2008).

Also the finding of the study indicated that there are no statically significant effects for age or employment on mother's acceptance of their children who have any type of disability (hearing impairment, visual impairment, cerebral palsy, mental retardation). The present study found that, across all types of disability that are included in this study, acceptance is not related to age or employment. In this study, age was measured on an ordinal level with tow classes; and employment on a nominal level with tow classes. The cross-tabulation of the sample revealed a small number of mothers who were employed and had a disabled child. When age was broken into four categories and crossed over employment, some cells were empty or had cases fewer than five. This forced the researcher to collapse the classes of age into tow only. This may have disguised the real differences. Working mothers were less ready to cooperate in this study. Furthermore, the researcher was forced to drop mother's level of education due to some empty cells. Despite the lack of significance in the results, probably the most significant result is the difference between working (n = 40) non working (n = 365) mothers. This finding suggests that a mother of a child with disability needs education and rehabilitation to deal with her child. This is particularly true in Jordanian society since traditions and habits render mothers to be shy and guilty because of the disabled child (Al-khateeb, 2001; Al-khateeb, 2008)
In all types of disabilities included in this study, working and non-working mothers expressed similar levels of acceptance for their children. Of particular significance, the differences between working and non-working, young and old mothers regarding acceptance of a child with cerebral palsy, the result seem to be logical. This may be due to the fact that children with cerebral palsy need intensive follow up and much care in order to satisfy their needs such as feeding, dressing, bathing, and moving, etc. They also need various adaptations for their tools and supporting means of living. This is not easy to be carried out by the mother, and she may not be able to fulfill all the needs of her child such as carrying or taking him/ her home, and / or to rehabilitation centers. This disability is visible and may affect negatively the mother's attitude and make huge psychological stress. The stress may be compounded by the lack of understanding of the disability by other people. This disability is also evident and can be easily noticed which make it hard for mothers to adapt to it and accept it regardless of their age or employment (Abed-Allah, 1999; Marwan, 2002).

Similarly, the study showed that there were no statistically significant differences in the level of acceptance for mothers of mentally retarded children due to the age and employment. Whether they are working or not, old or young the mother who have a child with mental retardation would have negative impact on the mother's emotions and feelings, especially if the case is a severe one. This result supports Lee's (1986) conclusion.

The researcher recommends carrying out further studies in other Arab countries in order to identify the level of mothers’ acceptance of their children with special needs. He also recommends carrying out a comparison study between these countries, especially the effect of mother's acceptance on the self-esteem of their
child with disabilities. Also, it is recommended that further research be carried out
with consideration to the representation issue. Research as such should be designed as
Stratford with sufficient number of cases in different categories or levels (working
non-working, varies levels of age and education).
References


Dissertation


Table 1  
*Analysis of Variance of Mother's Acceptance of the Hearing Impaired by Age and Employment*

<table>
<thead>
<tr>
<th>Source of difference</th>
<th>Sum of squares</th>
<th>D F</th>
<th>Means of sum squares</th>
<th>F</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother age (1)</td>
<td>11.788</td>
<td>1</td>
<td>11.788</td>
<td>.032</td>
<td>.859</td>
</tr>
<tr>
<td>Mother employment (2)</td>
<td>72.803</td>
<td>1</td>
<td>72.803</td>
<td>.195</td>
<td>.659</td>
</tr>
<tr>
<td>1x2</td>
<td>424.580</td>
<td>1</td>
<td>424.580</td>
<td>1.136</td>
<td>.288</td>
</tr>
<tr>
<td>Error</td>
<td>60895.585</td>
<td>163</td>
<td>373.593</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4729885.000</td>
<td>167</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

*Analysis of Variance of Mothers' Acceptance of Children by Age and Employment*

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>D f</th>
<th>Means of sum squares</th>
<th>F</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' age (1)</td>
<td>132.183</td>
<td>1</td>
<td>132.183</td>
<td>.517</td>
<td>.474</td>
</tr>
<tr>
<td>Mothers; employment (2)</td>
<td>25.732</td>
<td>1</td>
<td>25.732</td>
<td>.101</td>
<td>.752</td>
</tr>
<tr>
<td>1x2</td>
<td>319.356</td>
<td>1</td>
<td>319.356</td>
<td>1.248</td>
<td>.267</td>
</tr>
<tr>
<td>Error</td>
<td>23542.506</td>
<td>92</td>
<td>255.897</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2860556.000</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3
Analysis of Variance of Mother's Acceptance of children by Age and Employment

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Means of sum squares</th>
<th>F</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother age</td>
<td>744.485</td>
<td>1</td>
<td>744.485</td>
<td>1.949</td>
<td>.168</td>
</tr>
<tr>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother employment</td>
<td>472.639</td>
<td>1</td>
<td>472.639</td>
<td>1.237</td>
<td>.270</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x2</td>
<td>311.366</td>
<td>1</td>
<td>311.366</td>
<td>.815</td>
<td>.370</td>
</tr>
<tr>
<td>Error</td>
<td>23300.371</td>
<td>61</td>
<td>381.973</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1867481.000</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

*Analysis of Variance of Mother's Acceptance of Mentally retarded Children by Age and Employment*

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Means of sum squares</th>
<th>F</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother age</td>
<td>220.915</td>
<td>1</td>
<td>220.915</td>
<td>.576</td>
<td>.450</td>
</tr>
<tr>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother employment</td>
<td>14.220</td>
<td>1</td>
<td>14.220</td>
<td>.037</td>
<td>.848</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x2</td>
<td>354.428</td>
<td>1</td>
<td>354.428</td>
<td>.924</td>
<td>.340</td>
</tr>
<tr>
<td>Error</td>
<td>27997.974</td>
<td>73</td>
<td>383.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1995451.000</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5
The mean scores and the standard deviations of the sample according to the type of disability.

<table>
<thead>
<tr>
<th>Type of Disability</th>
<th>M</th>
<th>N</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing Impairment</td>
<td>167.191</td>
<td>167</td>
<td>19.283</td>
</tr>
<tr>
<td>Visual Impairment</td>
<td>171.895</td>
<td>96</td>
<td>15.8715</td>
</tr>
<tr>
<td>CP</td>
<td>168.384</td>
<td>65</td>
<td>19.5701</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>159.831</td>
<td>77</td>
<td>19.3339</td>
</tr>
</tbody>
</table>

Table 6
The One Way ANOVA Analysis of the differences in the degree of the mother's acceptance of their disabled children according to the type of disability.

<table>
<thead>
<tr>
<th>Source of differences</th>
<th>Sum squares</th>
<th>Degree of Freedom</th>
<th>Mean of Sum squares</th>
<th>(F) Value</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>6385.033</td>
<td>3</td>
<td>2128.344</td>
<td>6.159</td>
<td>0.00</td>
</tr>
<tr>
<td>within groups</td>
<td>138579.0</td>
<td>401</td>
<td>345.584</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tot</td>
<td>144964.0</td>
<td>404</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7
Scheffé's test indications of the means differences for the degree of the mother's acceptance

<table>
<thead>
<tr>
<th>Square Differences</th>
<th>Hearing Impairment</th>
<th>Visual Impairment</th>
<th>Cerebral Palsy</th>
<th>Mental retarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing Impairment</td>
<td>€</td>
<td>4.7042</td>
<td>1.1930</td>
<td>*7.3604</td>
</tr>
<tr>
<td>Visual Impairment</td>
<td>4.7042</td>
<td>€</td>
<td>3.5112</td>
<td>*12.0647</td>
</tr>
<tr>
<td>Cerebral Palsy</td>
<td>1.1930</td>
<td>3.512</td>
<td>€</td>
<td>8.5534</td>
</tr>
<tr>
<td>Mental retarded</td>
<td>*7.3604</td>
<td>*12.0647</td>
<td>8.5534</td>
<td>€</td>
</tr>
</tbody>
</table>

& \leq 0.05
IS SELF-DIRECTED LEARNING A CHALLENGE TO HKUGA PRIMARY SCHOOL STUDENTS? A NARRATIVE INQUIRY OF THE “OTHER LEARNING EXPERIENCE” (OLE) OF HONG KONG PRIMARY STUDENTS AT THE EXPO 2010 SHANGHAI, CHINA

Abstract

This case study extrapolates the self-directed learning experience of HKUGA Primary School's students ("the students") who volunteered for the “Other Learning Experience” (OLE) in the form of a study tour to the Expo 2010 in Shanghai, China. The role of the teachers as the facilitators, knowledge co-constructors and advisors of the self-directed learning outcomes would be analysed. It is theorized that, based on a culturally-diverse and cross-disciplinary curriculum framework, the paradigm of learning would shift from teacher-centred to self-directed. Thus, students are capable of orchestrating their own learning experience with the end results of (i) interacting with teachers to refine the foci of their own self-directed researches for their projects, (ii) understanding and resolving the cultural divide between Hong Kong and the People's Republic of China (the PRC), and (iii) identifying innovative and pragmatic solutions to the global problems from a stakeholder's perspective.

Results would be deduced from quantitative post-trip questionnaires and qualitative interviews. The teachers and parents involved in the project design would be interviewed as well. Documentations and policy texts would be analysed in order to give an all-round picture of this innovative OLE.

This study would shed light on future OLE initiatives overseas, the essence of which would be to nurture students into global citizens who embrace diversity and solidarity.

Keywords: Self-Directed Learning, Expo 2010 Shanghai China, curriculum integration, cultural divide, Other Learning Experience (OLE), Hong Kong primary education
Background

HKUGA Primary School (hereafter as the “HKUGAPS”) organized the first and foremost cross-border “Student Learning Tour of the Shanghai Expo 2010” (hereafter as “the Tour”) in collaboration with the Parents-Teachers Association (PTA) within its 8 years of school history.

As a preparation ahead of the Tour, the HKUGAPS teachers embarked on the Pre-Tour Study Trip to the Shanghai Expo 2010 as a staff development initiative. Six teachers from different subject departments were appointed to sit in the Working Committee under the leadership of the Curriculum Development Officer. The committee was responsible for designing the learning framework, students' tasks and tour itinerary.

Two identical Tours were organized to cater for the P5 and P6 students and their parents. The Tours lasted for five days each (1st to 5th September, 2010, and 8th September to 12th September, 2010), with two full days of exposure at the Shanghai Expo, one day of cultural exchange at a suburban local primary school (the Shanghai City Xincheng School), the Sun Yat Sen's (Father of Modern China) Residence, Shanghai Science Museum and Shanghai Museum of Planning and Energy Conservation.

Research Questions in the context of “Other Learning Experience” (OLE) overseas

This paper postulates that, with case-specific and time-sensitive guidance received from the teachers and parents, the paradigm of learning would shift from teacher-centred to self-directed. It was postulated that HKUGA students would be capable of (i) refining the foci of their self-directed research questions for their projects, (ii) understanding and resolving the cultural divide between Hong Kong and the People's Republic of China, (ii) identifying innovative and pragmatic solutions to the global problems from a stakeholder's perspective after the Tour.

The research questions above could not be fairly assessed without reading the Tour with the backdrop of “Other Learning Experience” (OLE). As suggested by the Chief Curriculum Development Officer (Life-wide Learning and Library) of the Education Bureau, “OLE embraces a catalytic function in promoting students' whole-person development” (HKSAR Government's Education Bureau, 15th July, 2007). It was advocated by the HKSAR Government that OLE can (i) broaden and balance students' formal and informal learning, (ii) develop life skills (for example, creativity, aesthetics, art appreciation, interpersonal and intrapersonal skills etc.), and (iii) promote
lifelong learning.

Hence, this paper would attempt to delineate the potential, positive washbacks which are brought forth by this OLE in Shanghai, namely, (i) the application of critical thinking skills, (ii) global awareness and understanding and (iii) holistic personal development. All of the washbacks would be analysed in the subsequent sections with the use of narrative inquiry approach.

**The Research Study – “A Tale of Two Cities” told using the Narrative Inquiry Approach**

The focus of this article is a group of 104 students from HKUGAPS – a Direct Subsidy School in Hong Kong which has financial autonomy and a culture of school-based management, with the status of which is similar to that of a private school in the United Kingdom. The school serves a predominantly middle-class, ethnically Chinese community, whose students typically achieve better academically than the territory's average.

In this unique context of “Other Learning Experience” overseas, the holistic narrative inquiry approach ought to be adopted in this paper as the findings are divergent in perspectives, opinions and knowledge disciplines. This approach is desirable since the author was a third-party observer and participant of the Tour, the status of which would offer the readers with an objective lens in extrapolating the insights from all the stakeholders' reflections narrated in both verbal and literal forms. All names are made anonymous in this article.

It is undoubted that this paper is the mutually-constructed story about the Expo as told by all the student participants, parents and teachers who have joined the Tour. Therefore, the intertwining encounters between the individuals at the Expo would magnify the OLE experience and formulate the full story. Concurring with the theory of Connelly and Clandestine (1990), which stated that "humans are storytelling organisms who, individually and collectively, lead storied lives,” the study of narrative is thus the de facto study of how humans experience the world.

In order to examine the “stories” of stakeholders thoroughly, the following instruments have been analyzed –

- Interpretations of Pre-Tour school documents
- On-Tour observations of students, teachers, parents and state propaganda
- Post-Tour observations and interpretations of logbooks, reflection journals and presentations
Interpretation of Post-Tour questionnaires tailored for students
Post-Tour individual interviews with teachers, students and parents

Putting these aside, a quantitative survey (see Appendix One) for students was done to supplement the narrative stories and help verifying the research questions posed beforehand.

Pre-, On- and Post-Tour's Curriculum Designs

(i) Pre-Tour Curriculum Integration Week (16th-23rd June, 2010)

There are two strata of “learning foci”. The first strata one is teacher-centred (the guiding theme of “Heading into the Future City”), whilst the second strata allows a certain degree of autonomy, because it was up for the students to design their own project themes or work on one of the four given themes below.

- Environmental protection
- Technological advancement
- Architecture of the Pavilions
- Art in the Expo

As the student participants had never been to the Expo before the Tour, teachers were supposed to guide students through the Expo during the Curriculum Integration Week (June 2010) after attending the staff development trip to the Shanghai Expo (April 2010). All students, including the non-participants of the Tour, had to construct their own bilingual display boards, posters and models as assignments, no matter they were joining the Tour or not. All the subject-based tasks were set against (i) the genres of writing (e.g. narrative writing in Chinese Language, poster design in English Language) that student had learnt in the previous academic year and (ii) key learning areas (e.g. energy conservation and urban development in General Studies).

(ii) On-Tour Curriculum Design (1st-5th September, 2010 & 8th to 12th September, 2010)

<table>
<thead>
<tr>
<th>Types of Participants</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>P5 Students of the 2010/11 school year (P4 Students as of 2009/10)</td>
<td>68</td>
</tr>
<tr>
<td>P6 Students of the 2010/11 school year (P5 Students as of 2009/10)</td>
<td>36</td>
</tr>
<tr>
<td>Parents</td>
<td>127</td>
</tr>
<tr>
<td>Teaching Staff (including the Principal)</td>
<td>13</td>
</tr>
</tbody>
</table>

*Figure 1. Types and Numbers of Participants attending the Tour to the Expo 2010, Shanghai, China*
The breakdown of the types of participants is shown in Figure 1 above. The teacher-to-student ratio is around 1:6 for the P6 cohort and around 1:8 for the P5 cohort. Each student must bring along one parent for the sake of guidance and safety. Each student was given a logbook to note down his/her findings after each day's program. Inside the logbook are the objectives of the Tour and a work schedule, which is followed by empty boxes of open-writing spaces with the simple sub-headings of “what I discovered today”, “my most memorable moment of today” and “my reflection”.

To follow up on the students’ written account on the logbooks, every teacher was assigned to a group of students to guide them through the writing. Written feedbacks, verbal comments and specific guidance on the notes written were given in a voluntary manner, though two compulsory debriefing sessions had to be conducted by the teachers to ensure that the students were on track with their research questions. For the regionally-specific issues, they were addressed by the local tour guide in Shanghai, who explained the culture, customs and heritage of Shanghaiese from an oriental, if not ethnocentric and biased perspective.

(iii) Post-Tour Curriculum Design

Students who joined the Tour were required to submit writings of their chosen genres and present their findings to the rest of the class. The execution of presentations varied in forms and frequencies since the teacher leaders of the student groups at the Tour may not necessarily be the subject teachers of the student participants in the academic year of 2010/11. In fact, the author was the only P5 class teacher who joined the tour, which in turn enhanced the engagement factor of the students. In the year ahead, the Principal has planned to reproduce the best artwork and writings in printed form as a means of knowledge management and information sharing, which in turn motivates the production of quality work.

Challenges posed to the Realization of “Self-Directed Learning”

(i) Limited “Self-Directed Learning” during the Curriculum Integration Week (June, 2010)

As explained earlier, students might work on one of the four standard themes which were shaped by the teachers during the Curriculum Integration Week, or work out their own research topic with the approval of the teachers before the trip. Without any exposure to the Expo in person and given the limited class hours during the Curriculum Integration Week beforehand, almost all
students (n = 93 out of 100 respondents, with 4 non-respondents in the survey) stayed inside their “comfort zones” and chose to work on the four given themes during the Curriculum Integration Week back in June, 2010 (i.e. three months before the Tour).

The fact that students managed to pick a theme to work on was not the end of the story. Students were expected to draw up a concrete action plan for data collection and analyses. Nonetheless, it was remarkable to note that 10% of the respondents admitted to have failed to draw up a concrete action plan for research on one of the four given themes after the delivery of class activities during the Curriculum Integration Week.

(ii) Challenges to be tackled at the Shanghai Expo (September, 2010)

According to the guidance note on the printed learning logbook, students had to “relate the research topic to future citizenship, future urban life and the ideologies behind such constructs”. During the Tour, however, student participants experienced quite a number of unresolved problems, which hindered them from comprehending the basics before the tasks could possibly be done (see Figure 2 below).

<table>
<thead>
<tr>
<th>Categorization of Problems</th>
<th>Problems faced by Student Participants(^1)</th>
<th>Counts(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>I cannot comprehend simplified Chinese characters.</td>
<td>44</td>
</tr>
<tr>
<td>Language</td>
<td>I do not speak in fluent Putonghua.</td>
<td>16</td>
</tr>
<tr>
<td>Curriculum Design</td>
<td>I did not know how to fill in the learning logbook (e.g. I do not understand what it meant by “My Reflection”).</td>
<td>32</td>
</tr>
<tr>
<td>Life Skills</td>
<td>I did not know how to plan my time around the numerous pavilions.</td>
<td>41</td>
</tr>
<tr>
<td>Communications &amp; Motivations</td>
<td>My parents and I have different interests, so I have no choice but to follow them around the Expo.</td>
<td>7</td>
</tr>
<tr>
<td>Life Skills (Map-Reading)</td>
<td>Others: I have lost my directions at the Expo.</td>
<td>4</td>
</tr>
<tr>
<td>Citizenship</td>
<td>Others: The Chinese visitors were very impolite and they jumped the queue.</td>
<td>2</td>
</tr>
<tr>
<td>Life Skills (Inter-personal Relationships)</td>
<td>Others: My classmates and I were interested in different pavilions.</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^1\) Students may check more than one problem in the questionnaires.
\(^2\) 104 students joined the Tour and 100 had turned in the post-Tour questionnaires, so there are 4 non-respondents.
(iii) Post-Tour Technicalities (October-December, 2010)

According to the school documents written by the school's Curriculum Development Officer, there were implied expectations that students have to present the post-tour reflections in forms of powerpoints, photo albums, speeches, portfolios and articles. Unfortunately, no tailored-made training was provided to equip students with the oratory skills. Peer learning was not facilitated, because other students who did not join the Tour were not as well-informed as the student participants, so the formers might not be at a good position to judge on the presentations.

Thematic Learning at the Expo and the Potentials for Self-Directed Learning

That said, HKUGAPS students were able to generate insightful findings upon the four given themes despite all the difficulties delineated in the previous section. The themes were well researched on during the Tour. The success of thematic learning can be reflected in the students' writing found within their learning logbooks. Ballantyne & Packer (1995, cited in Akerlind, 1999:102) has identified the same strategy to manage the gradual shift from teacher-centred to self-directed learning, which is the usage of learning journals “to encourage ongoing reflection by students on their learning and experiences over a period of time”.

In effect, students were made responsible for keeping track of their own learning process and self-management skills were enhanced. The notion of accountability / responsibility is the prima facie agenda behind learners’ autonomy. An illustration of the inter-relationship of the elements is found in Figure 3 (Silen, 2003:255) below.

![Figure 3. A Dialectic Relationship influencing students’ responsibilities and independences](image-url)
As suggested by Hmelo-Silver (2004:236), an important part of the problem-based learning cycle is to “identify knowledge deficiencies relative to the problem”, with “knowledge deficiencies” meaning the learning issues that students were researching on during their self-directed learning. Subsequent to the self-directed learning, students would evaluate whether their assumptions are correct or not. The excerpts below demonstrate how students defined the global problems and identified the solutions to tackle those problems.

Students' Reflections on Theme No.1 – Environmental Protection

HKUGAPS students were well aware of the existing problems in urban areas and after visiting the Pavilions and the showcase exhibitions in the Urban Best Practices Area (UBPA), as a result they have internalised the good environmental-friendly practices into their daily lives back in Hong Kong. For instance, “I would use my bike instead of private cars (1 student)”, “Save energy by not using the air-conditioner that often (10 students)”. The same happened to Student A, who noticed the greening measures, whilst for Student B, he was inspired to play his part in saving the world’s resources by all means.

Student A: “All the buildings should have their walls covered by climbing plants. It is indeed very environmental friendly for the Madrid's Urban Best Practices Area (UBPA) to decorate its outer walls with bamboos.”

Student B: “The plates people used at the 'Zero-Carbon Restaurant' of the London's Urban Best Practices Area (UBPA) are edible! They are made of chocolate and the practice seems to be very environmental-friendly! From now on I will not use any disposable cutlery anymore.”

Students' Reflections on Theme No.2 – Technological Advancement

HKUGAPS students were empathetic towards the disadvantageous social groups and alerted by the global problems. Bearing in mind the official slogan of “Better City, Better Life”, students could exercise their judgments pragmatically and fair-mindedly.

Student C: “The robots at the Japan Pavilion are incredible! They can play the violins...though it goes out of tune sometimes. I believe we can use the robots to help disabled people or the elderly in the future.”
Student D: “It would be great to turn the sewage water into drinking water using the new technologies. That will solve the problem of water shortage in many countries.”

Students’ Reflections on Theme No.3 – Architecture of Pavilions

According to description of the United Kingdom Pavilion on the official website, the “Seed Cathedral” aims to “demonstrate the concept of sustainability, the diversity of nature and the potential of life” (Expo 2010 Shanghai China, 16th October, 2010), and in fact, the “Seed Cathedral” is a seed bank with 60,000-plus transparent acrylic rods containing seeds. After visiting the “Seed Cathedral”, student E managed to apply the idea of biodiversity into the case of Hong Kong. Hence, one may infer that this HKUGAPS student was able to capture the essence of the architectural design with a critical mind.

Student E: “The Seed Cathedral of the United Kingdom Pavilion is amazing. The Seed Cathedral is built by 60,000 illuminating plastic tubes with one real seed stored in each tube. The structure is wonderful and I wonder if Hong Kong has 60,000 different types of seeds (plant species) too.”

Students’ Reflections on Theme No.4 – Arts in the Expo

Besides enjoying the aesthetic aspect of the pavilions at the Expo, HKUGAPS students were able to capture the hidden agendas behind the artefacts. Instead on focusing on the artistic techniques, Student F spotted the history behind the livelihood of ancient Chinese commoners from a famous painting on display in the China Pavilion. In effect, Student F’s learning curve is trans-generational and longitudinal, which brought him back to 900 years earlier in history.

Student F: “In the China Pavilion, there was an animated version of the famous 'Riverside Scene at the Qing Ming Festival' (a famous 12th century painting by Zhang Zehuan). It took us back in time to look into the ancient Chinese's daily life. Both day (time) and night (time) activities came alive in front of us. The missing horse in the original painting is re-constructed again, I believe this is really impressive!”
Paradigm Shift from “Teacher-Centred Learning” to “Self-Directed Learning”

Knowles (1975:18) stated that self-directed learning “is a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources, choosing and implementing appropriate learning strategies, and evaluating learning outcomes”. In the current case, HKUGAPS students required the assistance from third parties as this was the first OLE overseas for almost all of them (except for eleven P5 students who did a cultural interflow tour in Barcelona, Spain the year before).

Despite the potentials of self-directed learning which lie within this overseas OLE experience, Taylor (1986, cited in Akerlind, 1999:98) has documented the disorientation experienced by students when they shift to self-directed learning, which is “marked by confusion, anxiety and tension, plus loss of confidence”. He has described the adjustment required of students as a “cultural journey”. In face of such an obstacle in the form of paradigm change to self-directed learning, the roles of teachers and parents have become even more crucial than ever.

Fraser & Walberg (1991, cited in Naidoo & Searle, 1999:168) maintained that “home and school environments interact and co-determine school achievements”, and in the current case, 73% and 63% of respondents found the advice, feedbacks and comments by teachers and parents as “very valuable” or “valuable” respectively. This was so especially when they were in the course of refining their research topics and formulating their action plans. 96% of respondents also found it “very easy” or “easy” to formulate their own research topics and action plans after receiving assistance from their teachers or parents.

The Role of Teachers

Despite the capability of HKUGAPS students to infer meaningful insight from their observations at the Expo, that does not deter one from questioning the room for self-directed learning within the pre-existing curriculum, as the majority of student participants had failed to formulate their own research topics, as well as improvise and personalize their pre-tour experience. The only exceptions are the 7 students who managed to design their own research topics beforehand.
The self-directed research topics are listed below.

- (5th Grade) The Designs of Stamps given at Pavilions in the Expo
- (5th Grade) How local volunteers feel after serving at the Expo
- (5th Grade) The Mascots of World Expos
- (5th Grade) Differences between the Local Food of Hong Kong and Shanghai
- (6th Grade) The Influence of the Expo upon the Transportation, Infrastructure and Economy of Shanghai
- (6th Grade) The Food Culture of Different Countries
- (6th Grade) The Development of Transportation and Urbanization in Shanghai

Yet, self-directed learning started to take its shape when students started stretching the official curriculum further. This could be done by resorting to the time-sensitive and case-specific advice given by the teachers and parents during the Tour. Undeniably, the teachers were the catalysts of self-directed learning due to their multiple roles as the knowledge co-constructor, facilitator and counsellor.

It was suggested by Ausburn (2002:233) that instructional strategies have to be designed to prepare learners for a “customized, self-directed learning environment (which) help them maintain learning focus, direction, and momentum (that) may contribute to their success”. The challenge would be to resolve the dilemma between learners’ autonomy and meeting the expectations of the curriculum. Teachers as the facilitator bear the responsibilities to keep the students on track and lead them to fruitful conclusions. Student G’s written submission in the learning logbook with the teachers' comments below would shed light on the argument above.

First draft (Student G): “I feel very happy to walk around the expo. We will have lots of high-tech innovations in the future, like living in space.”

Teacher A’s comment: “When you fill in the logbook, you should compare and contrast what you observe at the Expo and your current living style. Reflect on what you would do otherwise in the future with the new technologies here in Shanghai!”

Second draft (Student G): “I learnt from the Expo that microalgae would affect the ecology and it can be processed into oil!”

Teacher A’s comment: “Why do we need the extra oil?”
Final Submission (Student G): “We humans have almost exhausted all the oil reserve, so we have to limit our use and discover new energy sources.”

Student G could never come up with the conclusion above without the guidance of the teacher. However, departing from his final submission, Student G subsequently embarked on a full study of the potential energy sources for the future world, which was entirely self-directed and self-motivated.

Student G has captured the essence of self-directed learning by “assimilating new knowledge and applying it to solve problems, thinking critically and performing self-assessment as well as that of communicating and collaborating with others” (Cornish, 1986, cited in Birenbaum, 2002:119). He went through the problem with a multi-dimensional perspective, bearing in mind the individual, national and global concerns.

Student H also mentioned about the positive washbacks brought about by the cross-disciplinary orientation tasks given by the teachers. He said, “Before I went to the Expo, the teachers gave us summer assignments relating to the Shanghai Expo. You may say I have learnt a bit about Geography from the Math assignment, because there are questions about the number of participating countries in the Expo and the names of the continents they are found within.”

The Role of Parents

In previous sections, quite a handful of obstacles stood in the way to effectuate self-directed learning. Fortunately, parents helped filling the learning gaps before and during the Tours, given the fact that 36% of respondents had proactively approached their parents for guidance. The sharing of the parents being interviewed would illustrate this argument further. While they were asked what the parents’ role is throughout this learning tour, they replied as below –

Parent A: “I was a Geography major back in college, that’s why I could explain how fossil fuels was formed in ancient times, after watching the 4D-movie on oil formation with my son at the Oil Pavilion.”

Parent B: “My child was too small when we were staying in Canada. Although all our family members are Canadian passport holders, he has little understanding of Canada, therefore I’d make use of the opportunity to explain the icons of Canada inside the Canadian
Pavilion. My child was pleased about the VIP passage for Canadians after all.”

Parent C: “Simplified Chinese is not taught in local Hong Kong primary school. Whenever my child failed to understand the text, then I would interpret that.”

From the HKUGAPS students’ perspective, the parents were not just their guardians but also their trainers of life skills, for example, time management skills, self-management skills and etiquettes.

Parent D: “My little girl cried pitifully after she tried to request a local to line up behind her, because that local called her a ‘fat piggy’. I comforted her saying that was a proper gesture to do.” (Teacher B then added, “I agree, it should be the local who should take in comments whole-heartedly.”)

Student I: “I freaked out when the locals jumped the queues when I was lining up for entry. My dad and other fathers literally protected us by forming a blockade. My mom said I should tell those people to line up probably.”

Student J: “My mother taught me how to pack my luggage and get ready for the trip. She said I should look after my own belongings at the airport.”

Student K: “My parents said it is impolite to leave my meal untouched because that is very rude. So I had to finish all the greasy, spicy and meaty meals in Shanghai!”

It should be highlighted that self-directed learning is “a matter of degree” because the learning process is normally non-linear with an ever-changing focus as learning occurs (Candy, 1991, cited in Rager, 2004:96). Hence it would be rather demanding to ask for complete autonomy and self-control on the part of the students upon their first OLE tour overseas.

The Role of Externalities

Often being overlooked are the influences of externalities beyond the formal curriculum. Teachers and parents are catalysts which channel the teacher-centred mode into a self-directed one, though there are intertwining external inputs like (i) media influence, (ii) state propaganda, (iii) domestic and community support and (iv) web knowledge which involved in the self-directed
process. All these externalities have contextualized this OLE experience, as supported by Greveson & Spencer (2005:348) and Merriam & Caffarella (1999), it was argued that “the ability, extent and motivation to be self-directed varies with the context of learning”, taking into account of the subject matter concerned; the social, cultural and educational setting; past experiences; self-concept; and relevant study skills.

Besides, it was observed that the application of the self-directed learning framework has allowed students to “identify their deficit in knowledge and target their learning needs to relevant sources of information” (Yeung et al., 2003:240). Therefore, students would proactively reach out to different sources for extra information to fill in their knowledge gaps, which is well proven by the data below.

88% of the respondents indicated in the questionnaires that they were exposed to the state propaganda from different media source. One significant example would be the theme song, “The City of Hope”, as sung by the famous Hong Kong artist called Eason Chan. The lyric is translated literally (see Appendix Two) and the Expo has been glorified as the “window to the world” and a platform for the “mingling of civilizations”. This is owing to the fact that China is the first developing country to host the event and the Expo would be a golden opportunity for China to demonstrate its soft power and win the hearts of everyone. Expo spokesman Xu Wei said the Expo “is a big platform, a big event for cultural exchanges...(and let Chinese have) 'face to face' contact with international society” (BBC.com, 29 April, 2010). It would be interesting to examine the extent to which HKUGAPS students were able to evaluate the Expo using a critical perspective, with due regard to the ethnocentric state propaganda.

44% of the respondents also acknowledged that they once approached relatives or friends who had visited the Expo beforehand, such that they could plan their time around the Expo wisely, but putting that aside, self-directed learning was evident as 82% and 53% of the respondents had done research on the internet alone and read printed matters or books about the Expo by themselves. Little is known though, about the quality of the data collection or syntheses due to the differentiated needs and motives behind the students’ intended research.

The interactions between the students and the external inputs throughout the learning process are visualized in Figure 3 on the next page. The emphasis is on how student-directed learning was made possible within the teacher-centred formal curriculum framework.
Figure 4. Flowchart of the Self-Directed Learning Process
Self-Directed Learning beyond the HKUGAPS Curriculum

The on-site personal experience, guidance from the parents and teachers, as coupled with the influences brought forth by the externalities, have paved the way for students to conduct self-directed learning. The students were not left wandering alone during the learning process. Given their limited experience and competencies, teachers and parents had to get involved to assist the undertaking of inquisitive learning.

The technicality involved is to guide learners to the right track, but the gist is still about letting students explore the subject matters by themselves first. Dewey (1931:424 cited in Dowden, 2007:58) insisted that learners should actively experience subject matter and engage in inquiry in order to authenticate the process of personal integration.

“The mentally active…(learner’s) mind roams far and wide…there is constant judgment to detect relations, relevancies (and) bearings on the central theme. The outcome is a continuously growing intellectual integration…within the limits set by capacity and experience…(this) is the process of learning.”

It is concluded from the students’ submission that this type of “Other Learning Experience” can fulfil its goals of widening students’ horizons, cultivating whole person development and promoting lifelong learning. Besides the four standard research themes, HKUGAPS students had explored several areas of learning which are hardly assessed and explored within the formal curriculum, namely –

- Socio-Cultural Environment of Shanghai
- Global Awareness and Understanding
- Character Building
- Critical Thinking
- The Design of An Ideal City

Again, time-sensitive and case specific stimuli from the teachers were fundamental in motivating students to conduct self-directed learning with the right approach. The correspondences between the students and teachers are quoted below to argue for the case.
On the Socio-Cultural Environment of Shanghai

The author overheard a dialogue between a student, her mother and another teacher when the three of them were queuing up outside one of the pavilions and as quoted –

Student L: “The tourists at the Shanghai Expo (who are mostly Mainland Chinese) always jump the queue and push the way through. I think we should line up while waiting.”

Teacher C: “Do you find those Mainlanders belonging to a certain age group particularly rude? They are mostly in their 40s. What happened some thirty years ago which affected the education of these people, when they were at your age?”

Student L: “I have no idea at all…”

Parent E: “My son, the Cultural Revolution took place in mid-1960s. Lots of people did not receive the proper schooling at all…(and he went on to talk about the history of the Revolution).”

This is indeed a significant example of the inter-dependency of both teachers and parents in facilitating self-directed learning. Student L might simply observe a phenomenon without the awareness or knowledge base to comprehend the rationales behind. Once the teachers and parents stepped in, it would be conducive to learn from an all-encompassing manner. On the bright side, the cultural divide derived from the socio-economic differences between the Hong Kong Special Administrative Region and Mainland China has been narrowed down as a result too.

On Global Awareness and Understanding

The Expo has housed the pavilions of 192 countries, with 50 extra organisations putting themselves on show. This OLE has obviously made a lasting impression upon the HKUGAPS students. Cultural diversity is appreciated and some students even handled the cultural divide well with empathy. The evidence are deciphered below –

Student M: “The most memorable moment of mine was that everyone (student) in my group made a wish at the ‘wishing stone’ inside the Latvia Pavilion – I hope there will be world peace!”
Student N: “We cannot judge and compare one pavilion against another, because they all have their own strengths, just like humans.”

On Personal Development

HKUGAPS students have been enlightened by the daily encounters at the Expo and hence they did take a step back in reviewing some of the etiquettes and mentalities which are often belittled.

Student O: “The signage at the Expo said you have to queue up for six hours to get into the Saudi Arabia Pavilion, however, we did that successfully in three hours only! We have to be persistent and believe in what you want to do, like the Chinese proverb said, 'you can sharpen an iron rod into a thin needle' if you work hard.” (Teacher D's comment: “Lots of great theories are sparkled by small incidents!”)

Student P: “Time management is crucial and we should use time wisely to learn the most out of the pavilions.”

Student Q: “Lots of people were smoking inside the restaurants this afternoon. I felt awful because there were no windows. I should not smoke indoors because that would affect others.”

Student R: “My classmates and I were interested in different pavilions, so we had to compromise among ourselves and take turns to visit the pavilions we each liked.”

Having experienced a lesson in life at the Expo, when being asked in the post-tour questionnaires what they would do to perfect their characters, the HKUGAPS students have pledged to uphold a number of positive, daily habits after the trip in the post-Tour questionnaires and as expected, lots of the reflections echo with what they have learnt, especially towards environmental protection and personal development.
<table>
<thead>
<tr>
<th>Proposed Good Habits by HKUGAPS Students</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be environmental-friendly (e.g. riding the bike, turning off the air-conditioner)</td>
<td>10</td>
</tr>
<tr>
<td>Management my time better</td>
<td>2</td>
</tr>
<tr>
<td>Be self-disciplined (e.g. wake up early, be on time, be persistent, be polite)</td>
<td>12</td>
</tr>
<tr>
<td>Prepare and plan ahead for my future</td>
<td>5</td>
</tr>
<tr>
<td>Take good care of my mom</td>
<td>1</td>
</tr>
<tr>
<td>Try to learn simplified Chinese</td>
<td>3</td>
</tr>
<tr>
<td>Reflect on what I have learnt from time to time</td>
<td>2</td>
</tr>
<tr>
<td>Respect others’ cultures</td>
<td>1</td>
</tr>
<tr>
<td>Be proactive and ask for the information you want</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 5. List of Good Habits proposed by HKUGAPS students to be upheld after the Tour

On Critical Thinking

HKUGAPS students, though being coached during the Expo, were able to evaluate what was being said and told using a critical perspective without receiving training on that before.

Student S: “At the Technology Pavilion, it mentioned about the robots with thinking (artificial intelligence), so robots will supersede humans in the future. What should humans do then?”

Student T: “Lots of pavilions talk about environmental protection, but then all the countries have used lots of resources to make the Expo happen, isn't that a waste of resources in the first place?”

On the Design of an Ideal City

After consolidating all their personal experience at the Expo, HKUGAPS students have an ideal vision for a green and loving world. Their ideas have incorporated all the elements of the four standard themes, with a dash of innovative thoughts and ideas of world peace.

Student U: “My future dream city uses natural resources like sunlight, wind and rain. The roof is made of solar panels for generating solar power. The top of the roof has a wind turbine sticking out for generating wind power.”

Student V: “My future dream city is free from wars, and full of freedom and love. We can use renewable energy instead of fossil fuels. At last, if we save the environment, everyone
will be happy.”

Student W: “Inside my future dream city, all the cars, bus and trains are maglev-driven, which make our city free of carbon dioxide.”

Student: X “My dream city would be a green city without pollution and everyone would be very peaceful and healthy. The transportation network would be fast and convenient. The prices of the goods should be very low.”

An unintended, positive washback of the current self-directed OLE experience would be “multicultural education”. Consistent with Banks’ (2003:xxi, cited in Linskens, 2009:16) interpretation of multicultural education, the Tour has met the major goals of such, which are, “(i) helping students to deepen their cultural understandings and to interact effectively with people from diverse cultures and groups, and (ii) helping students to acquire the knowledge and skills needed to become effective citizens in pluralistic societies who are striving for ways to balance unity and diversity”.

The Recipe of Success for Self-Directed Learning

The author’s impression is that the HKUGAPS students have borne a sense of mission to help improving the livelihood of urban dwellers once they finished exploring the Expo. Therefore, this is a nice pivot for departure from self-directed learning to high-order thinking, since, without a picture in mind, there will not be any chance for success.

Without any doubts, high-order thinking is a prerequisite for self-directed learning to succeed. As Christensen & Hooker (2000:14) advocated, “self-directedness is based on a constructive capacity for high order integrative process modulation geared to managing interaction processes”.

Yet, does high-order thinking skills the sole prerequisite for self-directed learning? A definite “no” the answer would be, since a mature mindset does not necessarily motivate students to embark on self-directed learning and the creation of a sense of ownership is essential. The concept of a “negotiated curricula” (Boomer, 1992, cited in Hodgkin, 2007:40) may apply in OLE initiatives as it entails the contributions from all stakeholders, like parents, teachers and students, to contribute to and modify the curriculum. This would in turn nurtures the sense of ownership and it is this
“active, intentional and participatory involvement in the decision making processes that results in more effective learning”, rather than the passivity found within the teacher-centred curricula, which lead to themselves the undesirable tendency for rote learning (Stein et al., 1998:228) in most cases.

On the part of teachers and parents, they have to let go of the paternalistic and dominating control and establish students’ confidence, thus reinforcing students’ learning autonomy. This is owing to the fact that self-directed learning is a “design feature of the learning environment which stresses students’ freedom in the pursuit of their learning” (Loyens et al., 2008:418). Under such environment would the students be then have the freedom to select and critically evaluate their own literature resources to achieve that self-directed goals.

Conclusion

Brockett and Hiemstra (1991:29) reported that self-directed learning is a broad term that encompasses such factors as “the learner taking primary responsibility for planning, implementing and evaluating learning,” as well as “personality characteristics that predispose one towards accepting responsibility for one's thoughts and actions as a learner. As evident from the current case study, HKUGAPS students have embarked on setting parameters for their research and taken on board their own interpretation of cultural citizenship and empathy towards the global problems. The finding about their dispositions towards the positive personal habit has reinforced this belief.

The scope of influence ignited by this overseas OLE experience has reached beyond the student participants, and peer-to-peer sharing is expected to achieve the same goal of character building, albeit the fact that it can hardly be quantified. The Principal of HKUGAPS, upon her return from the Tour, once introduced the ideologies of ethics, patriotism and responsible citizenship to all other students.

“The Norwegian citizens have knitted and donated lots of handmade woollen gloves to the Norway Pavilion. These gloves are put onto the mannequin hands on the walls. However, some gloves have been stolen by the visitors, worse still, some mannequin hands have gone missing together with the gloves! What does it imply? Which elements are essential in realizing the official slogan of 'Better city makes our lives better'? Too often do people overlook the second phrase of the slogan, which is 'We makes the cities better” (emphasis added). Indeed, the key lies within the citizens
themselves......we have the responsibility to make everyone else’s life better.”

In order to optimize the effects of self-directed OLE experience, equipping the students with the research skill sets and high-order thinking skills are crucial for OLE to achieve and stretch its desirable results beyond what the formal curriculum requires. In a nutshell, “self-directed learning skills can be the factors that foster cross-cultural adaptability” (Kelley and Meyers, 1992) and this type of overseas OLE experience is a good springboard for engaging students in future dialogues with the other nationalities.

As a side note, 94% of the respondents indicated that they would like to join the future school-based OLE initiatives overseas and the author aspires for genuine self-directed learning with full student autonomy in future. This is probable that the more mature students are, the less dominant roles would the teachers and parents assume in self-directed learning, the finding of which may be a research question for further studies.

It is forecasted by the author that the self-directed OLE experience has engaged the HKUGAPS students into the cycle of lifelong learning as proposed by the Hong Kong SAR Government, for the OLE has equipped students with three facets of learning capacities, namely, (i) broad self-management skills for independent learning (e.g. research skills, critical thinking skills), (ii) expertise in the students’ favourite subject matters and (iii) learning competencies and self-control (Miflin, 2004:47).

Acknowledgements

The author would like to express her gratitude towards the management of HKUGA Primary School, which offered the author with the opportunity to get involved in this OLE program in Shanghai and granted her with a study leave for paper presentation at this international conference in Hawaii. The contributions from student participants, parents and my fellow colleagues are duly acknowledged here with the author’s heartfelt respect and grace.
Appendix One – Sample of the Post-Tour Questionnaire for Students

Post-Shanghai Expo Tour Questionnaire for Students

Please ☑ the option(s) that applies / apply to you.

1) Your Grade: P5 / P6 (please circle)

2) Gender: M / F (please circle)

3) Which group were you in during the Shanghai Expo tour? A / B / C / D (Please circle)

4) Did you manage to formulate your research question during the Curriculum Integration Week (June, 2010) and before the study tour?
   □ Yes (skip to question number 6)
   □ No (answer question number 5 below)

5) Did you manage to formulate your research question before your departure for the study tour?
   □ Yes
   □ No

6) Who helped you formulate and finalize your research topic most? (You may check more than one option)
   □ Teachers and Classmates
   □ Parents
   □ All by myself (skip to question number 8)
   □ Others

7) After receiving help from your teachers or parents, how difficult it was to formulate your own research topic? (Check one option only)
   □ Very difficult
   □ Difficult
   □ Neutral
   □ Easy
   □ Very easy
8) What is your research topic for the Shanghai Expo tour? (Check one option only)
   - Environmental Protection
   - Technological Advancements
   - Architecture of the Pavilions
   - Art of the Expo
   - Your own research question: ________________________________________________

9) What did you do to prepare for the Shanghai Expo Study Tour? (You may check more than 1 option.)
   - Ask my teachers for extra information
   - Ask my parents for extra information
   - Ask those friends and relatives who went there before for extra information
   - Look for information on the web alone
   - Read books and printed matters about the Expo alone
   - Get information from the open media (e.g. watch the TV channels, listen to the radio)
   - Others (please state): ________________________________________________

10) Have you ever listened to the theme song of the Shanghai Expo on the TV? (Eason Chan's City of Life”)
    - Yes
    - No

11) What were the problem(s) you had faced during the Shanghai Expo tour? (You may check more than 1 option.)
    - I did not understand simplified Chinese.
    - I did not speak good Putonghua.
    - I did not know how to fill in the logbook (e.g. I don't understand the meaning of “reflection”)
    - I did not know which pavilions to go to because of the time constraint.
    - My parents and I were interested in different pavilions, so I had no choice but to follow them.
    - Others: _____________________________________________________
12) How useful are your teachers' advice, feedbacks or comments to you when you were doing your research and logbook?

- [ ] Very valuable
- [ ] Valuable
- [ ] Neutral
- [ ] Not so valuable
- [ ] Not valuable at all

13) How useful are your parents' advice, feedbacks or comments to you when you were doing your research and logbook?

- [ ] Very valuable
- [ ] Valuable
- [ ] Neutral
- [ ] Not so valuable
- [ ] Not valuable at all

14) Do you like joining this type of study tours overseas?

- [ ] Yes
- [ ] Neutral
- [ ] No

15) Are you willing to join another study tours locally or overseas organized by the school?

- [ ] Yes
- [ ] No

16) Name one good and new habit you will do in Hong Kong after returning from Shanghai.
Appendix Two – Original Lyrics (in Chinese) and Translation (in English) of the Expo’s Theme Song “City of Hope”

[無限之城]

陽光輕撫城市臉龐 海風擁抱霓虹燈光 動人未來越過公路望

歷史在發亮 夢想在飛翔 時尚的行裝 無限的形象 小小地方 在地圖上發出光芒

為了世界開創 明天的曙光 新的力量 新的思想

一起歌唱 煙花在等待 你用力鼓掌

東方西方 過去現在 一起揮動 文明的翅膀

生活的感動在登場 繁榮的品牌在成長 吸引目光的世界之窗

打造了堅強城市的肩膀

東方西方 過去現在 創造輝煌 床前明月光

自由自在的時光 原始原創的力量 自由自在的時光 這城市燦爛像陽光

[City of Hope]

The sun shines over the city, the see breeze embraces the neon lights and our future can be foreseen over the highways.

Our history is glorious and we are flying away with our dreams.

The hip outfit and ourimaginative styling have made this little city well-known around the world.

We fight for the bright future, new source of power and new thought. Let us sing together with the backdrop of fireworks and your applause.

The East and the West, the Past and the Present. Let our civilizations interact and mingle.

The vibrant lives are on show and the flourishing brands are expanding. This eye-catching window to the world has shaped the wings for this strong city.

The East and the West, the Past and the Present. Let us build the glory and bring it into our dreams.

Carefree time, primitive and original source of power. Carefree time, this city shines like the sun.
REFERENCES


Abstract: Storytelling is a popular theme in many educational fields today and has become a trend in teaching English as a Second Language in higher education also. This paper discusses integrated skills activities for three parts of a storytelling project: “practice”, “performance” and “product” for university ESL students that included community performances and a recorded program for a local television station. The lessons in this project followed engagement theory which states when educators equip students with the tools to become self-motivated, real engagement in learning takes place (Wasserstein 1995) and when students see practice activities as meaningful, yet challenging, they will work harder to give their best performance (Schlechty 2002). Our lessons also took into consideration Keller’s ARCS model of Motivational Design based on Expectancy-value Theory. To achieve complete motivation students must advance through all four parts of the model: attention, relevance, confidence and satisfaction (Keller 2000). The practice sessions were also given a product or performance focus, which Zorfass & Copel (1995) assert make them more meaningful to students.

Introduction

ESL university students from Japan were asked to read aloud traditional folktales from their own culture for a variety of community audiences and a program for community television. The performances required students to spend considerable time in and out of class, practicing their pronunciation, intonation, voice expression, comprehensibility and speaking fluency skills. Repeated practice sessions were necessary to prepare these low intermediate level students adequately for the performances. The practice sessions and performances were all documented and shared using technology to further develop language fluency skills.

Theory

The project design used elements of both Engagement Theory and Expectancy-value Theory. The Theory of Engagement focuses on student motivation and Newman (as cited in Voke, 2002) states that engaged students make a “psychological investment in learning.” To design a project that would transform our sometimes shy, passive students into active learners with this psychological investment, we looked at Schlecty’s (2002) question,

“What do teachers…but do in order to insure that more students are engaged in learning activities more of the time?”.

We also looked at Keller’s ARCS model of Motivational Design which is based in part on Expectancy-value Theory. The four parts of this model are attention, relevance, confidence and
satisfaction (ARCS) and are all necessary for a person to be completely motivated. (Keller, 2000) It is important for these steps to be followed in order as each step builds upon the previous one.

According to Keller, the first condition that must be met is to capture the students’ attention. The final product for the project was a television program that would be aired on a local cable TV channel. The students were immediately interested in the prospect of being television stars—attention captured.

The second condition of the model is relevance. This step lets students know how they can use knowledge they already have and gives them some choice. We chose traditional Japanese folk tales that the students had heard as children. They knew the stories in Japanese and would now read them to others in both Japanese and English. Within each group they were given the choice as to how to organize the reading. For example, students chose who would read each part.

Step three, confidence is necessary for motivation. This step encompassed the largest part of instructional time. We set realistic goals that allowed the students to see that their success was clearly a result of their efforts. We also provided a safe environment where students could practice. They were able to take risks without fear of ridicule or failure.

The final step in Keller’s model is satisfaction. We provided our students with many opportunities to receive feedback. By reading the stories for peers, tutors, and American students they got rewards and praise which gave them a sense of accomplishment before they ever recorded the stories for the TV program. According to Starnes (1999), students take more care with their work when it will be seen by an audience outside the classroom. Zorfass & Copel (1995) also assert that a performance or a product result in higher student engagement.

The second part of our project involved the students’ creation of a Photo Story and a Publisher newsletter (both are Microsoft software programs) to document their learning experience. Hancock and Betts (2002) state that technology is one resource that affects student engagement and achievement in many ways. Our students were actively engaged in this part of the project as it gave them the opportunity to learn new technology while reflecting on their experiences throughout the project.

Practice Activities
The folktale unit began outside the classroom with a tour of the Capitol Community TV studio where the students would be recording their folktales for TV. The tour made the project “real” and provided the opportunity for students to meet the studio staff members and hear authentic language regarding the recording process. Seeing the studio also allowed students to visualize where they would be performing and helped reduce some of their stress of filming for television.

In class, students first read the folktales in English without translation. They discussed the vocabulary, heroes, elements of plot and cultural traditions and values in the stories. Then students practiced reading these traditional folktales aloud for peer, instructor and tutor feedback. They worked on eye contact, pronunciation, intonation and voice expression as they read. Performing for television required extensive practice in reading the stories aloud, changing the
picture cards and changing from speaker to speaker. The students spent quite a lot of time practicing both in and out of class. Once they were more comfortable in English, we added in the speaking practice in Japanese. In order to keep the progression going forward, we needed to add variety to the practices. We had students read aloud to other small groups of peers, to the entire class and then to another class of peers. Students were very helpful in providing positive feedback to one another on how they could improve their clarity, volume, pace and expressive voices. In Speaking/Listening class they recorded the stories on the Dartmouth Recorder for self-evaluation and instructor feedback which improved their speech even more. We documented the studio tour and each different type of practice activity with photos and posted them on the Sakai-based class management online site. In Reading/Writing class, students wrote short reflections about the practice experiences and chose photos to illustrate their assignments. The reflective journaling allowed students to discuss their fears and note their improvements as they progressed throughout the folktale project. Documenting the practice sessions with photos and written assignments increased motivation for practicing since this not only resulted in improved language skills but also in graded products.

**Performance Activities**

Students performed their folktales for community school groups. Dressed in their traditional “yukata” and “hapi coats”, students read the folktales in Japanese and English for local high school students who were studying Japanese. These native language partners provided feedback on eye contact, voice volume and corrected pronunciation difficulties. Our students listened very carefully and took their advice seriously even though they had heard it before from the instructors. This same advice from their new American friends was very meaningful to them.

Students also performed their folktales in costume for classes in a local elementary school. Since the folktales included great onomatopoeic sound effects, the children were delighted with the performance. When the children laughed and clapped their hands, the students felt a new sense of accomplishment and confidence with their performances.

The culminating storytelling performance took place at the community television studio as students recorded their folktales for a television program with all of the “lights, camera and action” authentic language directions from Capitol Community TV staff and community volunteers. Students checked their appearance in the “talent” dressing room and stood in front of the cameras for their performances. As students waited their turn, they were drafted into helping with the cameras and sound equipment. There were some retakes, but overall, the students performed exceptionally well.

A former TIUA student currently studying at Willamette University became a volunteer intern for our project. He was trained at the Capitol Community TV studio in camera operation, audio recording and film editing software. He assisted the classes on filming day in the studio and selected the Japanese music for the film. He co-wrote an introduction in Japanese for the program, performed for the opening scene and also spent about thirty hours editing the film for television. The course tutor spent many hours listening to students practice their folktales over and over and also wrote the television program introduction and performed for the opening scene in English.
This project included the participation of all the ESL students in two classes, two instructors, a tutor, an intern, high school language partners, several elementary school classes and five staff and community volunteers at the television station. We expanded our learning community beyond the walls of our classroom.

Again, we documented each performance with digital photos and students talked about their experiences in Listening/Speaking class and wrote about them in Reading/Writing class. For these activities, they were asked to use past tense verb forms and incorporate idiomatic expressions to describe their feelings as they reflected on these exciting experiences. Each performance also had a “product” focus and assignment afterwards.

Product Activities

In the product phase of the project, students wrote new stories to document their own memorable storytelling experiences using digital media. They created colorful newsletters in Microsoft Office Publisher with photos and reports and reflections of the project. Microsoft Publisher allows student work to look immediately professional with the graphics, borders, titles and other desktop publishing formatting devices. Students were pleased with their written products and we posted them on bulletin boards to share with others.

Students then recorded narratives of their experiences with the digital storytelling program, Microsoft Photo Story. Combining some reflective writing, photos, music and their recorded speech, they made their own digital memories of the entire experience. Their Photo Story projects were posted on a web page to share the storytelling experience (http://www.tiua.edu/en/component/content/article/226). They evaluated the storytelling project with a free online survey creation tool, SurveyMonkey. We asked students for feedback on each part of the project and whether we should make changes. Students actively discussed the results since they were invested in the data and implications it held for future classes. Finally, students enjoyed watching themselves on community television and received their own DVD copies of the television program to keep.

Evaluation

Each step of the storytelling project was evaluated by both Listening/Speaking and Reading/Writing instructors. Rubrics were used to evaluate the group practice sessions for contributions, quality of work, attitude and preparedness and the recordings for pronunciation, intonation, clarity, fluency and expressiveness. The newsletters were evaluated for grammar, transitional expressions, vocabulary and form. The Photo Story projects were graded by both instructors with rubrics that included pacing, clarity of voice, story detail, grammar, content, and pronunciation.
Conclusion
The storytelling project transformed our students into active learners by providing them with many types of engaging activities over an extended period of time. Students learned new technology to practice their folktales and record their experiences. These tools encouraged students to be self-motivated which led to real engagement in learning (Wasserstein 1995). Incorporating technology in practice activities made language development personal and meaningful so students worked harder to give their best performances (Schlechty 2002). The practice sessions were also given a product or performance focus, which Zorfass & Copel (1995) assert make them more meaningful to students. Recording a television program was a challenging project but yet very rewarding for students and they worked very hard on the practices, performances and final products. This project fulfilled all the requirements of Keller’s ARCS model of Motivational design and kept the students motivated and active participants in the learning process.

While not every ESL class may have the opportunity to perform for television, there are many other applications for these types of assignments with other themes. Microsoft Publisher, Photo Story and SurveyMonkey can be used for countless types of assignments. Photo Story can be downloaded from the internet at no cost, and SurveyMonkey is a free online survey creation tool. Teachers can incorporate practice activities with a product or performance focus in many types of situations surrounding many different themes.

References


Effect of Circuit Weight Training on Autonomic Nerve System Function and Whole Body Muscle Strength of Young Healthy Subjects

Purpose: In recent decades, studies have shown that exercise training affects autonomic nerve control of the cardiovascular system. Moreover, long-term aerobic exercise has been positively linked to reducing both heart disease and mortality caused by the disorder. Accordingly, researchers have found that aerobic training improves aerobic capacity and cardiovascular autonomic nervous system functioning, which leads to increased metabolic adaptability. Zoppini [6] found that after 6 months participation in a moderate aerobic training program held twice per week, Type II diabetes patients experienced HRV reduced sympathetic influence, increased parasympathetic influence, and more favorable cardiovascular autonomic nerve system balance. Similarly, Ekblom [7] et al found that after a 5-week program of cross-country running training, sports training mechanisms leading to reduced heart rate both increased parasympathetic activity as well as produced a reduction of sympathetic activity.

Resistance training has also been recommended for the general public to improve and maintain both good health and physical condition [10]. In fact, traditional resistance training programs have been adopted by many prominent health organizations [11]. To be sure, the literature has shown that participation in minimal resistance training programs occurring only 2-3 days per week and allowing for proper recovery time intervals increased muscle strength, size, efficiency, and endurance. In addition, bone mineral density increased and normal body weight maintenance was improved [12]. A recent meta-analysis investigating resistance training on arterial blood pressure also revealed significantly lower systolic and diastolic blood pressure [16,17]. Furthermore, at least two other studies have confirmed both a decline in blood pressure after resistance training and a decrease in muscle sympathetic nerve activity via aerobic training. However, although resistance training has been shown to influence factors associated with cardiovascular health, the research is thin compared to the extant literature on aerobic training and the effects of the regimen on Cardiovascular Autonomic Regulation is poorly understood. Indeed, whether resistance training of some type consistently reduces the internal mechanisms of blood pressure is still largely unknown. In sum, the literature clearly indicates that autonomic function can be improved by long term aerobic exercise training, while traditional resistance training has a limited impact. However, much less is known about one specific type of resistance training, circuit weight training, on both autonomic cardiovascular regulation and whole body strength. The present research involved 24 young healthy subjects and investigates the effects of a 12 week circuit weight training program on autonomic cardiovascular regulation and whole body muscle strength. The investigation seeks to add to the extant literature on cardiovascular health and muscle strength, and to provide support for choosing the appropriate exercise prescription for
different individuals.

**Methods:** 24 young (18 to 30 years) healthy subjects were assigned to exercise (EG, n =13) and control (CG, n =11) groups. Subjects in the EG group underwent a circuit weight training program that consisted of 7 exercises performed in 3 sets of 15 repetitions with 15-30 seconds rest 3 days per week for 12 weeks. Whole-body muscular strength, resting metabolic rate, body composition and aerobic capacity were measured before and after training. Blood pressure, pulse wave velocity and autonomic function were tested every four weeks throughout the 12 week program. Autonomic function tests consisted of subjects preforming 5 minutes controlled frequency breathing (0.25 Hz), and three Valsalva’s maneuvers while recording synchronous ECG and beat-by-beat blood pressure. HRV was estimated through time and frequency domain analysis of R-R intervals during controlled frequency breathing. Spontaneous cardiovagal BRS was estimated through sequence method during controlled frequency breathing, dynamic cardiovagal baroreflex sensitivity was derived from increases of R-R intervals as functions of increases in systolic pressures with linear regression analysis during phase IV pressure increases caused by Valsalva’s straining.

**Data Analysis:** Dependent variables prior to exercise intervention were assessed with a between groups (exercise vs. control) analysis of variance (ANOVA). The effects of circuit weight training on dependent variables of interest were assessed with analysis of variance (ANOVA) between groups (exercise vs. control) and for repeated measures (baseline, four, eight, and twelve weeks). Fitness variables were measured only pre- and post-training

**Hypotheses of the Study:**

H₁ Circuit weight training treatment will yield a positive effect on autonomic nerve functioning, resting metabolic rate, and blood pressure.

H₂ Circuit weight training will increase whole body skeletal muscle strength.

H₃ Circuit weight training will have a positive effect on pulse wave velocity, body fat percentage, and VO₂ max.

**Sample:** Participants in the study included 24 young healthy subjects, who were assigned to either Control Group (CG) or Experimental Group (EG). The Control Group contained 11 subjects. Seven of the subjects were male and four subjects were female. The average age of the Control Group subjects was 25±3.0 years, the average height of the subjects was 171.6±7.6 (cm), and the average weight of the subjects in the group was 79.7±17 (Kg). Likewise, the Experimental Group contained 13 subjects. Nine of the subjects were male and four subjects were female. The average age of the
Experimental Group subjects was 22.3±2.8 years, the average height of the subjects was 171.3±12.4 (cm), and the average weight of the subjects in the group was 86.3±16 (Kg).

**Instruments:** Omron Model HEM-907XL Professional --- BP, Doppler (MD6, Hokanson, Bellavue, WA, USA) --- PWV, Standard 4 - lead ECG --- ECG, Finger photoplethysmography (Finometer, Finapres Medical Systems, Arnhem, the Netherlands) --- beat by beat blood pressure, Infrared CO₂ analyzer --- end-tidal CO₂ level.

**Results:**

(1) Circuit weight training increased whole-body muscular strength (289±30.8 pre-, and 396.4±35.5 Kg posttraining; mean±SE; p<0.01 ) and VO₂ max ( 2.46±0.3 pre-, and 2.91±0.2 L/min posttraining; mean±SE; p<0.05 ), but RMR and body fat percentage were not changed.

(2) Peripheral and central pulse wave velocities, and arterial systolic and diastolic blood pressure remained static throughout 12 weeks of circuit weight training.

(3) Circuit weight training did not alter HRV or cardiovagal baroreflex sensitivity.

**Conclusion:**

(1) During the12-week strength training cycle, the lower limb muscle strength of young healthy adults in the investigation was significantly increased. Likewise, maximum oxygen uptake increased significantly. Hence, we believe that description cycle strength training can improve muscle strength and increase aerobic capacity.

(2) The circuit weight training cycle did not change the resting metabolic rate and body fat ratio of this group of young healthy adults. According to our study data, the training intensity and training volume applied by this treatment was not sufficient to affect non-diet, body composition changes.

(3) According to baseline data taken before the beginning the treatment and at 4 weeks, 8 weeks and 12 weeks, the training group systolic blood pressure, diastolic blood pressure, and central and peripheral arterial pulse wave speed indicator did not change significantly.

(4) Before training, after 4 weeks, 8 weeks and 12 weeks of training, both the Experimental and Control groups experienced no significant differences in measured
heart rate variability (HRV). This included training group stages between testing intervals.

(5) There were no significant differences in regards to the dynamic or spontaneous BRS measurements in either the Experimental Group (EG) or Control Group (CG) before training, after 4 weeks, 8 weeks, and 12 weeks of training.

In sum, the results of this study demonstrate that the 12-week circuit weight training cycle significantly increased muscle strength and improved the aerobic capacity of young healthy subjects, while maintaining arterial compliance and autonomic nerve function stability. However, although circuit weight training increases muscle strength and aerobic capacity, in this study, it did not affect blood pressure, arterial compliance and autonomic nerve function in young healthy subjects.

References:


28. Arroll B and Beaglehole R. Does physical activity lower blood pressure: a critical review of


Samples:

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<th>Age (year)</th>
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<td>11</td>
<td>7</td>
<td>4</td>
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<td>4</td>
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Effects on Muscle Strength

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<td>Leg press</td>
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<td></td>
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</tr>
<tr>
<td>C</td>
<td>11</td>
<td>136±12.4</td>
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</tr>
<tr>
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<td>11</td>
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<td>67.7±9.8</td>
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<td>E</td>
<td>13</td>
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<td>91.1±9.4##</td>
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</tr>
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Note: C, control group; E, exercise group; *p < 0.05, compare to pre-training,  # p < 0.05, compare to CG; ** p < 0.01, compare to pre-training,  ## # p < 0.01, compare to CG

Effects on VO₂max, RMR and Body Fat Rate

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<td></td>
<td></td>
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<tr>
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<td>10</td>
<td>2.6±0.2</td>
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<td>23.03±1.2</td>
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<tr>
<td>E</td>
<td>13</td>
<td>26.4±2.3</td>
<td>25.4±2.9</td>
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</table>

Note: C, control group; E, exercise group; \(\dot{V}O_2\) max (L/min): maximal oxygen consumption; RMR (Kcal/day): Rest metabolic rate; BFR(%): Body fat rate* p <0.05, compare to pre-training
### Effects on PWV

<table>
<thead>
<tr>
<th>group</th>
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<th>Week 4</th>
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<tr>
<td>PWVC(m/s)</td>
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</tr>
<tr>
<td>C</td>
<td>11</td>
<td>6.2±0.7</td>
<td>6.0±0.3</td>
<td>5.9±0.5</td>
<td>6.1±0.5</td>
</tr>
<tr>
<td>E</td>
<td>12</td>
<td>6.7±0.7</td>
<td>5.9±0.3</td>
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<td>PWVP(m/s)</td>
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<tr>
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<td>9.1±1.0</td>
<td>9.4±0.5</td>
<td>9.6±0.9</td>
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<tr>
<td>E</td>
<td>12</td>
<td>8.9±0.5</td>
<td>9.4±0.9</td>
<td>9.3±0.4</td>
<td>10.2±0.9</td>
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Note: C, control group; E, exercise group; PWVC, pulse wave velocity of central; PWVP, pulse wave velocity of peripheral.

### Effects on BP

<table>
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<tr>
<td>E</td>
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<td>DBP</td>
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<td></td>
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<tr>
<td>C</td>
<td>11</td>
<td>82.4±4.8</td>
<td>76.4±1.9</td>
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<tr>
<td>E</td>
<td>13</td>
<td>79.9±4.4</td>
<td>74.8±1.8</td>
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Note: C, control group; E, exercise group; Sys (mmHg), systolic blood pressure; Dia (mmHg), diastolic blood pressure.

### Effects on HRV

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<th>G</th>
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<th>pre</th>
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<th>Week 8</th>
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<td>RRI</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C</td>
<td>11</td>
<td>934.4±47.3</td>
<td>961.7±55.5</td>
<td>910.4±40.8</td>
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<tr>
<td>E</td>
<td>13</td>
<td>930.2±48</td>
<td>933.6±37.1</td>
<td>954.2±41.0</td>
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<td>SDNN</td>
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<td>C</td>
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<td>61.1±11.0</td>
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<td>E</td>
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<td>59±10.8</td>
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<td>28.3±8.0</td>
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<tr>
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<td>34.1±8.5</td>
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<td>HR</td>
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</tr>
<tr>
<td>C</td>
<td>11</td>
<td>66.1±3.2</td>
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<tr>
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<td>13</td>
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<td>64.2±2.4</td>
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<td>RRIHF</td>
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</tr>
<tr>
<td>C</td>
<td>11</td>
<td>1890.8±1272.9</td>
<td>1385.2±384.0</td>
<td>1955.2±1025.2</td>
<td>1638.7±801.3</td>
</tr>
<tr>
<td>E</td>
<td>13</td>
<td>1904.2±637.5</td>
<td>1617.3±460.6</td>
<td>1441.2±505.6</td>
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<td>RRILF</td>
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</tr>
<tr>
<td>C</td>
<td>11</td>
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<td>514.5±86.8</td>
<td>613±149.2</td>
<td>430±75.5</td>
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<tr>
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<td>LF/HF</td>
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<td></td>
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</tr>
<tr>
<td>C</td>
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</tr>
<tr>
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<td>13</td>
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<td>62.2±17.9</td>
<td>60.5±9.3</td>
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<td>RRIHFnu</td>
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<td></td>
</tr>
<tr>
<td>C</td>
<td>11</td>
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<td>67.3±5.5</td>
<td>63.3±6.6</td>
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<tr>
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<tr>
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<td>11</td>
<td>40.4±6.9</td>
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<td>31.7±5.4</td>
<td>36.5±4.0</td>
<td>35.6±4.7</td>
</tr>
</tbody>
</table>

Note: C, control group; E, exercise group; RRI (ms), R-R wave interval; SDNN(ms), standard deviation of the NN intervals; pNN50(%), the proportion derived by dividing NN50 by the total number of NN intervals; HR, heart rate; RRIHF (ms²), power in the high frequency range (0.15-0.4Hz); RRILF (ms²), power in the low frequency range (0.04-0.15Hz) of RRI spectral;
LF/HF, the ratio of LF and HF; RRIHFnu, the normalized units of RRIHF; RRILFnu, the normalized units of RRILF.

**Effects on spontaneous cardiovagal BRS during controlled frequency breathing**

<table>
<thead>
<tr>
<th>group</th>
<th>n</th>
<th>pre</th>
<th>Week 4</th>
<th>Week 8</th>
<th>Week 12</th>
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</thead>
<tbody>
<tr>
<td>BRSup</td>
<td>C</td>
<td>10</td>
<td>18±3.0</td>
<td>16.9±2.5</td>
<td>16.6±2.6</td>
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<tr>
<td></td>
<td>E</td>
<td>10</td>
<td>18.2±3.0</td>
<td>17.8±2.5</td>
<td>20.7±2.6</td>
</tr>
<tr>
<td>BRSdown</td>
<td>C</td>
<td>10</td>
<td>13.3±2.4</td>
<td>15.1±3.2</td>
<td>11.9±2.4</td>
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<td></td>
<td>E</td>
<td>11</td>
<td>15.1±2.3</td>
<td>17.8±3.0</td>
<td>16.1±2.3</td>
</tr>
</tbody>
</table>

Note: C, control group; E, exercise group; BRSup (ms/mmHg), baroreflex sensitivity of up-up sequences; BRSdown (ms/mmHg), baroreflex sensitivity od down-down sequences.

---

**A**

![Graph showing BRSup gain](image)

**B**

![Graph showing BRSdown gain](image)
Effects on dynamic cardiovagal BRS during Valsalva’s maneuver

<table>
<thead>
<tr>
<th>G</th>
<th>n</th>
<th>pre</th>
<th>Week 4</th>
<th>Week 8</th>
<th>Week 12</th>
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<td>Overshoot</td>
<td>C</td>
<td>11</td>
<td>41.5±3.8</td>
<td>39.9±5.4</td>
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<tr>
<td></td>
<td>E</td>
<td>13</td>
<td>41.5±4.3</td>
<td>40.8±5.2</td>
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</tr>
<tr>
<td>Phase IV</td>
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<td>6.4±0.7</td>
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<td>6.0±0.9</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>13</td>
<td>6.8±0.9</td>
<td>7.7±0.9</td>
<td>8.5±1.0</td>
</tr>
</tbody>
</table>

Note: C, control group; E, exercise group; Overshoot (mmHg), the systolic blood pressure overshoot during the phase IV blood pressure increases; Phase IV BRS, the baroreflex sensitivity in phase IV blood pressure increases during Valsalva’s straining.
Changing Paradigms: Faculty Development in Higher Education for the 21st Century

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Changing Paradigms: Faculty Development in Higher Education for the 21st Century

ABSTRACT

In response to La Salle University’s new strategic plan, we are implementing a unique faculty development initiative. Our initiative grows from two of the strategic plan’s core goals: to increase the use of creative pedagogies that engage students in their learning, and to make greater and more intentional use of our urban location. Our initiative thus focuses primarily on supporting faculty efforts to use the city of Philadelphia and its surrounding region as instructional resources for their classes.

Our faculty development initiatives are rooted in contemporary pedagogical research (Bain, 2004), which suggests that the best college teachers regard their craft as a serious and challenging intellectual endeavor, and one that offers continual opportunities to learn how to teach. Rather than focus on raising awareness about general teaching strategies, as more traditional faculty development does, we began by first seeking to understand of our faculty’s attitudes and beliefs about the value of using the city as an instructional resource. We accomplished this through a survey, which provided us with data that importantly informed our programs.

Overwhelmingly, faculty thought that using the city and its region as instructional resources was a good or very good idea (91%), and that students enjoy field trips into the city (73%), yet over half of them almost never or seldom actually used these resources (62%). Additionally, those faculty who made use of the city reported that either their use was remaining about the same (54%) or actually decreasing (12%). The major concerns that faculty expressed about using our urban location were that it is difficult to fit such activity into their subject areas (32%), that there is not enough time to do so (26%), and that is was too much of a hassle (19%).

In order to address these data and in light of the importance of using our urban location to engage students in their learning as articulated in La Salle’s strategic plan, we instituted a faculty development program that included a unique Subway Series to help faculty consider ways to incorporate cultural and historic sites into their courses, and a Cultural Passport Program to help
address the hassle and cost of taking students on field trips. Further, we constituted *Faculty Reading Groups* and commissioned *Practitioner Research Projects* to create Professional Learning Communities. Finally, we partnered with related initiatives already extant on our campus to bring faculty and students together outside of the classroom through the *Explorer Connection*. The central component of the Explorer Connection is an essential question about which all first year students and many faculty members intellectually engage.

We have begun to collect data on the results of our faculty development initiatives as they compare to the benchmarks presented above. These data will be shared with participants during the workshop session. In addition, we will model several strategies and give participants the opportunity to discuss potential plans of action for continuing their own meaningful, sustained faculty development programs that are in line with contemporary research and principles of newer conceptions of pedagogy.
Innovative Methods to Optimize Power Production and Body Weight Reduction
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Physical Education Department

Key Words: obesity, aerobic vs. anaerobic, resistance.

PREFACE:
Muscles generate force in slow or fast rate depending on many factors. One factor is the increasing size of the cross sectional area of muscle's bulk and corresponding mass. Another factor is the stretch reflex mechanism and related elastic energy storage in the muscle (Kilani, Palmer, & Gapsis, 1989). Based on Newton's Second Law, the more force a muscle produces, the greater the acceleration of its segments; while, the more mass a muscle has, the lower the acceleration of its segments. However, in jumping and other events, athletes need to combine a greater rapid force generation and a conserved or reduced body weight (Kilani, 2000). In vertical jumps, two components contribute to the power output: the amount of optimum impulse generated at take off and type of muscle contraction with related mass. So it is assumed that having more leg muscle mass would be associated with a better utilization of elastic component in the muscle and achievement of a higher jump height (Kilani et al., 1989). It has been well known that systematic resistance training, especially among initially untrained healthy subjects, has a potent effect in promoting increases in size and strength of skeletal muscle. This is true both in men and women. Although women have lower absolute strength than men, the relative increases in strength following a training programme are similar between genders, at least in the beginning of resistance training (Häkkinen and Pakarinen, 1994; Staron et al., 1994; Häkkinen et al., 2000a).

High intensity is not necessarily dependent upon the use of near-maximal or maximal loads but more to the degree to which the relevant muscle fibers are recruited during the effort. The terms “fast twitch” and “slow twitch” do not necessarily mean that fast movements recruit exclusively fast twitch fibers and slow movements recruit exclusively slow twitch fibers. The fibers involved are determined by the force that is produced. The explosive movements rely heavily on the action of the fast twitch fibers. Also, accelerated movements recruit the muscle stretch (myotatic) reflex, which can elicit a faster and more powerful contraction. The pre-stretch principle is well known in sports and in the plyometric method in explosive training.

Training the fast twitch fibers also includes the storage and release of elastic energy by the connective tissues in the muscle/tendon complex and should not be ignored by bodybuilders, powerlifters, power athletes, endurance athletes and for body weight reduction (Kilani, 2010; Kilani & AbuEisheh, 2010). This is done by involving the stretch reflex, which entails accumulation of energy in the muscle-tendon complex prior to a quick explosive contraction and accelerates the weight or object held. After this, the weight or object moves on its own momentum followed by some muscle involvement until the movement stops.

After approximately seven weeks of training based on applying the principle of stretch reflex training, Phil Murphy, a former lineman for the then Los Angeles Rams football team in the early 80s, lost 25 pounds of mostly fat and posted 255 pounds of lean muscle mass at a weight of 325 (Michael Yessis, 2006).

The use of vibration as a means for enhancing athletic performance is a recent issue in exercise physiology. Current evidence suggests that vibration is effective in enhancing
strength and the power capacity of humans with decreasing weight, relying on the stretch reflex utilization. (Cardinale, and Bosco, 2003, Kilani, 2000, Kilani & Qatami, 2006, Kilani, 2010, Kilani & Abu Eisheh, 2010). The purpose of this paper is to address this dilemma by shedding light on the innovative findings regarding the variables that are related to power production and body weight reduction. The interplay among aerobics, anaerobic exercises, intensity level, resistance training, reflex contribution, and nutrition will be examined. This review will support those people-obese and heavy weights- who are not able to lose weight and gain strength in short time.

BACKGROUND:
Nearly three fourths of the UAE’s population is battling with obesity – which has been termed as a silent killer by the World Health Organization (WHO) (MOH/UAE, 2003). It is also known that nine out of 10 cases of obesity develop into diabetic cases. Obesity is clearly becoming an epidemic which needs urgent attention (Mokdad et al., 1999). Some of the health problems associated with obesity include Type 2 diabetes, heart disease, cancer, stroke, back and joint pain, osteoarthritis, high blood pressure, gallstones, fatty liver, infertility, breathlessness, depression, snoring, difficulty in sleeping and excessive sweating. (Alhazza and Musaiger, 2010), (Physical activity and health Report, 1996; National Task Force on the Prevention and Treatment of Obesity (NTFPTO), 2000).

In the United States, an estimated 97 million adults, or more than six out of 10 men and women are overweight or obese (Mokdad et al., 1999). Approximately 300,000 deaths each year are attributed to a combination of dietary factors and physical inactivity—the two primary culprits of obesity—making these lifestyle habits second only to cigarette smoking as the leading cause of death in the United States. The trend of overweight and obesity in adults appears to be growing unabated, while an increase in the number of overweight American youths points to an even greater preponderance of adult obesity and its associated co-morbidities in the future. (MMWR, 1994)

Not many are aware that obesity not only affects the adults but also children, who incidentally are even more vulnerable, primarily because of the likelihood of growing up to become obese adults. Studies indicate that obesity is more likely to persist when its onset is in late childhood or adolescence and where children have obese parents. Problems associated with excess weight in children and adolescence includes heat intolerance, breathlessness on exertion, tiredness, and flat feet. (LeMura and Maziekas, 2002; Kilani, 2005; Alhazza, 1996)

No longer is there any serious doubt about the strong impact of physical activity on promoting health and preventing disease, or achieving and maintaining a healthy body weight. Despite the well-known benefits of regular physical activity, only about 15 percent of American adults regularly engage in the modest amount of activity required to obtain health benefits, while more than one fourth of adults are sedentary. The potential medical hazards of obesity have been documented extensively (Pi-Sunyer, 1993; NTFPTO, 2000). According to the American Heart Association (AHA), obesity is a major independent risk factor for coronary heart disease (CHD), and it appears to interact with or amplify the effects of other cardiovascular risk factors, including hypertension, dyslipidemia, insulin resistance, and hyperinsulinemia (Eckel and Krauss, 1998). Moreover, clustering of risk factors in obesity is important because obese persons face more than a 65 percent chance of having at least one additional risk factor for CHD (Yusuf, Giles, Croft, Anda, and Casper, 1998) and a 50 percent chance...
of having two or more other risk factors for heart disease (Wilson, Kannel, Silbershatz, and D'Agostino, 1999).

The World Health Organization (WHO) Eastern Mediterranean Region is exposed to NCD risk factors as part of risk-transition as a result of marked changes in the pattern of living in many countries of the Region, particularly countries of the Gulf Cooperation Council, where rapid increases in obesity are being recorded, primarily among children, adolescents and young adults. Overweight and obesity have risen 2-fold or more since 1980. Changes in food processing, production and type of food (fast food) have affected health in the majority of countries in the Region. The prevalence of overweight and obesity for males and females in a number of countries of the Region among males ranges from 10.5% in Pakistan to 64.0% in Saudi Arabia, while for females it ranges from 21.7% in Morocco to 79.0% in Bahrain (Wee, McCarthy, Davis, and Phillips, 1999). The regional adjusted mean for overweight and obesity is 54.2% for women compared to 31.4% among males. Obesity kills around 150,000 men and women a year in the Region.

According to the World Health Organization, the most important risk factors of non-communicable diseases in the Arab countries included high blood pressure, high concentrations of cholesterol in the blood, inadequate intake of fruit and vegetables, overweight or obesity, physical inactivity and tobacco use. Five of these risks are closely related to improper diet and physical inactivity (Hazzaa et al., 2010).

Because studies have demonstrated that obesity in childhood tracks into adulthood, public health officials commonly refer to pediatric obesity as an “alarming trend” and as an “epidemic” research synthesis demonstrated the effectiveness of exercise as an adjunctive treatment for childhood and adolescent obesity. With regard to the development of an appropriate exercise prescription, the most favorable alterations in body composition were associated with low-intensity, long-duration exercise and aerobic exercise combined with high-repetition resistance training (LeMura, and Maziekas, 2002).

The 1998 NIH Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults Report indicates that more research is needed on effects on body weight/obesity of different lengths of physical activity interventions, different formats and intensities of physical activity, and different forms of physical activity in combination with diet, as well as effects of physical activity on body fat distribution, e.g., abdominal fat. The recommendations of this report for future research includes the need to determine the optimal amount of physical activity to promote weight loss, maintenance of weight loss, and prevention of obesity, as well as strategies to preserve muscle and bone in the face of weight loss. This corresponds to our purpose of this paper. Therefore, research is needed on the effects of pharmacologic intervention for weight loss on cardio-respiratory fitness. Research is also needed on environmental and population-based intervention methods for weight control that incorporate physical activity. These studies should address high-risk populations for obesity and low levels of physical activity including underserved population segments, e.g., minorities and low socioeconomic (SES) groups.

Education about the long-term health consequences and risks associated with overweight and how to achieve and maintain a preferred weight is necessary. While many individuals attempt to lose weight, studies show that within five years a majority of them regain the weight. In order to maintain weight loss, good dietary habits must be coupled with increased physical activity, and these must become permanent lifestyle changes. It is still not clear; however, which methods are best for achieving these changes, particularly long-term. A 1998 NHLBI workshop on Maintenance of Behavior
Change in Cardiorespiratory Risk Reduction concluded that the following are examples of research topics and study approaches that are relevant. Applicants are encouraged to consider these questions, when relevant, in relation to persons with and without morbid conditions (such as hypertension, diabetes, arthritis). Likewise, applicants are encouraged to provide a rationale for the type of physical activity (e.g., aerobic, anaerobic, resistance) that they propose in their applications and are the outcome of this review.

METABOLISM:
The speed of basal metabolic energy depends primarily on body composition. Research shows that the leaner muscle mass is, the faster the metabolism. Another factor affecting energy expenditure is something called "dietary induced thermogenesis" (digesting, transporting and storing food). This is the least significant in terms of calories, and accounts for about 10 percent of total calories expended (about 75 to 200 calories burned per day). The third factor is activity, which accounts for approximately 15 to 35 percent of total calorie burning (Alhazzaa, 2010). Any activity we engage in, whether it is running, walking, or fidgeting, burns calories above and beyond our basal metabolic rate (BMR).

Some people have a higher metabolism than others, which can vary as much as 30 percent. More emphasis is being placed on the percentage of muscle and fat, and less on total body weight. Dieting shuts off metabolism and causes a loss of lean muscle mass. For every diet, there is an equal and opposite binge. Statistics show that people gain back more weight after dieting, and with a higher percentage of body fat. Evans, (2001) states, "By cutting back in calories, you will see an immediate drop in metabolic rate."

Sports nutrition is built upon an understanding of how nutrients such as carbohydrate, fat, and protein contribute to the fuel supply needed by the body to perform exercise. These nutrients get converted to energy in the form of adenosine triphosphate (ATP). It is from the energy released by the breakdown of ATP that allows muscle cells to contract. However, each nutrient has different pathways that determine how it gets converted to ATP. Carbohydrate is the main nutrient that fuels exercise of a moderate to high intensity, while fat can fuel low intensity exercise for long periods of time. Proteins are generally used to maintain and repair body tissues, and are not normally used to power muscle activity.

ENERGY PATHWAYS:
Because the body cannot easily store ATP (and what is stored gets used up within a few seconds), it is necessary to continually create ATP during exercise. In general, the two major ways the body converts nutrients to energy are: Aerobic metabolism (with oxygen) or Anaerobic metabolism (without oxygen). These two pathways can be further divided. Most often it is a combination of energy systems that supply the fuel needed for exercise, with the intensity and duration of the exercise determining which and when a method gets used.

ATP-CP Anaerobic Energy Pathway
The ATP-CP energy pathway (sometimes called the phosphate system) supplies about 10 seconds worth of energy and is used for short bursts of exercise such as a 100 meter sprint. This pathway doesn't require any oxygen to create ATP. It first uses up any ATP stored in the muscle (about 2-3 seconds worth) and then it uses creatine phosphate (CP) to resynthesize ATP until the CP depleted (another 6-8 seconds). After the ATP
and CP are used the body will move on to either aerobic or anaerobic metabolism (glycolysis) to continue to create ATP to fuel exercise.

**Anaerobic Metabolism - Glycolysis**
The anaerobic energy pathway, or glycolysis, creates ATP exclusively from carbohydrates, with lactic acid being a by-product. Anaerobic glycolysis provides energy by the (partial) breakdown of glucose without the presence of oxygen. Anaerobic metabolism produces energy for short, high-intensity bursts of activity lasting no more than several minutes before the lactic acid build-up reaches a threshold known as the lactate threshold and muscle pain, burning and fatigue make it difficult to maintain such intensity.

**Aerobic Metabolism**
Aerobic metabolism fuels most of the energy needed for long duration activity. It uses oxygen to convert nutrients (carbohydrates, fats, and protein) to ATP. This system is a bit slower than the anaerobic systems because it relies on the circulatory system to transport oxygen to the working muscles before it creates ATP. Aerobic metabolism is used primarily during endurance exercise, which is generally less intense and can continue for long periods of time.

During exercise an athlete will move through these metabolic pathways. As exercise begins, ATP is produced via anaerobic metabolism. With an increase in breathing and heart rate, there is more oxygen available and aerobic metabolism begins and continues until the lactate threshold is reached. If this level is surpassed, the body cannot deliver oxygen quickly enough to generate ATP and anaerobic metabolism kicks in again. Since this system is short-lived and lactic acid levels rise, the intensity cannot be sustained and the athlete will need to decrease intensity to remove lactic acid build-up.

**FUELING THE ENERGY SYSTEMS**
Nutrients get converted to ATP based upon the intensity and duration of activity, with carbohydrate as the main nutrient fueling exercise of a moderate to high intensity, and fat providing energy during exercise that occurs at a lower intensity. Fat is a great fuel for endurance events, but it is simply not adequate for high intensity exercise such as sprints or intervals. If exercising at a low intensity (or below 50 percent of max heart rate), you have enough stored fat to fuel activity for hours or even days as long as there is sufficient oxygen to allow fat metabolism to occur. As exercise intensity increases, carbohydrate metabolism takes over. It is more efficient than fat metabolism, but has limited energy stores. This stored carbohydrate (glycogen) can fuel about 2 hours of moderate to high level exercise. After that, glycogen depletion occurs (stored carbohydrates are used up) and if that fuel isn't replaced athletes fatigue occurs. An athlete can continue moderate to high intensity exercise for longer simply replenishing carbohydrate stores during exercise. This is why it is critical to eat easily digestible carbohydrates during moderate exercise that lasts more than a few hours. If you don’t take in enough carbohydrates, you will be forced to reduce your intensity and tap back into fat metabolism to fuel activity.

As exercise intensity increases, carbohydrate metabolism efficiency drops off dramatically and anaerobic metabolism takes over. This is because your body can not take in and distribute oxygen quickly enough to use either fat or carbohydrate metabolism easily. In fact, carbohydrates can produce nearly 20 times more energy (in the form of ATP) per gram when metabolized in the presence of adequate oxygen than when generated in the oxygen-deficit, anaerobic environment that occurs during intense efforts (sprinting).
With appropriate training, these energy systems adapt and become more efficient and allow greater exercise duration at higher intensity.

Fat needs oxygen to burn completely so in order to burn fat during an exercise we need to move slowly and smoothly. This enables muscle cells to be supplied with enough oxygen to continue with its aerobic capacity and utilize fat as the main energy source. Anaerobic exercise requires moving at an increased pace or with greater effort. Exercising this way burns more calories but results in a greater demand for oxygen which cannot be delivered in sufficient quantities to allow cells to continue burning fat. When we breathe heavy we start to develop an oxygen debt and muscle cells switch to burning mainly carbohydrates, this fuel burns quickly and does not require oxygen. Anaerobic exercises such as sprinting or weight training require more effort and up to 95% of the fuel used will be carbohydrates. While doing aerobic exercises, your body uses approximately 60% of the total calories burned during a low to moderate aerobic exercise from fat. As the intensity level increases, the body switches from using fat as the primary source of fuel to using readily available carbohydrates. At a high intense aerobic workout, you will use only approximately 35% of fat for fuel. At an extreme or vigorous workout level, or an anaerobic exercise, the percent of fat may only be 5% of total calories burned during exercise as your muscles do not require oxygen. Based on this most people assume that the low to moderate intense level gives you the most fat calories burned, however, it is all relative to the total calories burned during exercise. The low intense level aerobic exercises, while burning a higher percent of fat, will actually produce the lowest number of total calories burned. While the higher intense aerobic workouts give a lower percent of fat burn, it also gives you the higher calories burned.

Walking is one of the favorite activities common of older adults, but few of them might consider that increasing their speed and agility may prevent hospitalization or disability. However, Cesari et al. (2005) demonstrated that walking speed translates into important clinical outcomes. Among 3047 older adults, those with walking speed of less than 1 meter per second were more likely to have a hospitalization or lower extremity disability vs. older adults with a faster walking speed. They suggested that participants with a slower walking speed also experienced an increased risk for death. Alsears (2010) stated “Doing aerobics isn’t a smart way to exercise, and it doesn’t build your lungs or breathing capacity as the name implies. In fact, aerobics actually shrinks your heart and lungs - making you more vulnerable to fatal heart attacks”.

The notion of high intensity exercises went under various types of research methods as many studies have been done on the effect of training on V02max, but little information has been available about the effect on anaerobic capacity. Tabata et al. (1996) showed that moderate-intensity aerobic training that improves the maximal aerobic power does not change anaerobic capacity and that adequate high-intensity intermittent training may improve both anaerobic and aerobic energy supplying systems significantly, probably through imposing intensive stimuli on both systems. In the moderate-intensity group, seven active young male physical education majors exercised on stationary bicycles 5 days per week for 6 weeks at 70% of V02max, 60 minutes each session. V02max was measured before and after the training and every week during the 6 week period. As each subject's V02max improved, exercise intensity was increased to keep them pedaling at 70% of their actual V02max. Maximal accumulated oxygen deficit was also measured before, at 4 weeks, and after the training.

A second group followed a high-intensity interval program. Seven students, also young and physically active, exercised five days per week using a training program similar to
the Japanese speed skaters. After a 10-minute warm-up, the subjects did seven to eight sets of 20 seconds at 170% of V02max, with a 10 second rest between each bout. Pedaling speed was 90-rpm and sets were terminated when rpms dropped below 85. When subjects could complete more than 9 sets, exercise intensity was increased by 11 watts. The training protocol was altered one day per week. On that day, the students exercised for 30 minutes at 70% of V02max before doing 4 sets of 20 second intervals at 170% of V02max. This latter session was not continued to exhaustion. Again, V02max and anaerobic capacity was determined before, during and after the training.

In some respects the results were no surprise, but in others they may be ground breaking. The moderate-intensity endurance training program produced a significant increase in V02max (about 10%) but had no effect on anaerobic capacity. The high-intensity intermittent protocol improved V02max by about 14%; anaerobic capacity increased by an enormous 28%.

It was the first study to demonstrate an increase in both aerobic and anaerobic power. The results, of course, confirm the well-known fact that the results of training are specific. The intensity in the first protocol (70% of V02max) did not stress anaerobic components (lactate production and oxygen debt) and therefore, it was predictable that anaerobic capacity would be unchanged. On the other hand, the subjects in the high-intensity group exercised to exhaustion, and peak blood lactate levels indicated that anaerobic metabolism was being taxed to the max. So, it was probably also no big surprise that anaerobic capacity increased quite significantly.

What probably was a surprise, however, is that a 4 minute training program of very-hard 20 second repeats, in the words of the researchers, "may be optimal with respect to improving both the aerobic and the anaerobic energy release systems."

High-intensity Interval Training:
This commentary highlights recent work from Dr. Gibala's laboratory examining rapid adaptations in exercise capacity and aerobic energy metabolism after short-term HIT. Using the Wingate Test, he explores the effect of HIT on exercise capacity, skeletal muscle adaptations to HIT, and compares it with traditional endurance training.(Gibala, 2007). Tremblay et al., (1994), challenged the common belief among health professionals that low-intensity, long-duration exercise is the best program for fat loss. They compared the impact of moderate-intensity aerobic exercise and high-intensity aerobics on fat loss. They divided 27 inactive, healthy, non-obese adults (13 men, 14 women, 18 to 32 years old) into two groups. They subjected one group to a 20-week endurance training (ET) program of uninterrupted cycling 4 or 5 times a week for 30 to 45 minutes; the intensity level began at 60% of heart rate reserve and progressed to 85%. (For a 30-year-old, this would mean starting at a heart rate of about 136 and progressing to roughly 170 bpm, which is more intense than usually prescribed for weight or fat loss.)

The other group did a 15-week program including mainly high-intensity-interval training (HIIT). Much like the ET group, they began with 30-minute sessions of continuous exercise at 70% of maximum heart rate reserve (remember, they were not accustomed to exercise) but soon progressed to 10 to 15 bouts of short (15 seconds progressing to 30 seconds) or 4 to 5 long (60 seconds progressing to 90 seconds) intervals separated by recovery periods allowing heart rate to return to 120-130 beats per minute. The intensity of the short intervals was initially fixed at 60% of the maximal work output in 10 seconds, and that of the long bouts corresponded to 70% of the individual maximum work output in 90 seconds. Intensity on both was increased 5% every three weeks. The total energy cost of the ET program was substantially greater than the HIIT program. The researchers calculated that the ET group burned more than twice as many calories
while exercising than the HIIT program. But (surprise, surprise) skinfold measurement showed that the HIIT group lost more subcutaneous fat. "Moreover," reported the researchers, "when the difference in the total energy cost of the program was taken into account..., the subcutaneous fat loss was ninefold greater in the HIIT program than in the ET program." In short, the HIIT group got 9 times more fat-loss benefit for every calorie burned exercising.

In order to determine why high-intensity exercise produces so much more fat loss, Tremply et al. (1994), took muscle biopsies and measured muscle enzyme activity. "[Metabolic adaptations resulting from HIIT] may lead to a better lipid utilization in the post-exercise state and thus contribute to a greater energy and lipid deficit." In other words, compared to moderate-intensity endurance exercise, high- intensity intermittent exercise causes more calories and fat to be burned following the workout.

Similar metabolic adaptations during exercise after low volume sprint interval and traditional endurance training in humans was reported by Burgomaster, Howarth, Phillips, Rakobowchuk, MacDonald, McGee, and Gibala, (2007). They found that 6 weeks of low-volume, high-intensity sprint training induced similar changes in selected whole-body and skeletal muscle adaptations as traditional high-volume, low-intensity endurance workouts undertaken for the same intervention period.

Hawley, (2002), on the other hand, stressed that the key components of any training programme are the volume (how much), intensity (how hard) and frequency (how often) of exercise sessions. These ‘training impulses’ determine the magnitude of adaptive responses that either enhance (fitness) or decrease (fatigue) exercise capacity (Hawley, 2002).

One of the key tenants of exercise physiology is the principle of training specificity, which holds that training responses/adaptations are tightly coupled to the mode, frequency and duration of exercise performed. This means that the vast majority of training-induced adaptations occur only in those muscle fibres that have been recruited during the exercise regimen, with little or no adaptive changes occurring in untrained musculature. Furthermore, the principle of specificity predicts that the closer the training routine is to the requirements of the desired outcome (i.e. a specific exercise task or performance criteria), the better will be the outcome. However, Burgomaster et al., (2007), reported those 6 weeks of low-volume, high-intensity sprint training induced similar changes in selected whole-body and skeletal muscle adaptations as traditional high-volume, low-intensity endurance workouts undertaken for the same intervention period. Specifically, they show that four to six 30 seconds sprints separated by 4–5 min of passive recovery undertaken 3 days per week results in comparable increases in markers of skeletal muscle carbohydrate metabolism (i.e. total protein content of pyruvate dehydrogenase), lipid oxidation (i.e. maximal activity of β-3-hydroxyacyl CoA dehydrogenase) and mitochondrial biogenesis (i.e. maximal activity of citrate synthase and total protein content of the peroxisome-proliferator-activated receptor-γ coactivator-1α) as when subjects undertook 40–60 min of continuous submaximal cycling a day for 5 days per week. These findings are particularly impressive given that weekly training volume was ~90% lower in the sprint-trained group (~225 versus 2250 kJ week−1) resulting in a total cumulative training time of ~1.5 versus 4.5 h per week.

STRENGTH TRAINING:

Strength training is considered an anaerobic exercise regardless of how heavy the resistance or how many repetitions are done. Strength training is all about challenging the muscles through resistance in order to tone and strengthen. Strength training is not considered a fat burning exercise while performing the exercise. However, it will bring
you fat burning benefits. This is done by increasing your lean muscle mass and the more lean muscles you have, the higher your BMR.

There was a landmark study done some years back by Dr. James Rippe that really punctuates the benefits of anaerobic exercise versus aerobic exercise, or no exercise at all.

Dr. Rippe took 65 people and divided them into three groups. Each of them was put on the same diet. They simply ate fewer calories than they normally would, assuring that they would all lose some weight. They participated in this study for six weeks.

Group one did no exercise at all during the six weeks, group two did only aerobic exercise, and group three did only anaerobic exercise. The study showed the following findings:

Weight loss: Group one (no exercise) lost 9 pounds. Group two (aerobic exercise) lost 10 pounds, and group 3 (anaerobic exercise) lost 9 pounds.

So far things are very even. But here’s where it gets really interesting.

Muscle loss: Group one (no exercise) lost 11% of their muscle mass. Group two (aerobic exercise) lost 1% of their muscle mass, and group 3 (anaerobic exercise) lost no muscle mass.

Notice that even those who did aerobic exercise lost muscle mass!

Muscle gain: In the final category, only those who did anaerobic exercise gained muscle mass—9%.

Everyone lost weight, but it was only the strength trainer's who added calorie-burning muscle while losing fat.

**CONCLUSION:**

The above research findings suggested that one should consider the high intensity exercise for weight reduction and power gain. But, it’s always better to underestimate your ability at the start. Begin a little slower than you think you can handle, and then adjust the pace from workout to workout. Don't attempt high-intensity intervals unless you are in good condition; they’re not appropriate for beginners. The intensity of anaerobic exercise stimulates an increased demand for calories and an elevated body temperature. It stimulates the secretion of growth hormone (GH) and thus increasing the bulk of the muscle which increases surface area and enhances the BMR. These factors generate an increase in your metabolic rate (the rate at which you burn calories) that lasts for several hours after your workout.

Since your preferred fuel choice at rest is fat, you will burn more fat ceaseless because of your glucose-burning workout! However, many exercisers take shortcuts that sabotage the weight loss benefits of high intensity workouts.

The continuous increase in metabolism caused by an effective training program is the only true way to lose weight. Consider that during a vigorous hour of exercise, you burn between 500-800 calories. A bran muffin or a piece of eastern Kunafah gets you nearly back to even. Thus, the Aerobic Base Building is first then only will the dramatic benefits of high-intensity training be enjoyed. On this regard, research has shown that people who exercise regularly have far more fat-burning enzymes in their muscles than people who don’t exercise.

Exercise positively affects a number of hormones in your body which are related to fat storage such as insulin, adrenaline, and cortisol. Endorphins, small morphine-like chemicals, are secreted with exercise and can also help reduce fat storage, as well as create a feeling of well-being and alleviate stress. The more you do, the more you will want to do as the benefits continue to increase and you get the results you’re after. In short, aerobic and anaerobic exercises with various types of resistant stimuli such as vibration and stretch reflex mechanism that influence power production is a must for
losing body fat as well as improving the overall quality of life. It will add years to your life and life to your years.

FUTURE WORK:
Additional research is needed to examine factors associated with long-term maintenance of weight loss, long-term maintenance of increased physical activity levels, and the relationship between the two. In addition, the question of whether physical activity enhances long-term maintenance of weight loss has not been formally examined with increased power production with the aid of reflexes training methods.

REFERENCES:
Harwood RH and Conroy SP. Slow walking speed in elderly people. BMJ 2009; DOI:10.1136/bmj.b4236. Available at: http://www.bmj.com
Hubbard, Dave, Why Strength MATTERS With Fit10 Ppt Presentation, www.authorstream.com/ May 28, 2009
Kilani, H. & Qatami, H. The development of explosive strength through involuntarily vibration and plyometric training. DIRASAT, Uof J. 2006.
Physical Activity and Health: a report of the Surgeon General. Atlanta, Ga.: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.
Tabata, Izumi; Nishimura, Kouji; Kouzaki, Motoki; Hirai, Yuusuke; Ogita, Futoshii; Miyachi, Motohiko; Yamamoto, Kaoru. Effects of moderate-intensity endurance and high-intensity, Medicine & Science in Sports & Exercise. 28(10):1327-1330, October 1996.
Tremblay, A. et al., Impact of exercise intensity on body fatness and skeletal muscle metabolism. Metabolism.1994; 43(7): 814-818
Student Engagement and Performance in Principles of Finance

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Abstract

This paper studies the relation between student engagement activities and performance in a Principles of Finance course. The National Survey of Student Engagement (NSSE) survey is adapted for the purpose of examining how student coursework performance in Principles of Finance relates to his/her engagement activities in the previous two semesters. While there is no doubt that student engagement activities offer various benefits to students, the short-term impact of student engagement activities on coursework performance is not clear. Using the ordinary least squares estimation, a weak association is found between student performance and the extent of his/her academic outside-classroom activities. The relation between performance and academic inside-classroom activities and social and global engagement activities are not statistically significant. After controlling for possible survivorship bias due to student withdrawal, the results of this study suggest no association between all engagement activities and student performance. This paper also studies students’ perceived benefits of engagement activities in relation to their knowledge, skills, and personal development. The findings suggest that social and global engagement activities help personal growth during their college careers.
Title - Social Media as a Means of Engaging Students Within the Classroom

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Diadora America: A Social Media Case Study
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The Internet has become an integral part of society. According to the Pew Internet and American Life Project (2008), 63% of all Americans currently have high-speed Internet access at home and the figure is expected to grow to 90% by the year 2012. Statistics further indicate that more Americans are using the Internet to watch videos, visit social networking sites, blog and share photos (Universal McCann Wave 4, June 2009). Many are finding it difficult to ignore social media since over 122 million people now visit Facebook each month and Twitter grew 1551% last year (Compete.com, June 2009).

From a business perspective, it is not prudent to ignore the fact that millions of people are using these networks and tools. Not surprisingly, companies of all sizes are using social media as part of their public relations campaigns. In fact, 54% of Fortune 100 companies utilize Twitter for news updates, customer service, marketing, promotion and even employee recruitment (Mashable, August 2009). Wouldn’t it be prudent for educators to use the same networks and tools to engage students and prepare them for the future?

This presentation focuses on the many types of platforms, applications, tools and strategies associated with the constantly emerging world of social media. We will discuss how to encourage students to engage in an educated and systematic manner, how to maximize the benefits of social media without damaging one’s reputation, how to be responsible about the information broadcast over the Internet via online communities and networks and how to constructively spend time online to get internships, jobs and positive exposure. Students need to understand the world of social media, the positive and negative consequences associated with online information and the concept of personal branding and maintaining a positive online presence. We will include specific examples of how educators may embed social media into existing courses, demonstrate techniques and specific assignments designed to provide hands-on experience and share some of the best practices associated with teaching and using social media within the traditional classroom environment.

Social media is a growing phenomenon in the world that we live in today. Twitter, Facebook, and LinkedIn are all social media types which have come out over the course of this past decade. All of these different types of social media can be taught in classrooms, whether it be in high school or college. Using these tools in an educational manner can be beneficial for the student as well as the professor. However, they can also be damaging to a person’s reputation if used in an uneducated manner.

One may ask, how can social media be taught in class? This is a valid question with numerous answers. Professors can use social media such as Twitter to get in touch with students or give them a chance to find out information about a project. An example of this could be when the professor “tweets” information such as “first person to meet me at the cafeteria will find out information about project.” If the students are following their professors and see this, then they will try to get to the cafeteria in order to get that extra information for the project. The students will also be learning how to use this valuable resource which can help them in the future, whether at school or in the workforce.

Another project for Twitter can consist of making as many contacts over the course of one week in the same department. The incentives for this include networking, experiencing Twitter, and learning the benefits of this tool. Twitter can also be beneficial for students and
Commenting on blogs can be beneficial because it gives students the opportunity to learn about different topics. They can also see how to professionally write blogs, which can help them out in the future if they are to work for a job which includes writing.

LinkedIn is more professional than Facebook and should mainly be used for industry networking as opposed to socializing among friends. How can professors teach students about LinkedIn? The easiest way is to show them examples and have them set up a LinkedIn account while they are in their class. If this is done the professor can see what is being done correctly as well as what they need to work on.

Although Twitter and LinkedIn are more professional than Facebook, students still need to know about the benefits and consequences of Facebook as well as the other two vehicles. Students need to use social media in an educated manner; they need to know the consequences of what can actually happen if they do something wrong while posting on these sites. Professors can teach them this by giving them personal examples of what has happened to people who have posted inappropriate information to these sites. Examples would include people losing jobs, not getting hired, or ruining chances for future opportunities.

In order to make all of these different types of social media available, professors need to set up projects which use all of them. Over the course of the previous semester, the York College of Pennsylvania Sport Management Public Relations class did a project working with Diadora. This project consisted of trying to increase the world-wide knowledge and awareness of Diadora. This was done by using different types of social media including, Twitter and Facebook. For this project students posted information about Diadora on the social media sites in order to increase recognition. At the end of the semester, the Facebook Diadora group had grown to over 750 people. Contests were run weekly on the site to get people participating. The Twitter account accumulated over 200 followers as contests were also run on this social media site. The different sites were updated regularly by the students, and it was well-received as a great experience for the students to learn how to use the various social media sites.

Perhaps the most important aspect of social media that must be stressed to students is the potential it possesses to damage one’s reputation if used in an inappropriate and unprofessional manner. Students should be taught how to maximize the benefits of social media without damaging one’s name. This can be accomplished by being diligent with regards to responsibly broadcasting information over the internet via online communities and networks such as Facebook, Twitter, or LinkedIn. Instructors can employ a wide array of tactics to successfully drive home these concepts in the minds of their students.

The first, and most obvious, strategy to use would be to dedicate class time instructing on the topic of social media etiquette. Students cannot be completely expected to be responsible in their social media endeavors if they have never been told what this responsibility entails. Topics to cover include proper language, suitable photos, privacy settings, personal branding, and appropriate frequency of use. It is critical to avoid over-lecturing during a class such as this, as students will quickly tune out the instructor. Instead, the class period should be heavily focused on gathering the thoughts and opinions of the students, who will naturally have had a great deal of experience in this area. Another focus of this lesson should be on the practical implications of failing to maintain the previously discussed responsibility, namely the prospect of potential employers inspecting this information.

A second tactic in the strategy to stress the importance of social media responsibility to students would be for the instructor to actually check all of their accounts, much in the same way
as a corporation would. The instructor can easily search for the accounts of students, and a message describing all inappropriate activity contained on a particular page would certainly deliver a powerful message to the student in question. Facebook pages should be scanned for inappropriate pictures, offensive wall posts, and any other such red flags. If the student has not taken the time to enact privacy settings that would block the average individual from seeing such unsuitable content, than there is no chance that an interested company would fail to notice the infractions. Twitter accounts should be scrutinized to make sure that all Tweets are constructive, valuable, and contain no derogatory content. Furthermore, LinkedIn accounts ought to be examined for any obvious falsities regarding accomplishments, recognition, or experience. After receiving the initial information in class, students should be provided roughly a week to cleanse their accounts of inappropriate activity before these measures are taken.

After instructing students on the responsible ways to conduct themselves within the context of social media networks, and subsequently checking to see if they have taken heed to this advice, the third step in the strategy to impart this knowledge would be to bring in an outside voice to further reinforce these ideas. The instructor should reach out to a professional in the industry corresponding to the students’ career ambitions who conducts examinations of social media accounts while working in a human resources capacity. This individual would not only be able to provide impactful examples of qualified applicants who were denied employment due to inappropriate social-media-related activity, but would also be able to lend an extremely credible voice to the discussion. Allowing students to hear the message “straight from the horse’s mouth” would put an end to any doubt they may have left regarding the accuracy or significance of the original message. Other tactics may certainly be effective as well, but we feel that the three proposed provide a strong foundation in the effort to teach students how to responsibly broadcast information over the internet via online communities and networks.

According to Global Round Table, there are over 32.9 million users of LinkedIn in the United States of America alone (2010). A typical month on the professional social networking site averages 36.5 million site visits by professionals around the globe, either developing their own professional portfolio or viewing other’s portfolio’s in hopes of improving their own business. The question is not whether it is to the advantage of college-age students to be developing their own professional profile or not. The question is why haven’t they developed one yet?

LinkedIn gives a professional appeal to the users of other social networking sites, to link to other professionals in their fields and display their accomplishments on-line. The site offers a variety of features including recommendations, where former or current colleagues may give a recommendation on another’s work for prospective employers to view. This site also offers the chance to act in a professional manner and connect with a variety of other professionals students may have met or made contact with at conferences. LinkedIn is a great tool to be utilized in a classroom atmosphere as well. In a Professional Development course, an instructor may help the students realize the potential of a social network that displays one’s professional profile with over 32.9 million users.

Educational resources should not limit the student’s ability to produce networking opportunities; they should instead improve the student’s ability to meet new people. Setting up networking events for students to meet professionals in their field is a great way to get students more involved and interested in learning about their future. A professional networking event also allows students to practice acting professionally, knowing what types of language and gestures to use, and establishing a sense of professional dress. Acting professionally is a tool that students
will be able to carry with them through their career and potentially land a challenging job in their
career field. Through these networking events students can also realize a real-world concept of
how to make a good first impression and to continue to make positive connections in the
professional world. Students never know when they will be able to benefit from a past
connection in the business world.

Educators also may have the keen ability to help direct students’ searches for internships
or jobs. The ability for a student to locate an internship or job comes down to the student’s
ability to build on their professional development as well as the student’s ability to locate the
position. With a variety of job searching tools now at the finger tips of students via the Internet,
it becomes more necessary than ever for educators to help point students in the proper direction
to reputable sites such as Team Work Online and Work in Sports, both professional Sport
Management job and internship listing sites. It can also benefit the students to have a positive
networking connection with the educational staff, because the staff could have connections in
organizations that may have a position to fill.

Another task in developing a strong and professional network is the ability to continue to
stay in touch and build on your current networks. Many students will make a onetime connection
with someone and never contact them with a follow-up. A network is only as strong as the
relationship you build with the people who share the network. Students must learn how to
implement tactics in regard to following up on connections while still observing the interaction
in a positive and professional manner. This will allow the students to functionally use their
network in the future. A great way to target a follow-up in the classroom is for the educational
instructor to bring in guest speakers and allow students to build a network, while also
implementing a project that involves contacting the speaker later on in the semester. This not
only builds a professional networking relationship with the person, but could also potentially
teach the student how to keep a positive relationship and how to continue to follow up with the
professionals in their field. While this paper presents both general and specific topics included in
our presentation, we will also allow time for questions and answers regarding the vast number of
ways in which educators may embed social media into the traditional classroom experience.
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Hawaii International Conference on Education, January, 2011  
Abstract  

Title: Engaging Undergraduates in Collaborative Research: A Model for Early Professional Development
Teacher candidates need an opportunity to study student learning and teaching practices. Standards for teacher education continue to emphasize the need for teacher preparation programs to prepare teacher candidates with a strong content knowledge and a strong pedagogical knowledge. Involving teacher candidates in field experiences that provide opportunities to engage in collaborative research with university faculty and teachers in a classroom setting can develop a strong content knowledge, a strong pedagogical knowledge and an understanding of implementing research-based teaching and learning strategies while investigating student learning and teaching practices.

In their joint statement of principles in support of undergraduate research, scholarship, and creative activities, the National Conferences on Undergraduate Research state the following: “We believe that undergraduate research is the pedagogy for the 21st century.” In our research, university faculty in partnership with professional development school faculty designed a teacher education model that engages undergraduate teacher candidates in systematic inquiry into student learning. This model implements both action and formal research methodologies.

The following purposes are the focus of the collaborative research model:
1. Do undergraduate experiences with action and formal research contribute to candidate professional development?
2. What learning gains for both candidate and children are documented?
3. How successful is the model, and what are the future directions?

Two types of research models are taught in an experiential approach during two semesters of the junior year. The formal research project in mathematics during the fall semester is faculty planned and directed with candidates involved in assessment, differentiated instruction, and data collection. During the spring semester candidates plan and direct a collaborative action research project in literacy in their assigned classroom with their teacher.

Our program began with formal research in mathematics focusing on teaching geometry in the kindergarten classroom. This geometry research has recently been added to Baylor’s international internship program in Queensland, Australia. With student progress evident in the geometry study, the Parkdale PDS principal requested a new focus on fractional understanding.
A graduate problems course in teaching mathematics chose as its research project to address elementary children’s learning of fractions. After an extensive background analysis of the fractional literature, they wrote the IRB for the university and school district, developed assessments, planned and field tested hands on interventions, and assembled evaluative instruments for candidates, students, and faculty.

Graduate students and faculty then instructed undergraduate candidates in the research process and videotaped candidate performance in assessment and instruction. The model used for formal research is summarized below:

- Pre/Post Assessment, including school district assessment, national and state standards
- Differentiated instructional intervention in small group settings
- Data collection and analysis
- Sharing in a public forum

Data collection involved extensive assessment, and candidates learned to assemble data to use for differentiation in their planning, instruction, and selection of materials. Preliminary results showed students’ retention of mathematics vocabulary is important to their further understanding of concepts. Kindergarteners could name the fractions ¼, ½, and 1/3, and they understood the concept of “fair share”. These aspects are beyond the requirements of our state standards for kindergarten. This research is a continuing longitudinal study that provides opportunities for presentation and publication.

During the spring semester candidates design an action research study in collaboration with their classroom teacher guided by a literacy-based question posed by university faculty. After assigned readings related to action research, candidates follow the prescribed action research sequence:

1. Identify the question, issue, or problem.
2. Define a potential solution.
3. Locate or develop pre and post assessments.
4. Apply the intervention and collect data regarding the intervention.
5. Analyze the findings.
6. Take action.
7. Share in a public forum.

This past year’s general question posed by the faculty was “Does using wordless picture books contribute to children’s oral language?” After the intervention period, candidates reported data that shows children’s improved use of appropriate vocabulary and sentences, increased descriptive language, and evidence of better engagement.

Candidates reported that their personal involvement in research improved their understanding of the research protocol, and that knowledge has enhanced their understanding and use of research and contributed to their professional development. They commented in reflections that they now know how to let assessment guide instruction.

The success of the research model is found in collaboration. Classroom teachers and university faculty collaborate with teacher education candidates to improve children’s learning by enhancing instruction in the classroom.

References


Governance in Independent Public Schools: the role of the new School Board

One of the most common practises in the general trend towards decentralisation in public schools in Australia has been the setting up of School Councils. This study explores the transition from School Council to School Board for selected schools, following the Government’s announcement of the Independent Public Schools Program. This new model of governance will give selected schools the opportunity to operate with increased flexibility and autonomy, including the authority to select and appoint staff, with additional curriculum and financial flexibilities (Western Australian Department of Education, 2010). The long term objectives of the research are to develop a governance framework for good processes and practices. A qualitative case study approach using analysis of documents in the public domain including policy, participating school data, media releases and reports will generate descriptive data of emerging governance issues. This paper will provide a context and track and analyse the implementation of the state-level educational initiative in order to inform the transition to new models of governance.
Pre-service teachers

1. Title of the submission: Elementary pre-service teachers and homophobia: Curricular changes making a difference

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6. Abstract and/or full paper below
Abstract
This study describes research done with elementary pre-service teachers and the Education Outreach Project of the Gay Men’s Chorus of Los Angeles (GMCLA). The study summarizes research on the impact this Outreach Project had on these teacher candidates’ intersecting views of gender and sexuality. The presentation will share findings from this case study and the Project’s implementation in a large, comprehensive university teacher education program. It investigates how pre-service teachers bring to school their constructed meanings of gender and sexuality, and how the implementation of the Project changed pre-service teachers’ views of misogyny and homophobia. This study continues a dialogue about how to address issues of gender and sexuality in the classroom and how elementary school teachers might better be able to approach these topics in standards-driven appropriate ways.

Elementary pre-service teachers and homophobia: Curricular changes making a difference

This study describes research done with elementary pre-service teachers and the Education Outreach Project of the Gay Men’s Chorus of Los Angeles (GMCLA). The research summarizes the impact this Education Project had on these teacher candidates’ intersecting views of gender and sexuality.

Teachers have a fear of, and lack of experience, implementing ideas of sexuality in the classroom (Bickmore, 1999; Knotts, 2009; Macgillivray, 2004). Even if states have laws protecting school-age children from harassment based on sexual orientation or gender identity, those same laws rarely if ever require teachers to implement curriculum addressing those issues (Knotts, 2009). If administrators or teachers attempt to implement a curriculum addressing social change, it is often seen as radical or unnecessary (Deal & Patterson, 1999; Fullan, 1991, 1993, 2001; Skelton, 2007). Parental and social influences from the larger social/cultural world also contribute to the ways teachers understand their role in delivering content to students (Goodlad, 1984; Yanow, 1996). It is in this convoluted environment in which teachers operate that the Gay Men’s Chorus of Los Angeles presented their Education Outreach Project to pre-service teachers at a large, comprehensive university in Southern California.
Pre-service teachers

GMCLA’s Education Outreach Project, the A-Live Music Project (AMP), brings live music, personal testimony, and standards-driven curriculum to high school youth with the intended purpose of teaching content in innovative ways and encouraging students to think critically about personal, national, and international issues. This research study involved partnering with GMCLA in presenting curriculum on the biography of Billy Strayhorn, an African-American, gay composer from the early American Jazz Age, and his outstanding contributions both to music and the fight for Civil Rights equality. This initial AMP curriculum has now developed into further content comprised of contemporary civil rights issues, as well as biographies of other gay composers, and their histories involving immigration, religious persecution, race, and class. This study summarizes an adapted presentation of the Billy Strayhorn curriculum to elementary pre-service teachers, open-ended qualitative questions from pre- and post-assessment surveys, as well as lesson plans that the pre-service candidates created for K-5 students.

The discussion here is from a case study of the A-Live Music Project’s (AMP) implementation in a large, comprehensive public university teacher education program. It investigates how pre-service teachers bring to school their constructed meanings of gender and sexuality, and how the implementation of the Project changed students’ views of misogyny and homophobia, in theory, but not in practice. This study continues a dialogue about how to better address issues of gender and sexuality in the classroom and how elementary school teachers might better be able to approach these topics in standards-driven appropriate ways. The study encourages further research on standards-driven curriculum around these social/cultural issues.
History of the Project

The mission of the Gay Men’s Chorus of Los Angeles (GMCLA) is to use music and singing as a vehicle for changing hearts, minds, and attitudes (gmcla.org). GMCLA creates productions and performs music that reaches people with a message of unity that celebrates diversity, rather than condemning it. GMCLA was formed in 1979 as a volunteer effort of 99 gay men from all over the greater Los Angeles metropolitan area, and has grown in size, gained professional artistic and administrative staff, toured nationally and internationally, released fourteen CDs, and appeared with numerous stage, film, and television celebrities, and also appeared on several television broadcasts (i.e., *Will & Grace, Six Feet Under, MadTV*). GMCLA has also had many ‘firsts’ in its 30-year history. GMCLA was the first gay men’s chorus to perform for a sitting President of the United States: Bill Clinton, in 1999. The Chorus was the first gay men’s chorus to tour central Europe in 1991, the first openly gay chorus to be broadcast over Russian television in 1999, and the first openly gay chorus to tour South America.

GMCLA’s A-Live Music Project (AMP) is an attempt to address the fact that almost one-third of all California youth in grades seven to 11 have been the victims of bullying or harassment based on their actual or perceived race or ethnicity, religion, disability, gender, or sexual orientation (GLSEN, 2007). Eight percent of California students report being targeted for harassment because of their actual or perceived sexual orientation, according to the 2004 Safe Place to Learn report issued by the California Safe Schools Coalition and the 4-H Center for Youth Development at UC Davis. In addition, even if not the targets of harassment themselves, more than 91 percent of all youth in schools report hearing students make negative comments based on sexual orientation (GLSEN, 2007). AMP has been created in response to the fact that lesbian, gay, bisexual, and transgender (LGBT) people, or those perceived to be, are
Pre-service teachers disproportionately targeted as victims of hate crimes outside of schools (Herek, 2009). According to the Federal Bureau of Investigation, 14 percent of the hate crimes committed in 2005 were motivated by the victim’s sexual orientation (FBI, 2009).

California has a number of laws addressing perceived gender identity and sexual orientation in the schools [AB 537, AB 394, SB 777]. As early as 2000, California enacted a law, AB537: The Student Safety and Violence Prevention Act, that addresses harassment in the schools based on gender identity and sexual orientation (California Penal Code, 2005). In 2007, two additional laws were passed: the Safe Place to Learn Act, AB 394, and the Student Civil Rights Act, SB 777 (Equality California, 2008). The Safe Place to Learn Act attempts to enforce what AB537 did not by protecting youth, including those who identify as LGBT in California public schools, by ensuring that the state’s nondiscrimination and anti-harassment policies are rigorously enforced. This Act requires the state to actively monitor school district compliance of the already existing anti-bias law (i.e., The Student Safety and Violence Prevention Act of 2000). The Student Civil Rights Act establishes consistent civil rights protections in all public education programs and protects students from harassment and bullying. It also maintains that curriculum that is discriminatory or biased against LGBT people and other protected groups be prohibited. These recently passed laws, however, are being fought by a coalition of anti-LGBT activists in an attempt to undo student safeguards guaranteed by SB 777 (Campaign For Children and Families, 2007).

In response to statistics like these on LGBT harassment and the current state of legislation in the state of California, GMCLA developed an Education Outreach Project, titled the A-Live Music Project (AMP). AMP brings a personal and human connection to LGBT issues for high school students by including personal testimony from singing
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members that is aligned to the curriculum of the given presentation. Typically GMCLA sends 25 to 40 singing members to a high school site to present some version of curriculum addressing some combination of AMP’s stated goals: equality, diversity, music as message, LGBT history, and social action. AMP brings to life the larger sociocultural context of civil rights issues by presenting the music and biographies of outstanding gay American composers, or thematically addressing any of a number of the Project’s stated goals. The Project brings live music and standards-driven curriculum to youth with the express purpose of teaching content in innovative ways. The A-Live Music Project encourages students to think critically and construct their own social meanings, relating these to personal, national, and international issues. GMCLA has performed AMP in five southern California school districts, for audiences ranging from 25 to over five-hundred students and teachers.

In addition to thematic issues of civil rights, the A-Live Music Project oftentimes focuses on the lives and music of various composers (i.e., Leonard Bernstein, Marc Blitzstein, Stephen Sondheim, Billy Strayhorn) highlighting themes such as: racism, homophobia, escape from persecution and violence, poverty, and music as salvation. If focused on a composer, the presentations typically consist of live choral performance of several musical selections and short talk-spots to tell the biographical stories of the renowned American composers behind the music. Men from the chorus are also assigned the task of sharing experiences from their own personal life stories in order to make real and concrete the many issues raised in the biographies of the composers. These brief testimonials are meant to bring the potentially detached and disconnected stories of the composers into a vivid and personal context related to the particular Chorus member sharing the story.
This study summarizes an adapted and innovative presentation to elementary pre-service teachers. Moving the presentation to the university site, and targeting pre-service teachers, opened the possibility of GMCLA potentially bringing this presentation beyond the high school setting. This study summarizes the experience of 49 elementary pre-service teachers at a large, comprehensive, public university in southern California. The study used open-ended qualitative questions from pre- and post-assessment surveys, as well as lesson plans created for K-5 students.

**Literature Review**

*Teachers and Sexuality*

Teachers are conflicted when attempting to determine how best to present and frame gay and lesbian issues in the classroom, or whether to present them at all (Kempner, 2003; Lipkin 1999, 2004; Sears, 1999). There is little agreement as to how best to approach the issue of sexuality in the schools. Foulks (1999), however, presents the three most common perspectives of teachers as being the biological approach, the religious approach, and the societal/lifestyle approach.

The first notion is framing gay and lesbian issues in a biological approach. Teachers who support this approach and want to confront gay and lesbian issues at school feel that accurate information and clarification of misunderstandings in an objective framework is necessary for instruction. Teachers who support this approach, and feel that schools should not confront these issues, argue that these topics are best addressed at home and should be the responsibility of the family (Foulks).

Foulks (1999) also discusses proponents of the second paradigm, the religious approach. Teachers who support this approach feel that gay and lesbian issues at school should be
Pre-service teachers presented in a framework of broadening awareness to different beliefs and lifestyles with an emphasis on respect and acceptance. Religious approach proponents who do not want to instruct on these issues feel that often homosexuality can run counter to prevailing religious beliefs, is morally wrong, and is an inappropriate subject for the schools.

The third framework is the societal/lifestyle approach. Proponents of this ideology believe that since these issues are being addressed in the larger society through the media, the law, and general culture, then they cannot afford to be ignored in the schools. Proponents believe that these issues should be presented in a framework of respect, with tactics for disagreement of belief systems, and creating an atmosphere of safety for discussion. Proponents for this approach who do not want these issues addressed in school feel that children, especially elementary children, should maintain their innocence and not be exposed to sexual issues, and that the responsibility for discussion falls to the family (Foulks).

It would follow that whether a teacher is gay or straight would certainly influence which of these approaches might be adopted. The sexual orientation of a teacher also certainly would seem to impact how a teacher might want to implement these approaches, either to discuss or not discuss these issues in school. Unfortunately, studies of gay teachers are difficult to conduct, as there is still such social stigma to being an openly gay or lesbian teacher in school (Harbeck, 1992; Jennings, 2005; Kissen, 1996). Therefore it is difficult to know how the sexuality of a teacher influences which of these approaches might best impact the school environment. There have been studies, however, on teachers and how their sexuality generally influences the educational environment both negatively (Jennings, 1994) and positively (Jennings, 1994, 2005; Sears, 1992).
There is also the difficulty of a teacher’s gender. Haywood (1996) points out that there can be perceived sexuality and age related hierarchies that reorient themselves depending on the gender of both student and teacher. For instance, young boys often sexualize a female teacher through the use of overt or covert language. In addition, there is sometimes an interrelational dynamic of sexual disciplining between students and teachers when, for instance, male teachers, through flirting, can control female students in the class. In addition, the issue of curricular materials addressing sexuality, for instance, often depict minority sexualities negatively or not at all (Herr, 1997; Whatley, 1992; Whitlock & DiLapi, 1983).

**Pre-Service Teachers**

There is scant evidence about what pre-service teachers believe about sexual orientation prior to becoming teachers. Jennings and Sherwin (2008) found that only 55.6% of teacher preparation program even address issues of sexual orientation, and even then the issue is embedded in foundations courses and only somewhat couched in multicultural education. Elsbree and Wong (2007) did find teacher preparation programs that address sexual orientation by using the play “The Laramie Project” as a pedagogical tool to purposefully disrupt heteronormative and homophobic constructs. Using the dramatic arts allowed for these pre-service teachers to change their thinking on the need to address issues of sexual orientation and homophobia in the schools. Petrovic and Rosiek (2003) investigated Christian pre-service teachers and how they negotiate and explore their heteronormative suppositions and how that might affect their teaching. What is known about pre-service teachers is that very little is being done to consciously address sexual orientation as a systemic demographic variable for new teachers to consider as they begin their teaching careers.
Methods

This study summarizes the experience of 49 elementary pre-service teachers at a large, comprehensive, public university in southern California. The study used open-ended qualitative questions from pre- and post-assessment surveys, as well as lesson plans created by those pre-service teachers for K-5 students.

The study used two sections of a Social Studies and Performing Arts Methodology course in a post baccalaureate teacher preparation program for Elementary Education (candidates are studying to get their preliminary teaching credential to teach in the elementary schools). This course seemed in perfect alignment to the AMP curriculum, as the course has a stated purpose to help pre-service teachers better understand how to integrate the performing arts into the Social Studies curriculum. Between the two course sections, there were 49 pre-service teachers enrolled: 43 female, 6 male, with ages ranging from 21 to 50, with the majority of candidates (39) under the age of 26. The candidates were diverse ethnically, with 57% White, 31% Latino/a, 6% Asian, and 6% bi-racial.

A pre-assessment survey was administered to both sections. The pre-assessment survey asked questions of these pre-service teachers that discussed the value of social justice oriented curriculum generally, to including issues of race, class, gender, and sexual orientation into the curriculum, in addition to any specific knowledge they had of Billy Strayhorn, jazz music, and the Harlem Renaissance. This AMP curriculum was presented to both sections of the course. 12 singing members of GMCLA, the Artistic Director, and Assistant Director came to two different class sessions of each course; the class sessions were two weeks apart. GMCLA presented an adapted version of the Billy Strayhorn curriculum, which focuses on issues of race, class, and sexual orientation as the driving demographic features in Strayhorn’s life. Each presentation was
Pre-service teachers

one and a half hours long, which included biographical history of Billy Strayhorn, live singing of Strayhorn’s music, and personal testimony from the singing members that aligned with general themes of Strayhorn’s life (growing up poor, being a minority in the larger sociocultural world, and homophobia in various facets of life: the military, marriage, and the workplace.)

Immediately after the second presentation candidates were then given a post-assessment survey with the same questions from the pre-survey regarding the value of the content (social justice oriented curriculum generally, as well as including issues of race, class, gender, and sexual orientation into the curriculum specifically; in addition to any specific knowledge they gained about Billy Strayhorn, jazz music, and the Harlem Renaissance). As an adapted midterm, candidates were then asked to create lesson plans that would address any of the primary issues from Strayhorn’s life (race, class, sexuality; as well as gender and the use of the arts as a vehicle for social change), aligned to Social Studies content standards, in developmentally appropriate ways for the K-5 classroom. As the opportunity to have GMCLA present this curriculum came after the semester had begun, and a standard midterm was already listed in the syllabus, candidates had the choice of either taking the already prepared standard midterm (multiple choice, short answer, etc) or completing the adapted lesson plans. A rubric for the lesson plan was distributed along with already chosen, pre-selected Social Studies content standards (Attachment A) to which the candidates were to align their lesson plans.

The major limitation to the study is that the author was in various roles: professor of record for the two courses, singing member of GMCLA, and author of the study. Candidates could have been biased in their responses knowing that the study was being conducted by their professor, who happened to also be a member of GMCLA (and presenter of the AMP curriculum). As a participant observer and researcher, action research and qualitative analysis
Pre-service teachers certainly allows for these dual roles (Mason, 1996; Polkinghorne, 1988; Schwandt, 2001), and I believe I successfully navigated this duality and presented no untoward pressure on the candidates to agree (or disagree) with the presentation’s focus and content. As will be discussed further, the results of the surveys and lesson plans certainly demonstrate that the candidates appeared to honestly engage with the presentation and their response to it.

**Discussion and Analysis**

**Pre-assessment**

The initial survey, completed a week prior to GMCLA’s arrival, yielded interesting results from the candidates. There was a general tension between candidates who perceived some value in educating for social justice (and race, class, and homophobia/sexuality specifically) and those who believed that content not specifically addressed by standards and ‘the curriculum’ be left to the purview of the home. There was a general sense (36 candidates) that addressing these issues for the K-5 classroom would be difficult, at best, and perhaps even unnecessary, until students really “understand how the world works. Kids just don’t get it.” These more negative comments also included: “Is this in the curriculum?”, “Aren’t the parents going to cover this stuff?” and the more ubiquitous, “This sounds hard.”

There were positive, more enthusiastic comments (6) like, “As new teachers we should be open to many new ideas.” These more positive candidates (all female and all students of color) shared comments that new teachers should challenge themselves to step “outside the box and off the page” and bring “real lives in to [sic] the classroom.” There were also more neutral comments (7) like, “I don’t really know what to say about some of these things.” Generally, candidates were at odds with how to appropriately present the challenging social issues of race, class, and sexuality to K-5 students.
Post-assessment

The AMP presentation seemed to have profound effects on the pre-service teachers in terms of a raised consciousness and a call to social action and their willingness to approach these issues in their future classrooms. Generally, comments were coded into three major categories: Use of the Arts, Racism and Classism, and Misogyny and Homophobia. A summative look at these three major categories indicated that the pre-service teacher candidates experienced a consciousness raising and were willing, if not eager, to introduce these challenging social issues into their future classrooms.

Use of the Arts. There were a series of comments that simply addressed using and experiencing the arts as a pedagogical tool (26). Evaluative comments like, “You guys are really great….the vocals are really good!” and “I found the music to be awesome and I loved the performance!” are representative of the more pedestrian experience of simply listening to the music from the presentation. Other comments addressed the actual content of the music with comments like, “I learned a lot about the history of the music and Billy Strayhorn.” Other candidates experienced the presentation as a motivator for their future practice. “I can see I’d need to bring in some music and stuff to get them [the Ss] engaged.” And finally, some responses indicated an initial realization that the arts can be used in the classroom for an elevated purpose. “Easy to see how the Arts are used for social action.” These comments indicate that pre-service teachers had an immediate reaction to the use of music as a teaching tool in the delivery of the presentation.

Racism and Classism. Roughly the same number of candidates (24) made concrete comments about the presentation addressing the issues of race and class. In these comments there was a general sense that this kind of presentation was just “another tool in the arsenal” at
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breaking down stereotypes regarding race. One male candidate said, “I feel like we do a good job addressing race in the schools.” This was echoed by several others who felt that there were “posters, Culture Days, and books that help” teachers bring up the issue of race with their students. One candidate said, “I knew that music! It’s great now that I know an African American wrote it! Another great role model for kids.” The issue of class, socioeconomic status, and growing up poor resonated with candidates as well. “It just goes to show that we don’t have enough role models from poor backgrounds who grow up to do great things.” These and comments like them indicate that pre-service teachers see the value of addressing race and class in the classroom.

_Misogyny and Homophobia._ It is the area of sexual orientation and homophobia that seemed to resonate most with the pre-service teachers. 45 of the 49 candidates made some kind of comment regarding sexuality, homophobia, and the tacit presence of how those constructs contributed to a misogynistic culture. There were straightforward, descriptive comments like, “I’d never been in a room with that many gay guys before” and “Really great to see gay guys who can sing and also look so masculine at the same time.”¹ This idea of masculinity and the male construct was also echoed in comments like, “I learned that not all gay men are flamboyant” and “You guys just seem so normal.” These comments require further deconstruction beyond the scope of this study; perceptions of masculinity and femininity, and how teachers perceive those constructs in the classroom must be evaluated further, but it is clear that pre-service teachers are coming to be trained for the profession with constructed notions of gender and sexuality.

The pre-service teachers also reflected about the personal nature of the presentation and

¹ It is comments like this that made me realize that I must add individual interviews or focus group interviews to the next study because there is an obvious need to deconstruct the meaning behind terms like ‘masculine’ used in this context.
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how much they grew personally from listening to the personal testimony of the singing members. Many candidates made comments like, “I just never really thought about how hard it was for gay people” and “Your personal stories will haunt me. Honestly, I learned to be a little more accepting and less judgmental.” There was one nonevaluative comment from a male teacher candidate who said, “I guess it takes a lot of courage to be openly gay and not ashamed.” The comment neither affirms the openly gay singers, nor does it malign them; rather there is the presence of a number of possibilities that, again, would require further study in relation to the value of a presentation like this. For instance, is this the comment of a teacher perhaps biased against homosexuality, but acknowledging the courage of the presenters in their unapologetic presence as part of an organization with ‘gay’ in its title? Is it the comment of a closeted (or even as yet unacknowledged) gay youth who sees a presentation like this and realizes the courage he might need to live openly and honestly as a gay man? Is it the comment of a straight ally merely affirming that in the larger sociocultural world, it still does require ‘courage’ to live openly and out as a gay man? Again, this answer is beyond the scope of this study, but does require further investigation and research.

What is answered, however, is the immediate reaction the pre-service teachers had in relation to feeling the need to address sexual orientation and homophobia in the classroom. An overwhelming majority (34 candidates) made comments that said teachers needed to be more proactive in their treatment and delivery of these issues. One said, “I learned more about discrimination and how severe it is. It seems like an easy leap to tie these issues to bigger issues of tolerance and diversity.” Another said, “This presentation gave me a new perspective about this issue about gay people which I think is a cool feeling. I can see this is necessary to tell kids about.” And the more concrete, “Teachers can help eliminate all the negative
Pre-service teachers...about gay people.”

There was also a distinct minority (2) of teacher candidates who felt the presentation was inappropriate and unnecessary. One said she was, “Put off and offended” and “This presentation is wrong.” Another candidate seemed to struggle with her personal beliefs and the value of the presentation by saying, “I have never hated gays and I don’t even want anything bad to happen to gays. I know that isn’t right, but I simply don’t want to believe in the same ways that you believe.” There were also a few candidates (3) who were coded as neutral and who commented on the presentation with value-free remarks like finding the presentation “Interesting” and another who said she did not feel “any different [sic] than before I knew about your program.” And echoing some of the initial comments in the pre-survey, one teacher candidate said, “I don’t see how it’s connected to my job” referencing the fact that there are no content standards that specifically address sexual orientation in the K-5 curriculum.

Raised consciousness. 44 pre-service teachers, however, used positive words throughout their post-assessment surveys. Words like: proud, good, amazing, impressed, cool, happy, welcome, moved, admire, open-minded, entertaining, and enlightened were used throughout their responses. These positive comments fell, generally, into three major categories: Use of the Arts, Racism and Classism, and Misogyny and Homophobia. These three areas contribute to a general raised consciousness of the pre-service teachers. “I feel like I could intelligently educate others about acceptance of gays.” The teacher candidates felt compelled to treat their teaching like social action. “I feel as teachers we must act to end all these kinds of stereotypes” and “This can be used to crush all stereotypes and eliminate all of the negative things we think about gay people” were representative of the candidates who indicated a proactive, anticipatory commitment to addressing these issues in their teaching. A comment that seemed to capture this
Pre-service teachers sense of a raised consciousness is, “This presentation was exciting and challenging. I see how I have the opportunity to push the envelope with our kids in appropriate ways.”

Lesson Plans. In order to measure these ‘appropriate ways’ and the candidates’ understanding of how these issues could manifest in their teaching, I assigned the midterm, asking the teacher candidates to create a lesson plan addressing one of the issues captured in the presentation of Billy Strayhorn’s biography: race, class, or sexuality. The submissions yielded interesting results. Seven of the 49 candidates chose to complete the standard midterm (multiple choice, etc) and 42 chose to complete the amended midterm (attachment A) and submit a lesson plan addressing one of the issues from the presentation. Their submitted lesson plans addressed the three categories of comments found in the pre-service teachers’ post-assessment surveys: Use of the Arts, Racism and Classism, Misogyny and Homophobia. Table 1 indicates some representative examples of the general theme(s) of those lesson plans and the objectives for the K-5 students quoted from the lesson plans.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Grade Level</th>
<th>Objective</th>
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<tbody>
<tr>
<td>Use of the Arts</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>After viewing and listening to a power point presentation on the photographic art of Ansel Adams, his environmental work for the Sierra Club and national Parks, and specifically his photo book on Manzanar, the learner will complete a photo essay about a social injustice and a one paragraph summary explaining the injustice they photographed, to demonstrate the power of visual art as a mouth piece for commentary on social injustice.</td>
</tr>
<tr>
<td>Racism</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Following a lesson on Marian Anderson, the learner will write a reflection of at least five sentences about how racism affected Marian’s life, how it led to her singing at the Lincoln memorial, and why that concert was so important to her life and to the lives of others.</td>
</tr>
<tr>
<td>Misogyny/Racism</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>After a lesson on which groups of people were not allowed representation or the right to vote at the time of the writing of the Constitution, the learner will answer a question about how our country would be different if one of the groups had a voice in government and answer two additional “Below the Surface” questions in their journals.</td>
</tr>
</tbody>
</table>

It is clear from these examples that the pre-service teachers actively took many of the
themes from the Strayhorn biography, as well as the stories from the personal testimonies of the singers and created ways to address those themes in the K-5 classroom. There is higher order thinking, active learning, and an attempt to address issues of social justice in each of these representative examples. Pre-service teachers actively sought to integrate these challenging social themes in developmentally appropriate ways into the K-5 classroom. Table 2 indicates the ways in which those general themes were present in their submitted lesson plans.

<table>
<thead>
<tr>
<th>Lesson Plan Theme</th>
<th># of Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Standard Midterm)</td>
<td>7</td>
</tr>
<tr>
<td>Racism</td>
<td>22</td>
</tr>
<tr>
<td>Misogyny/Gender</td>
<td>13</td>
</tr>
<tr>
<td>Use of the Arts</td>
<td>8</td>
</tr>
<tr>
<td>Classism</td>
<td>2</td>
</tr>
<tr>
<td>Homophobia/Sexuality</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52 (double focus)</strong></td>
</tr>
</tbody>
</table>

Not one lesson plan addressed the issue of sexual orientation or homophobia. The presentation was given by the Gay Men’s Chorus of Los Angeles. It was about a gay composer who was also Black and poor. After this presentation, 45 out of 49 candidates commented on sexual orientation in the content of the presentation in some way. 28 said, in some way or other, they had gained ‘new perspectives’ on how to address the gay stereotype in the classroom. Yet not one candidate chose to address the issue in a lesson plan. There were a majority of candidates who made some version of the comment, “This presentation was valuable because it opens your mind and allows you to see things from someone else’s perspective.” The submitted lesson plans indicate that there is a congruence between this perceived value in presenting the perspective of race, class, and gender to elementary students. There is also an obvious dissonance between this perceived value in presenting the perspective of homophobia and/or sexuality to elementary students.
Conclusion

Elementary pre-service teachers believe in the importance of a raised consciousness and instructing their students about sexual orientation and homophobia. But there is a dissonance between this raised consciousness and the ability to move toward implementation of instruction. This study captures why some of this dissonance occurs.

In a class session after the midterms were submitted and graded, I presented initial findings and the outcome of the themes of the midterms to the students. These teachers’ reactions and rationales demonstrate some congruity with the present literature. Pre-service teachers are familiar with issues of race and class and feel that there are resources available to them (Molina & Wittig, 2006; Ortiz & Harwood, 2007; Swartz, 2003). The following comment seems to capture this notion, “I’ve already seen lessons on racial issues and tolerance so it was just easier for me to come up with those ideas.” The issue of identity (Brown & Kysilka, 2002; Castells, 1997) also seemed relevant from the teachers’ comments, like, “I’m a woman so I could talk about that issue easier….And isn’t that a beginning?” Teachers teach from what they know and have experienced (identity), and this comment seems to mirror this notion.

The following two comments indicate another kind of reaction: “Well when I sat down to actually do it I just couldn’t see how I could do it” and “I totally get it. I know I need to teach about it. But this presentation just wasn’t enough to get me comfortable talking about it.” These comments capture much of what is in the present literature about fear, lack of comfort, and not having confidence in the vocabulary to address issues of sexual orientation with elementary students (Bickmore, 1999; Knotts, 2009; Macgillivray, 2004). In the safe environment of the college classroom, after two presentations from the Gay Men’s Chorus, with an openly gay professor facilitating the dialogue, these two students’ comments seem to capture this
phenomenon: they could only say the word “it” when referring to sexuality. To even say the word ‘gay’ is difficult for some people. This lack of experience with even the word, let alone the sociocultural constructs it represents, captures a little of the difficulty in delivering instruction about sexual orientation to elementary students; or at all. It is clear that pre-service teachers are coming to be trained with constructed views of gender and sexuality (Foulks, 1999; Kempner 2003; Knotts, 2009; Quinlivan, 2006; Rienzo, Button, & Wald, 1996) and comments captured in this study (“You just seem so normal,” and “Really great to see gay guys who can sing and also look so masculine at the same time.”) seem to affirm this. And although presentations like AMP raised the consciousness regarding the need to implement instruction, when it came to writing lesson plans and intentionally planning to do this, not one pre-service teacher included issues of sexual orientation or homophobia in their lesson plans.

This study affirms Elsbree and Wong’s (2007) findings that it is possible to use the arts as a pedagogical tool to disrupt heteronormative and homophobic constructs in teacher preparation programs. Using the AMP curriculum disrupted the pre-service teachers’ constructs in theory, but did not move them to implement their new ways of thinking into their practice. Further work must be done on how believing in the need to instruct on issues of sexual orientation and homophobia is dissonant with implementation of content/curriculum regarding these issues.
References


Pre-service teachers


Pre-service teachers


ATTACHMENT A

MIDTERM (60 points): Adapt the content of the Billy Strayhorn presentation to make it grade-level appropriate for the K-5 curriculum by:

3 pts.  1) Using one of the following standards as a beginning point.

3 pts.  2) Write a criterion-based objective for a lesson.

9 pts.  3) Write three activities that support the objective.

5 pts.  4) Write a minimum of three double-spaced pages describing how your lesson idea is:

5 pts. a. Grade-level appropriate;

15 pts. b. Addresses at least one issue: racism, homophobia, and/or classism – the three main facets presented in the biography of Billy Strayhorn’s life;

10 pts. c. Incorporates the arts;

10 pts. d. Aligns to the standard you chose.

K.1.2- Students understand that being a good citizen involves acting in certain ways by learning examples of honesty, courage, determination, individual responsibility, and patriotism in American and world history from stories and folklore.

1.4.3 - Students compare and contrast everyday life in different times and places around the world and recognize that some aspects of people, places, and things change over time while others stay the same by recognizing similarities and differences of earlier generations in such areas as work (inside and outside the home), dress, manners, stories, games, and festivals, drawing from biographies, oral histories, and folklore.

2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives (e.g., from biographies of Abraham Lincoln, Louis Pasteur, Sitting Bull, George Washington Carver, Marie Curie, Albert Einstein, Golda Meir, Jackie Robinson, Sally Ride).

3.4.6 - Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government by describing the lives of American heroes who took risks to secure our freedoms (e.g., Anne Hutchinson, Benjamin Franklin, Thomas Jefferson, Abraham Lincoln, Frederick Douglass, Harriet Tubman, Martin Luther King, Jr.).

4.4.9 - Students explain how California became an agricultural and industrial power, tracing the transformation of the California economy and its political and cultural development since the 1850s by analyzing the impact of twentieth-century Californians on the nation's artistic and cultural development, including the rise of the entertainment industry (e.g., Louis B. Meyer, Walt Disney, John Steinbeck, Ansel Adams, Dorothea Lange, John Wayne).

5.7.5 - Students describe the people and events associated with the development of the U.S. Constitution and analyze the Constitution's significance as the foundation of the American republic by discussing the meaning of the American creed that calls on citizens to safeguard the liberty of individual Americans within a unified nation, to respect the rule of law, and to preserve the Constitution.
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The State of Field Experience Management in the Five-Year Science Teacher Education Program in Thailand

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The State of Field Experience Management in the Five-Year Science Teacher Education Program in Thailand

Abstract

This research explored the current situation in managing the field experience of a five-year science teacher education program in one university in Thailand. A number of methods were used to assess field experience situation; a questionnaire about pre-service science teachers’ perceptions of the field experience management; participant observation of seminars; interviews; and analysis of supervisory comments on student teachers’ teaching performance. The findings indicate that the pre-service science teachers have a high level of satisfaction with the practice quantity and their own teaching characteristics. However, during their student teaching, they could not define clear and expected learning outcomes in lesson planning. They did not probe students’ prior knowledge, rarely asked questions, could not manage a classroom, and held misconceptions in science concepts. Despite the struggles, pre-service did improve in their ability to develop lesson planning techniques, teaching strategies, students’ learning, classroom management skills, and incorporate instructional materials.

Keywords: field experience, pre-service science teacher, cooperating teacher, supervisor, teacher education
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Introduction

The field experience is a key component of many teacher preparation programs. According to recent education reforms in many countries, there has been a number of universities have been re-examining, refining and implementing teacher education programs that are aligned with curricular, pedagogical and organizational reforms. These teacher education institutions have an increased focus on the development of field experience courses (Russell, 2005). Since the field experience is considered as a bridge between the academic coursework and the realities of classroom teaching, pre-service teachers can learn how to teach a particular content topic to specific students, in a specific context (Beeth & Adadan, 2006; Kagan, 1992). Based on a social-constructivist perspective, the field experience can offer pre-service teachers opportunities to construct or reconstruct their own knowledge and beliefs through support and guidance from knowledgeable persons (Watson, 2006), collaboratively working with other people such as cooperating teachers, supervisors, parents, other pre-service teachers and others (Bell & Gilbert, 1994; Watson, 2006), and reflecting on their own and other’s ideas (Abell & Bryan, 1997). Pre-service teachers also have the opportunity to work with students which serves as the preparatory activity before they assume the full responsibilities of an in-service teacher. In a real school atmosphere, pre-service teachers can negotiate classroom management, school policies, organization, lesson planning, and their own positions within the social structure of the schools.

Like other countries, teacher education in Thailand is currently undergoing a period of learning reform. The primary goal of the Thai educational reforms is to help teachers become more aware of ways to improve student learning, and how to modify teaching to meet the new learning standards. Since Thai science teachers are more
familiar with the traditional national curriculum, many struggle to develop and implement a school-based science curriculum. Fry (2002) argues that some teachers do not understand that activity-based learning is only one of many methods that can be used to promote active and student-centred learning. A main reason of this problem is that the curriculum and teaching provided in the teacher education institutions is not attuned to actual practice and learning process reforms in school (Amornvivat, 2002).

Adding a full-year field experience is the highlight of the new five-year teacher education program in Thailand. Prior to 2004, teacher education programs were four-years. The five-year program is considered a new hope for improving the quality of Thai teachers and consequently developing student learning. It intends pre-service teachers to develop their pedagogical content knowledge (Shulman, 1987) and apply this kind of knowledge in real situations (Institute of Promotion of Science & Technology Teaching [IPST], 2002). Pre-service teachers are also expected to implement constructivist-based teaching strategies as suggested by the National Education Act (Office of the National Education Commission, 1999). The new five-year program requires pre-service teachers to study coursework for four years. They have one early field experience in year four and a yearlong field experience in year five. The extended time in the field experience from one semester in four-year teacher education program to two semesters, or one academic year, in five-year teacher education program is expected to help pre-service teachers gain a better understanding of the teachers’ role, curriculum, classroom action research and students' growth and learning over the course of an entire year.

While research on the role of the field experience in teacher preparation has increased in recent years, it is still limited to studies which examined how field experience course in five year teacher education program has been implemented,
whether this program is successful or not. On way that we can learn how to improve teacher preparation program is to study how pre-service teachers are educated. So, a challenging aspect of this study was to begin filling the gap in the literature of science teacher preparation in Thailand by focusing on investigating the implementation of the field experience, perceptions of pre-service science teachers’ on their field experience courses, and the students' learning and struggles during their student teaching field experiences. The intent is that this in-depth information would be used to further refine the science teacher education program in accordance with the national learning reform.

**Research questions**

1. How was the field experience implemented in the science teacher education program in one University?

2. What are the perceptions of pre-service science teachers regarding the quantity of their own practice load and the desired characteristics of teachers that have been promoted?

3. What do the fifth year pre-service science teachers learn and struggle with during the field experience?

**Theoretical framework**

The research presented in this work was set within social constructivist views of teaching and learning. Constructivism provides a useful theoretical framework in science teacher education for the understanding and development of the learning of science pre-service science teachers. It is regarded as a driving force for science educators to move their attention from teachers’ teaching behaviour to teachers’
knowledge; how they learn, how they think, and how they construct their knowledge (Shulman, 1987). A significant implication of constructivist-based views of learning (Tobin, Tippins & Gallard, 1994) for science teacher education is the notion of a pre-service science teacher as a ‘learner’. A pre-service science teacher is a person who actively constructs their views of teaching and learning science, and brings to the science teacher education program prior knowledge and beliefs (Bell & Gilbert, 1994). From a social-constructivist perspective, within a particular social context, pre-service teachers construct or reconstruct their own knowledge and beliefs through support and guidance from knowledgeable persons (Watson, 2006), collaboratively working with other people (Bell & Gilbert, 1994), and reflecting on their own and other’s ideas (Abell & Bryan, 1997; Capobianco, 2007). As a result, in most science teacher education programs, pre-service teachers have been challenged to learn about teaching science from field experiences (Northfield, 1998), rather than learning about teaching and learning theories solely from their university-based classes. Field experiences activities are regarded as “social laboratories” which provide a variety of activities for pre-service teachers to establish their own knowledge in a specific context.

Collaboration and interaction with other people can help pre-service teachers to construct their own knowledge for teaching. Lowery (2002) suggests that pre-service teachers need to collaborate with children, cooperating teachers, supervisors, university instructors, parents, other pre-service teachers and others. These persons can support them in developing confidence about their teaching. A supportive atmosphere helps pre-service teachers to comfortably reflect on and observe the strengths and weaknesses of their own teaching (Bell & Gilbert, 1994).
Pre-service teachers who collaborate with in-service teachers or facilitators can construct their own meaning of how to teach. Zuckerman (1999) found that listening to, and discussion, with in-service teachers or facilitators is helpful for pre-service teachers. Discussion with in-service teachers motivates pre-service teachers to identify the relevant details for applying their practical knowledge in other situations. In-service teachers act as cooperating teachers who can strongly influence beginning teachers in terms of what and how they teach.

In a collaborative atmosphere of field experience, pre-service teachers have opportunities to become aware of their current knowledge and beliefs and engage in experiences which reconstruct their views (Loucks-Horsley and Matsumoto, 1999). Because knowledge and beliefs about science teaching and learning can be made explicit through reflection, pre-service teachers should be provided with opportunities to reflect on their own prior knowledge and beliefs. “Reflection is thinking and feeling: asking such questions as ‘What am I doing?’ and ‘Why am I doing it’; selecting procedures; and making decisions about what to do next” (Baird and White, 1996, p. 191). Abell and Bryan (1997) argue that through reflection, pre-service teachers can clarify and confront their ideas, beliefs, and values about teaching and learning science. They will be aware of and in control of what they are doing, and then possibly change their personal beliefs. The reflection can occur by means of dialogues and conversation with peers and colleagues, cooperating teachers, supervisors, university instructors, parents, other pre-service teachers, and researchers (Abell and Bryan, 1997; Collier, 1999). Manouchehri (2002) reports that peer discourse, peer observations, and peer feedback during field-based experience, has the potential to facilitate pre-service teacher development. Peer discussion can help the
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pre-service teachers to confront each other’s thinking and force one another to defend their personal ideas, and then extend their own ideas to a theoretical level.

**Research methodology**

**Research Design**

This was a mixed-method research design study conducted in a five-year science teacher education program in a university in Bangkok, Thailand. In this program, field experiences were divided into two main parts: the first part consisted of three courses in observation and participation, and the second part consisted of two courses in student teaching. So, the design and questions of the research focused on the two main parts. In the first part, the researcher sought to find out the structure and implementation of participation and observation courses, and the perceptions of the pre-service science teachers regarding the quantity of their own practice and the characteristics of teachers; and their satisfactions towards the management of participation and observation courses. The second phase was designed to investigate pre-service science teachers’ learning and struggles about teaching science during their two courses of student teaching field experiences. This was a two-year study collecting both quantitative and qualitative data. Multiple data sources were used and triangulated to enhance validity.

**Data collection and analysis**

**The first part**

In this part, Research Questions (RQ) 1 and 2 were investigated. To answer the RQ1 "How is the field experience implemented for the preparation of science teachers in this program?", a variety of data were collected. The researchers made observations during the field experience courses and interviewed field experience coordinators.
They reviewed curriculum documents, field experience course manuals, pre-service teachers’ handbooks, and course syllabi. To analyze data, all data were combined in order to enhance validity (Patton, 2002). The analysis of the collected data started with curriculum documents, field experience course manuals and codes were developed. These codes were compared with data from field notes of observations, the transcripts of coordinator’s interviews, and course syllabi.

To determine RQ2, "What are the perceptions of pre-service science teachers regarding the quantity of their own practice and the desired characteristics of teachers that take place in field experience courses?", questionnaires were used. Since there were three observation and participation field experience courses (Field Ex1, Field Ex2, and Field Ex3), questionnaires were specifically developed for each. These questionnaires encompassed four sections: 1) personal data of pre-service science teachers, 2) their perceptions regarding the quantity of their own practice, and, 3) their perceptions regarding the characteristics of teachers. Students chose one of 5 levels of agreement on a Likert-style rating scale ranging from “strongly agree” to “strongly disagree” to answer the questions. For a fourth section, students responded to open-ended questions at the end of the questionnaire. The questions asked pre-service teachers to show their opinions about the implementation of the field experience. The questionnaires had been developed by the researcher/authors of this article and then validated by three panels of experts. The validity and reliability were enhanced by pilot testing with pre-service teachers who were not the subjects in this study. The Chronbach alpha coefficient of reliability of the questionnaires for Field Ex1, Field Ex2, and Field Ex3 were 0.96, 0.87 and 0.91, respectively. To collect the data, the questionnaires were administered to pre-service science teachers enrolled field experience courses as follows.
Second year pre-service science teachers, who enrolled Field Ex1 in the first semester of 2007 academic year, were asked to complete a questionnaire. Thirty-nine of forty pre-service science teachers returned a completed questionnaire.

Third year pre-service science teachers, who enrolled Field Ex2 in the first semester of 2007 academic year, were asked to complete a questionnaire. An overall response rate of 100% (23 pre-service science teachers) was obtained from the survey.

Third year pre-service science teachers, who enrolled Field Ex3 in the first semester of 2008 academic year, were asked to complete a questionnaire. Twenty two of twenty three pre-service science teachers returned a completed questionnaire.

After collecting a questionnaire on each course, semi-structured interviews were conducted to elicit additional information as well as validate responses to questionnaire items. Five pre-service science teachers were interviewed to explore their personal perceptions of the effectiveness of the field experience courses, implementations of the courses, their learning and problems. Interviews averaged forty minutes each. All were audio taped and transcribed for analysis. Questionnaires were statistically analyzed using computer program using frequencies, means, and standard deviations. The additional transcripts of interviews were inductively analyzed using content analysis.

The second part

In this part, RQ 3,"What do the fifth year pre-service science teachers learn and struggle with during a year-long field experience?", was investigated. The participants in this part were 33 fifth year pre-service science teachers enrolled on two student...
teaching field experience courses in the first and second semester during 2008. In order to understand pre-service science teachers’ struggles with and their learning about teaching science, multi-method evaluations were used throughout the research process. The methods included reviewing the students' written reflections in the logbooks, observation of seminar sessions and focus group interviews. Logbooks were the main source of data. It was designed to engage pre-service teachers in reflecting on and discussing their knowledge, learning and problems relative to the field experience.

To analyze data, data from written reflections in logbooks, field notes and interview transcripts were combined in order to enhance validity (Patton, 2002). In the first step, we began with a particular incident from pre-service science teachers’ written reflection in logbooks and transcripts of seminar discussion. Then in identified indicators for the categories of “struggles” and “learning” and coded them on documents. Sub-categories such as learning about teaching strategies, probing techniques were identified and coded thereafter. These codes were compared for their consistencies and differences. The consistencies between codes revealed tentative categories. In the second step, incidents were compared to initial versions of categories. New incidents were assessed to determine if they exhibited the category properties. In the last step, categories and their properties are reduced, refined, and finally linked together to formulate themes to interpret the data.
Research findings

First part

The implementation of field experience

Field experiences in the five-year teacher education program are a series of courses which consists two main components; observation and participation courses and student teaching courses. The observation and participation courses are a series of one credit field experiences designed to tie learning in teacher education courses to real classrooms, schools, and communities. These courses include Field Ex1 (observation and participation in schools, Field Ex2 (observation and participation in classroom), and Field Ex3 (observation and participation in teaching). The administration of the participation and observation courses was cooperative between Faculty of Education and University Laboratory School. However, overall guidance is the responsibility of University Laboratory School. Management is headed by the vice principal, then the field experience coordinator and followed by school teachers. The field experience coordinator has a meeting with the school teachers who assume roles of mentor teachers and lecturers. Course syllabi and worksheets are available for all participants in the field experience (pre-service teachers, mentor teachers and lecturers). Pre-service teachers were required to participate in the course for 15 weeks. In the first period which was the course orientation, course syllabus was distributed to pre-service teachers. The Field experience coordinator introduced lecturers and mentor teachers to pre-service teachers and explained assignments and field experience schedules to the pre-service teachers. In Weeks 2 – 15, pre-service teachers were divided into groups, each group consisted of 3-4 pre-service teachers, and then assigned periods of block practice. At the end of the course, pre-service science
teachers came to the seminar room to discuss their learning, problems and comments for the course.

The main objectives of Field Ex 1 are providing the second year pre-service teachers opportunities to learn and practice about school administration, school management, academic affairs, community relations, student affairs, and guidance. After course orientation in the first week, the school administrator team lectured pre-service teachers about the school management and administration. Then in week 3-15, pre-service teachers were assigned to observe and practice jobs in 11 school departments such as assessment and evaluation department and school library, under the guidance from mentor teachers in each department.

The purpose of Field Ex2 is to provide the third year pre-service teachers opportunities to examine student activities, sport activities for students and teacher jobs. Pre-service teachers were expected to learn classroom management, solving problems in some cases of students, teachers’ role and jobs. They were assigned to learn these by observing homeroom teachers in both primary and secondary levels.

The objective of Field Ex3 is to provide the fourth year pre-service teachers opportunities to understand and practice about organizing learning activities, students’ behaviour, classroom management, and development of learning through the classroom action research process. Pre-service teachers were assigned to learn these jobs in 6 stages; curriculum management and administration, student learning and extra-curricular activities, classroom action research, teaching science in the primary level, and teaching science in the secondary level. During field experience, they spent 2 hour - 5 weeks of observing and teaching students in each level.

After completing three observation and participation courses; Field Ex1, Field Ex2 and Field Ex3 courses, pre-service teachers move to the student teaching field
C. Faikhama et al. experience (Field Ex4 and Field Ex5) in their fifth year. The focus for student teaching is planning instruction, teaching lessons, managing the classroom, developing instructional media, assessing student progress, and conducting extracurricular activities and classroom action research. Overall guidance was the responsibility of the Centre for Field Experience. Management was run by the deputy dean of academic affairs, head of the centre, school principals, school cooperating teachers, and university supervisors. Duties and responsibilities for field experiences were provided to local primary and secondary schools. Arrangements for student teaching placements were made by Centre for Field Experience, specifically head of the centre. Cooperating teachers and supervisors took their roles to provide front line advice, support, and feedback to the student teachers. Besides, cooperating teachers were expected to assist student teachers in developing classroom management skills, gaining familiarity with teaching resources, lesson planning, and reflective practice. They were tasked with providing guidance and modelling professional behaviours through the development of supportive relationships. University supervisors acted as a bridge between the school and university and between student teachers and cooperating teachers. A handbook was available for all participants in the field experience (cooperating teachers, student teachers, supervisors, and schools). Supervision was standardized with a handbook and reporting form.

In the first and second week, pre-service teachers observed the cooperating teachers’ teaching. Observation and discussion with cooperating teachers were intended pre-service teachers to be familiar with classroom and school activities. Pre-service teachers were assigned periods of block teaching practice and then conducted their teaching, planed units and lessons, and became an integral part of the day-to-day events and extra-curricular activities of the school. Pre-service science teachers spent
an entire year (two semesters of 18 weeks) in a local elementary or secondary school. In the first semester, the pre-service teachers were expected to teach science 8-12 hours per week and conduct science extracurricular activities. Then in the second semester, they were required to teach science for 8-12 hours per week and do classroom action research. The student teaching, science extracurricular activities and classroom action research were supervised by university supervisors and school cooperating teachers at least four times a semester.

*The perceptions of pre-service science teachers regarding the quantity of their own practice and the desired characteristics of teachers*

This part presents the findings obtained from the questionnaire administered to pre-service teachers to determine their perceptions regarding the quantity of their own practice and the characteristics of teachers and satisfaction towards the management of observation and participation field experience courses. Pre-service science teachers found themselves practice in assigned jobs at high levels in all three field experience courses. Specifically, in the Field Ex1, they perceived at high level in practicing and learning about school management and structures, library jobs, guidance service, research in special needs education, public relations, welfare, and production of instructional materials. In the Field Ex2, pre-service science teachers’ perception on their practice quantity were found at high level in classroom management, producing worksheets, taking care of students, taking care of classroom cleanliness, making presentation board, learning reinforcement. In the Field Ex3, pre-service science teachers perceived at high level in observing school teachers’ teaching and classroom environment, planning science lessons, planning unit plans, developing instructional materials, designing assignments, classroom management skills, and practicing teaching in real classroom. However, they perceived that they developed tests, and
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learned assessment and evaluation strategies at medium level and conducted extracurricular activities at low level.

In all three courses, the perceptions of pre-service science teachers regarding the characteristics of teachers were at high level. Pre-service teachers consistently perceived that observation and participation experiences enhanced them to be good teachers. They learned how to control their emotions, about student individual differences, how to behave towards other teachers and students, about working with other people, and the importance of being on time, dressing well, and the codes and ethics of the teacher profession. However, the analysis of the interview and open-ended questions indicated that pre-service science teachers wanted to have more practice in observations and participations course. They argued that the mentor teachers mostly lectured or just observed them instead of giving them opportunities to practice and do their jobs. Additionally, pre-service science teachers had problems in making appointments because they had to study for their coursework in both faculty of education and faculty of science. They did not have time to participate and observe their mentor teachers’ teaching or doing their jobs. They also commented that University Laboratory School as a field placement did not reflect the real situation. They thought that observing and participating activities in a regular public school might help them learn more about teachers’ jobs and teaching and learning in real life situation.

Second part

Struggles with teaching science

Through written reflections in their logbooks, pre-service science teachers were asked to reflect on their problems, struggles and comments both from cooperating teachers
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and supervisors about their teaching. Several themes and coded as “struggle” across all pre-service science teachers’ reflective statements were emerged. Pre-service science teachers reported that during their field experience they faced many obstacles in teaching science. Especially at the beginning of their field experience, several pre-service science teachers were concerned with designing and organizing activities when they planned their lessons. It was quite difficult for them to think of how to write expected learning outcomes and how to begin and sequence learning activities. Some reflected that learning outcomes they intended to reach were too general and did not show what science concepts or skills the students were expected to obtain.

In teaching practice, many pre-service science teachers were challenged by the complexity of teaching and student learning. They generally felt that they rarely probed student prior knowledge at the beginning of the lesson. Even though some asked questions at the stage of lesson introduction, those questions did not relate to the science concepts they were going to teach. When they asked student questions, they accepted or rejected student answers and then went to another concept, rather than asking students to give more details. They thought that asking further questions took time, so they seldom paid attention to students’ answers and conceptions. Additionally, some pre-service science teachers reflected that they struggled to ask students content-specific questions. They asked students questions, but most of questions were quite difficult for students to answer.

Classroom management was another problematic issue for the pre-service science teachers. They found it difficult to think about techniques to cope with students’ disruptive behaviour, especially in a diverse group of students in a classroom. They reported that students especially whose academic ability was below average and sat at the back of the classroom did not pay attention to their learning
activities. Those students could not answer or seldom responded to their questions, only those of high performance understood what were taught. The pre-service science teachers discussed the fact that a number of students in each class had also affected their classroom management. Since each classroom had forty to sixty students, it was difficult for them to assign students into a group of four members.

Another concern was the limitation of their conceptual understanding of science. Some pre-service science teachers discussed that science concepts were too complex and difficult for them to teach. They felt that they held misconceptions for many science concepts. This concern inhibited them to choose key concepts and design learning activities. They noted that when planning the lesson, they put many science concepts in one topic, so they could not appropriately sequence science concepts they were going to teach.

Finally, pre-service science teachers’ struggled with time management. Throughout their teaching practice, pre-service science teachers discussed that there were many extra school activities that affected the timetable of their teaching and they could not teach as they planned. They mostly coped with this by omitting some science concepts, and changing the hands-on experiment activities to lectures. With the limitations of time, they explained science concepts by writing on the backboard, instead of preparing hands-on activities for students.

Learning about teaching and learning science

In this section, the teachers’ learning about teaching and learning science during field experience is addressed. Despite the struggles they experienced, the pre-service science teachers also noted “learning”. These learning included more understanding of lesson planning, teaching techniques, student learning, classroom management and using learning materials. Many pre-service science teachers reported that they had
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learned how to write a good lesson plan. As they mentioned in logbooks, the correct form of lesson plans should include learning outcomes, concepts, teaching and learning process, learning materials and evaluation. Particularly, some indicated that learning objectives or learning outcomes in the lesson plans should cover cognitive, science process skills, scientific attitude and attitudes towards science.

Another learning theme expressed by a significant number of pre-service science teachers was teaching techniques. The pre-service science teachers came to realize the importance of conducting hands-on activities, probing student prior knowledge, asking questions, and concluding lesson. In some cases, they were confronted with new ideas and knowledge. For instance, when they provided students opportunities to conduct hands-on activities, their students became more interested and participated in learning science. So the pre-service science teachers claimed that hands-on activity was important to science teaching and learning. Pre-service science teachers’ learning was supported by cooperating teachers and university supervisors. For example, they noted that they had learned how to introduce the lesson from specific feedback and advice from their cooperating teachers and university supervisors.

Even though pre-service science teachers had struggled with lesson introduction at the beginning, they improved and developed their teaching as suggested by cooperating teachers and university supervisors. Pre-service science teachers thought that probing student prior knowledge should be conducted at the beginning of the lesson rather than asking students what topics they were going to learn. They also found that time waiting was very important. When they gave students time to think, they could understand more about students’ ideas and conceptions.
Pre-service science teachers counted understanding their student learning characteristics as their knowledge gained from their student teaching experiences. They described that being a teacher in the real classroom helped them know the characteristics and abilities of their students. Understanding individual characteristics led them to think how to design teaching and learning activities, responsively.

Classroom management was another important specific learning. Pre-service teachers reflected that using cooperative learning and group work techniques helped them to control their classroom easier. Some reported that at the beginning of teaching, they had problems with classroom management. Even though they asked students to work in groups, their students did not want to work with their peers. When the time passed, the students became familiar with working cooperatively and understand their roles. The final learning theme was learning materials. Pre-service science teachers reflected that providing learning materials could encourage students’ learning and attention. They became aware that effective learning materials should help students understand an abstract science concept. So, they thought that concrete learning materials such as pictures and household apparatus needed to be prepared prior to teaching and use in learning activities.

**Conclusion, discussions, and recommendations**

This research study reflects the current understandings of the field experience component in a teacher preparation program in Thailand. We focused on investigating the implementation of the field experience, perceptions of pre-service science teachers’ on their field experience courses, and their learning and struggles in student teaching. The research findings indicated field experience consisted of three courses in observation and participation and two courses in student teaching. Field experience
courses were a series of experiences in which the pre-service science teachers learned about and practiced school administration, a teachers’ roles and content-specific teaching, respectively. Even though pre-service teachers perceived that the observation and participation in field experiences helped them to be well mannered, they thought they rarely had opportunities to practice teachers’ jobs, only observe them. This may cause pre-service teachers unable to link their learning in academic coursework and the realities of classroom teaching (Beeth & Adadan, 2006). Specifically, the three courses in observation and participation mostly focused on general jobs and general pedagogy rather than offered pre-service science teachers learn content – specific teaching practice (Shulman, 1987; Watsons, 2006). Consequently, they could face many difficulties in their teaching practice in real situations. They may not bring their learning from observation and participation field experiences into student teaching. Besides, when pre-service teachers moved to student teaching in the real classroom, they had struggled to develop their own pedagogical content knowledge (PCK) (Black, 2004; Shulman, 1987). They could not set clear and expected learning outcomes in lesson planning. They did not probe students’ prior knowledge, rarely asked questions and could not manage a classroom. They also had misconceptions in many science concepts. However, pre-service teachers did learn some lesson planning techniques and teaching strategies, and about students’ learning, classroom management, and how to incorporate instructional materials (Abell & Bryan, 1997).

The findings of this study confirm the notion that a direct experience in teaching is a key element in teacher education program (Sadler, 2006). Field experience has a significant role in assisting the pre-service teachers gain the expertise and confidence in their content-specific teaching. Since pre-service teachers have
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learned from their cooperating teachers, supervisors and even their students, they could improve and develop their teaching. Cooperating teachers and university supervisors should collaboratively share ideas about pre-service teacher’s learning and problems and give them comments by focusing on content-specific teaching (Abell & Bryan, 1997). Importantly, the cooperating teachers, university supervisors, or other stakeholders may use the findings of this study as information to guide their supervision.

Future research could investigate how to further prepare students to develop their ability to do classroom action research. The research could aim to explore how classroom action research impacts pre-service science teachers’ teaching practice. Conducting classroom action research could be an effective tool to help pre-service science teachers reflect on their teaching practice, so it could encourage their understanding of teaching and learning in both theory and actions. This type of future research could provide data about an effective practice and guide the preparation of high quality science teachers.

References


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The Institute of Promotion of Science and Technology Teaching. (2002). *Thai Science Teachers Standards*. Bangkok: The Institute of Promotion of Science and Technology Teaching.

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Proposal Information

Title of Proposal:
The evolution of alternative school system; how far we’ve come, how far we have to go

Authors of proposal including affiliations and email addresses:
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Diana I. Regis, MA-University of Cincinnati: eda157@juno.com

General description of research questions, objectives and theoretical framework

Alternative school systems have existed in US for over 150yrs. Historically at first they catered to students that had different needs than what regular schools were able to address. As such schools began to grown in numbers they offered more and more innovative programs for students with special interests to flourish. Thus, such schools offered a much needed value to the community and were very favorably viewed.

Yet, after passage of time, the alternative school programs began to focus more on the student at risk development. Such programs have often been viewed with much skepticism due to the fact that students improvement as a result of the intervention was only temporary and upon return to regular schools the students fell back into their old patterns of behavior. (Thus, such schools were used by teachers mostly just to “warehouse” the disruptive students so that they would be able to teach the other students.)

In 1988 as the Cincinnati school board has outlawed corporal punishment the school district was struggling with new innovative approaches to discipline students. As a result they came-up with a system of expelling students for bad behavior. The suspensions were longer and longer at length and were not productive since the students were missing out on their education. Furthermore, the policy seemed to be bias in a sense that it did not take into account the upbringing of African American kids from impoverished neighborhoods whose parents were encouraging them to stand up for themselves if they felt threatened.

The primary author was able to track the initial historical success of such programs as he successfully tweaked a traditional approach to the alternative schools for the student at risk. Project Succeed was an innovative experimental alternative school. The school differed from the more traditional alternative schools because it focused on a younger students and was actually created as a permanent schooling for kids requiring extra mentorship and guidance. One of the strengths of the program was that it focused on making the parents and teachers work together in the classroom and at home on the same goals. Although initially the school provided additional resources to help educate the parents and to assist them in their personal struggles, the long term benefits were great. The parents became very involved in school and even often volunteered by assisting the teachers in monitoring the student’s behavior.

The primary author will reflect of the relevance of the historical evolution of alternative schools and how he was able to draw on that to improve the alternative school system. Furthermore, the author will reflect on the current state of the system and where it is heading.

Methods/methodology
Case study
Reference
America’s toughest principal? (1983, April 14). The Cincinnati Post, pp. 1A, 7A.
Bloom comes to life (1981, November 16). The Cincinnati Post, pp. 1A, 10A.


V. Chou (Eds.), *Race and education: The roles of history and society in educating African American students* (pp. 140-158). Boston, MA: Allyn and Bacon.


University of Cincinnati.
-----------------(1990). Qualities shared by African-American principals in effective schools: A


Principal gets firm grip on Withrow (1986, October 21). The Cincinnati Post, p. 1A.


Smrekar, C., & Goldring, E. (1999). *School choice in urban America: Magnet schools and the


Proposal Information

Title of Proposal:
Lessons learned on diverse students and their parent body integration and how to effectively develop an interracial education policy for the Hispanic community.

Authors of proposal including affiliations and email addresses:
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Diana I. Regis, MA-University of Cincinnati: eda157@juno.com

General description of research questions, objectives and theoretical framework

As the congress is currently working on developing strategies on how to handle the large number of Hispanic immigrants who are illegally entering the county in large numbers, the school system has to prepare itself for yet another interracial integration. Yet do we need to start from the scratch, or can we learn from our own past?

In 1887, Cincinnati’s board of education adopted a policy of gradual integration. Such schools were officially open to both the black and white gender, however were primarily attended by the African American community. In 1954, Cincinnati’s school of education adopted the official policy of integrating students. At that time the primary author had lead the integration by employing interracial teachers, adopting innovative school programs and getting the parents involvement.

In this presentation the author will lead a discussion on lessons learned and how they can be of use today as the community once again is faced with another integration challenge of the Hispanic community into it’s educational system. What worked, what didn’t and what are the special needs of this segment of the population.

Methods/methodology

Case study

Reference

America’s toughest principal? (1983, April 14). The Cincinnati Post, pp. 1A, 7A.


Bloom comes to life (1981, November 16). The Cincinnati Post, pp. 1A, 10A.


----------(1995). The politics of who’s “at risk.” In B. B. Swadener & S. Lubeck (Eds.), *Children and families “at promise”: Deconstructing the discourse of risk* (pp. 76-94). Albany: State University of New York Press.


Education and Urban Society, 33, 17-35.


Landson-Billings, G. (1999). Just want is critical race theory in educational research and praxis? In L. Parker, D. Deyhle, & S. Villenas (Eds.), Race is...race isn’t: Critical race theory and qualitative studies in education (pp. 7-30). Boulder, CO: Westview.

Landson-Billings, G., & Tate, W. F., IV (1995). Toward a critical race theory of education. Teachers College Record, 97, 47-68.


Principal gets firm grip on Withrow (1986, October 21). The Cincinnati Post, p. 1A.


63, 93-110.

(September 1994), 26-31.

(Eds.), Transforming urban education (pp. 214-227). Boston, MA: Allyn and Bacon.

------------------(1995). Alternatives and marginal students. In M. C. Wang & M. C. Reynolds (Eds.),
Making a difference for students at risk: Trends and alternatives (pp. 119-155). Thou-
sand Oaks, CA: Corwin.


7, 144-146.

Schutz, A., & Harris, I. M. (2001). The fragility of community and function: A snapshot of an

New York: Eric Clearinghouse on Urban Education.

component in preventing school violence. Education & Treatment of Children, 24, 309-
322.


Sheldon, S. B., & Epstein, J. L. (2002). Improving student behavior and school discipline with
family and community involvement. Education and Urban Society, 35, 4-26.

Siddle Walker, V. (1993). Interpersonal caring in the “good: segregated schooling of African-
American children: Evidence from the case of Caswell County training School. Urban
Review, 25, 63-77.

------------------(1996). Their highest potential: An African American school community in the

------------------(2000). Valued segregated schools for African American children in the South, 1935-
1969: A review of common themes and characteristics. Review of Educational Research,
70, 253-285.

------------------(2003). The architects of Black schooling in the segregated South: The case of one

Skiba, R. (2001). When is disproportionality discrimination? The overrepresentation of Back
students in school suspension. In W. Ayers, B. Dohrn, & R. Ayers (Eds.), Zero toler-
ance: Resisting the drive for punishment in our schools: A handbook for parents, stu-

disciplinary practice, New Directions for Youth Development, 92, 17-43.

Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline:
Sources of racial and gender disproportionality in administration of school punishment.
The Urban Review, 34, 317-342.


Building Bridges Between Student Achievement and Rural School Leadership

Presentation: January 4-7 2011, Hawaii International Conference on Education,
9th Annual Conference, Honolulu, Hawaii

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Abstract

Analysis of 259 rural Texas public school administrator assessments identified differences in principal leadership skills by campus student achievement. Rural principals from schools with the highest student academic ratings relied more on collaborative leadership skills than management skills. Recommendations are presented for building bridges between rural school leadership and student achievement in four areas: systems thinking, school improvement, best practice instruction, and leadership capacity.
Building Bridges Between Student Achievement and Rural School Leadership

Twenty-five years of educational research (Marzano, Waters, & McNulty, 2005; Lesotte, 1992, 1991; Reynolds, 1990; Edmonds, 1979) establishes quality school leadership is essential for rural public school success. School leadership is second only to classroom instruction in influencing student achievement (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Furthermore, countries worldwide have recognized that as school administrator responsibilities expand, the need to cultivate school leadership increases (Olson, 2008). Among rural principals, unique community characteristics may also require different leadership skills.

Rural School Challenges

Rural principals work in schools that are demographically different than those in urban and suburban communities. Data collected from 2002-2005 by the National Center for Education Statistics (NCES) show that a third of all public schools are located in rural areas, but their enrollment represents only one fifth of the nation’s public school student population. Additional findings indicate that although rural schools enroll a larger percentage of White or American Indian/Alaska Native students, they enroll a smaller percentage of Black, Hispanic and Asian/Pacific Islander students than do urban or suburban schools. Likewise, a smaller percentage of rural school teachers are racial/ethnic minorities. English proficiency is found in greater percentages in rural than in either suburban or urban schools. Economically, NCES found 38% of rural students are eligible for free or reduced lunch; while 45% attend moderate-to-high poverty schools (Provasnik, et al., 2007).

Rural communities generally offer fewer educational opportunities for students. For instance, fewer rural students per capita attend prekindergarten classes and schools are less likely to have advanced placement, International Baccalaureate courses, or Internet access.
Nevertheless, according to NCES data, academically, rural students outscore urban children on National Assessment of Educational Progress (NAEP) assessments. On the other hand, rural students score below suburban students. In addition, rural students’ freshman graduation rate (75%) is higher than that of urban students (65%), but lower than that of suburban students (79%), while dropout rates in rural schools (11%) are higher than suburban (9%) and lower than urban (13%) rates (Provasnik, et al., 2007).

Rural schools receive a smaller percentage of revenue from the federal government, yet spend more per student than either urban or suburban schools. Rural schools are also more likely to have a smaller ratio between students and teachers, counselors, social workers, and special education specialists. There are fewer serious student behavior problems per capita and a larger percentage of teachers report satisfaction with teaching conditions in rural schools. In addition, rural parents are more likely to attend rural school events and take their children to athletic events (Provasnik, et al., 2007).

Rural parents are more likely than urban or suburban parents to have completed a high school diploma as their highest educational attainment. On the other hand, parents of rural school children (as compared to urban and suburban parents), are more likely to expect a bachelor’s degree as their children’s highest educational attainment. Despite these expectations, NCES reports that only 13% of rural residents acquire bachelor’s degrees (as their highest educational attainment) compared to 17% nationally (Provasnik, et al., 2007).

As the NCES data clearly show, rural campuses are unique. Because their roles and challenges are different, rural school principals may require specialized leadership skills that differ from those required of their urban and rural counterparts.
Principal Effect on Student Achievement

Studies in the U.S. from the last 40 years overwhelmingly support the notion that if a school has an effective principal, students are more likely to achieve academically (Cotton, 1995; Lezotte, 1992). A review of studies conducted worldwide (Hallinger & Heck, 1996) found similar results. In a definitive review of thirty years of research on the role of the principal in student achievement, Marzano et al. (2005) found both a practical and statistical significance in the relationship between student achievement and the quality of school leadership.

The importance of effective leadership is also recognized within the public school community, in spite of difficulty in identifying and assessing the composite required skills. According to Rammer’s (2007) findings, superintendents recognize the crucial role effective principals play in the development of schools even though they have no effective means of assessing those skills in potential administrative candidates. Likewise, Hallinger, Bickman, and Davis (1996) report that parents and teachers believe principals make a difference in the achievement of students and the learning environment.

Findings from these studies suggest that even when it is difficult to discern which skills are requisite to effective leadership, there is little doubt among researchers or stakeholders that effective leadership positively affects student achievement.

Challenges to Rural Principal Leadership and Campus Student Achievement

Research related to the rural principalship focuses on three challenges: retention of effective principals, community relations, and pressure to meet standards with limited resources. While there is a great need for effective, skilled leaders in rural schools, recruiting and retaining quality principals is a challenge. Administrative stability, a factor related to student achievement (Partlow & Ridenor 2008), might account for lower academic achievement in rural and urban
school (Provasnik, KewalRamani, Coleman, Gilbertson, Herring, & Xie, 2007). Principal turnover rates in rural schools are comparable to those of urban schools (Bainbridge, Lassley, & Sundre, 2003; Balfanz & MacIver, 2000). However, rural principals are generally paid less, asked to assume a greater number of responsibilities, and face greater community scrutiny than their urban and suburban counterparts (Winn et al., 2009a, 2009b; Arnold, Gaddy, & Dean, 2004). Community resistance, geographic isolation, and economic shortages also create difficulties when rural principals implement special education services (Cruzeiro & Morgan, 2006). The demands of finding and retaining highly qualified teachers (HQT), who can teach multiple subjects and assure adequate yearly progress (AYP) for students in special education, add to the challenges of rural administrators (Mitchem, Kossar, & Ludlow 2006; Jimerson, 2005). Furthermore, community resistance and lack of population diversity often impede the efforts to implement multicultural education in rural schools (McCray, Wright, & Beachum, 2004).

**Principal Skill Assessment**

Findings from research confirm that principal effectiveness is important, yet there is no consistent or formalized method for identifying the most highly skilled principals (Winn, et al., 2009a, 2009b). As noted in Rammer’s (2007) study for example, superintendents’ belief in the value of particular leadership characteristic does not guarantee that they have available tools to correctly assess these skills in potential employees. Adding to the complexity of assessment, findings from a study of new principals (Daresh, 2007) suggest it is not until principals become comfortable with the management of the school that they begin to consider critical instructional issues. Furthermore, new principals are likely to assess their own performance primarily in terms of management skills. Baxter (2008) posits this may result from university-based principal
preparation programs that apply a business manager metaphor to public school administration rather than one of community leader and public servant. Adding to the complexity of principal assessment, Anagnostopoulus and Rutlege (2007) found when schools face state and district sanctions for low performing schools, sanctions rather than best practice become the focus of school administrators. Additional findings suggest that, in this atmosphere, administrators are more likely to resort top-down managerial skills rather than collaborative instructional leadership skills. Another disconnect from instructional leadership may result from fewer (from 15% to 5%) principals coming to administration directly from the classroom. (“The Changing Face Of Principals,” 2008).

The convergence of these factors does little to guarantee quality leadership or stem rural school failure. In spite overwhelming evidence of the essential role played by principals in creating effective schools, measuring leadership effectiveness has not been adequately formalized either by rural school districts or by rural principals.

Method

Every five years in Texas, principals are required to participate in a state-approved professional development performance assessment. Records from one such assessment, Principal Assessment of Student Success (PASS), provided the data for this study (see Appendix A). One component of the PASS requires assessment of 14 leadership skills (see Appendix B) identified by Thompson (1993) and adopted by the National Policy Board of Educational Administration (NPBEA). PASS principal assessments from 2006 to 2008 determined which NPBEA skills predominated among Texas rural administrators in terms of student achievement as measured by the state of Texas public school accountability ratings Academically Acceptable (AA), Recognized (R) or Exemplary (E) (see Appendix C).
PASS data provided assessments from teams (two assessors per principal) as to the predominant NPBEA skills exhibited by each rural principal. PASS assessors were recruited among veteran campus and central office administrators, as well as from university educational leadership departments within the state of Texas. Sampled principals provided evidence of their job performance in a variety of ways (campus improvement plan, state accountability data, Adequate Yearly Progress phone interview, teacher performance data, and student performance data). Based on this evidence, assessors cooperatively identified each principal’s NPBEA leadership strengths. The top five skills identified by assessors for all principals sampled were tallied and categorized in terms of student achievement as measured by campus accountability ratings (AA, R, or E).

Finally, to identify the link between the leadership skills of rural principals and campus student achievement, 14 NPBEA skills identified by assessors were compared within student achievement categories as measured by Texas state campus accountability ratings (AA, R, or E).

Participants

PASS data accessed from principal assessments conducted throughout Texas from 2006 through 2008 yielded records of 259 rural school principals, representing 41.7% (108) elementary, 24.3% (63) middle, and 34% (88) high school campuses.

Table 1

*Frequency Counts and Percentages of Texas Accountability Ratings by Rural School Type*

(N=259)

<table>
<thead>
<tr>
<th>Rural Campus Type</th>
<th>AA Count</th>
<th>Of Total AA %</th>
<th>R Count</th>
<th>Of Total R %</th>
<th>E Count</th>
<th>Of Total E %</th>
<th>Total Table Count</th>
<th>Total Table %</th>
</tr>
</thead>
</table>
The 259 campuses of sampled principals were identified by Texas state accountability ratings (AA, R, E; see Table 1). High schools received more Academically Acceptable (AA) ratings compared to middle school and elementary campuses with 53.1% (76), 28% (40), and 18.9% (27), respectively. Elementary campuses led in Recognized (R) ratings 64.6% (62) compared to middle and high schools 24% (23) and 11.5% (11), respectively. In addition, more elementary schools were rated Exemplary (E) as compared to high schools and middle schools by 95% (19), 5% (1), and 0%, respectively. Unequal representation of schools at each instructional level (elementary, middle and high school) within each state accountability level (AA, R, E) may have affected interpretation of study findings. However, the dispersion of these data reflects the pattern of accountability ratings in Texas. Overall, rural campuses rated Academically Acceptable (AA) were associated with 143(55.2%) of sampled principals, the largest group, while rural campuses rated Recognized (R) and Exemplary (E) were associated with 96(37.1%) and 20(7.7%) sampled principals, respectively.

Analysis

Descriptive statistics were used to calculate principal and PASS assessor rankings. Chi-square cross tabulation tables were used to determine dependence/independence by school
accountability ratings and principal’s NPBEA skill ranking frequency counts per NPBEA domain. Significant differences and effect sizes were reported.

**Results**

**PASS Assessor Ratings of Principal NPBEA Skills**

Teams of two PASS assessors cooperatively rated the NPBEA skills of each principal based upon data from multiple sources. A total of 777 ratings were produced by 259 assessor teams (see Table 2).

Table 2

*Frequency Counts: Texas Accountability Ratings by Assessor Ratings of Principal NPBEA Skills* (N = 259 assessor teams)

<table>
<thead>
<tr>
<th>Functional Domain Skills</th>
<th>AA</th>
<th>R</th>
<th>E</th>
<th>TOTAL RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>365/714 (51%)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>71</td>
<td>59</td>
<td>7</td>
<td>137</td>
</tr>
<tr>
<td>Information Collection</td>
<td>45</td>
<td>39</td>
<td>7</td>
<td>56</td>
</tr>
<tr>
<td>Problem Analysis</td>
<td>16</td>
<td>12</td>
<td>5</td>
<td>33</td>
</tr>
<tr>
<td>Judgment</td>
<td>26</td>
<td>28</td>
<td>8</td>
<td>62</td>
</tr>
<tr>
<td>Organizational Oversight</td>
<td>37</td>
<td>29</td>
<td>11</td>
<td>77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programming Domain Skills</th>
<th>AA</th>
<th>R</th>
<th>E</th>
<th>TOTAL RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>204/714 (28.5%)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional Management</td>
<td>34</td>
<td>20</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>Curriculum Design</td>
<td>27</td>
<td>2</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Student Guidance &amp; Development</td>
<td>27</td>
<td>14</td>
<td>15</td>
<td>56</td>
</tr>
<tr>
<td>Staff Development</td>
<td>13</td>
<td>6</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Measurement &amp; Evaluation</td>
<td>18</td>
<td>4</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpersonal Domain Skills</th>
<th>AA</th>
<th>R</th>
<th>E</th>
<th>TOTAL RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>145/714 (20.3%)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td>48</td>
<td>36</td>
<td>7</td>
<td>91</td>
</tr>
</tbody>
</table>
Leadership produced the largest frequency count from assessors (137) while the lowest frequency count was found for Resource Allocation (13), a difference of 124 counts (See Table 2). Skills in NPBEA’s functional, programming, and interpersonal domains differed in frequency with 365/51%, 204/28.5%, and 145/20.3%, respectively. Functional domain skills netted greater totals than skills in the programming and interpersonal domains by 22.5% and 30.7%, respectively. Overall, within the functional domain, Leadership received the largest count while the highest counts in the programming and interpersonal domains were found for Instructional Management (57) and Sensitivity (91).

The five NPBEA skills with highest frequencies by campus accountability level appear in Table 3. Although ranked differently, both AA and R campus leaders shared four of the same top five NPBEA skills (Leadership, Information Collection, Sensitivity, and Organizational Oversight). Differences in AA and R leaders occurred in exclusive top ratings for Instructional Management (AA) and Judgment (R).

Table 3

<table>
<thead>
<tr>
<th>Academic Acceptable (AA)</th>
<th>Recognized (R)</th>
<th>Exemplary (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Leadership</td>
<td>59</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Information Collection</td>
<td>39</td>
</tr>
<tr>
<td>Information Collection</td>
<td>Sensitivity</td>
<td>36</td>
</tr>
<tr>
<td>Organize/Oversight</td>
<td>Organize/Oversight</td>
<td>29</td>
</tr>
</tbody>
</table>

Note. *= Total by Domain; AA=Academically Acceptable, R=Recognized, E = Exemplary.
Rural School Leadership

<table>
<thead>
<tr>
<th>Instruction/Managmnt</th>
<th>34</th>
<th>Judgment</th>
<th>28</th>
<th>Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Information Collection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sensitivity</td>
</tr>
</tbody>
</table>

Note. # = frequency counts; *= tied ratings.

E campus leaders shared top NPBEA skills (Leadership, Information Collection, Sensitivity, Organizational Oversight, and Judgment) with AA and R campus counterparts. However, only E campus leaders demonstrated high degrees of Student Guidance and Development and Staff Development (see Table 3).

Discussion

Rural Principal Leadership Skill Proficiency and Student Achievement

The National Policy Board of Educational Administration (NPBEA) leadership knowledge and skill domains of 259 practicing rural Texas principals were analyzed by state campus accountability ratings. Findings suggest that rural school principals from campuses with the highest student academic achievement exhibited different skill sets than rural principals from campuses of low and moderate student achievement. The NPBEA skill sets are categorized into three domains: functional, programming, and interpersonal. Functional domain skills (see Appendix B) comprise base-level management and organizational structure to supervise daily, routine campus business (e.g. to run the buses on time, schedule classes, or maintain order). Evidence of effectiveness is, typically, quantifiably measurable (e.g. attendance records, disciplinary referrals). Programming domain skills (see Appendix B) provide systemic campus leadership requiring holistic perspectives that incorporate but surpass functional domain skills. More complex and difficult to quantify, these skills enable principals to develop frameworks, design anticipated outcomes, implement ongoing supervision, set goals, and draw inferences. In contrast, interpersonal domain skills (see Appendix B) employ functional and programming
domain skills, but are subject to individual perception, making measurement more difficult. For example, principals may perceive themselves to be sensitive while faculty members disagree. Nevertheless, these skills improve effective implementation of both functional and programming skills. Win et al. found that at campuses with the highest student achievement, campus leaders netted lower percentages of functional and interpersonal domain skills and higher percentages of programming domain skills than did leaders from campuses with low or moderate student achievement, findings supported by those of Baxter (2008), Daresh (2007), and Rutlege (2007).

Anagnostopoulos and Rutlege (2007) contend that looming state and district sanctions for low student achievement tend to adjust principals’ focus on the sanctions rather than best practice. In addition, when faced with performance pressure, administrators are more likely to resort to top-down managerial skills (functional domain) rather than collaborative instructional leadership skills (“The Changing Face of Principals”, 2008). Study findings appear to support the notion that principals at lower performing campuses feel compelled to monitor instruction through management (functional domain) solutions.

**Key Focal Points to Bridge Rural School Leadership and Achievement of All Students**

As noted in the review of literature, quality school leadership is second only to classroom instruction in influencing student achievement (Leithwood et al., 2004). More precisely, there is a need for professional development opportunities designed specifically for principals of rural campuses. Based on study findings, rural principals who demonstrate skills in the programming domain tend to address campus instructional needs in a systematic manner utilizing collaborative leadership. Conversely, rural principals of lower performing campuses demonstrate skills in the functional domain supported by personal skills of the interpersonal domain. Thus, helping rural principals develop the skills associated with the programming domain (instructional
management, curriculum design, student guidance and development, staff development, measurement and evaluation, and resource allocation) could impact student success on rural campuses. Many of the challenges identified in the literature note that rural principals must do more with less (fewer educational resources, limited staff, and less financial support). In addition, rural principals must carefully maneuver the community norms and traditions. The skills in the programming domain enable principals to develop frameworks, design anticipated outcomes, set goals, and draw inferences which could facilitate greater student success by providing a more stable learning environment that is driven by clear expectations and facilitated by well-defined processes. This type of learning environment frees teachers to focus on student needs and instruction verses campus procedures.

Principals working to develop their skills in the programming domain can begin by concentrating on the following items:

1. Build Bridges for Systems Thinking (Programming Domain)
2. Build Bridges for School Improvement (Measurement and Evaluation)
3. Build Bridges for Best Practice (Curriculum Design and Instructional Leadership)
4. Build Bridges for Leadership Capacity (Staff Development)

Build Bridges for Systems Thinking

The concept of systems thinking is at the heart of the programming domain in that it is about developing a framework for establishing clear expectations and well-defined processes to help reach those expectations. The process of systems thinking simplifies complex systems, because it examines how parts of the whole interact with one another to produce overall outcomes. Systems thinking encourages leaders to see patterns and interrelationships in order to solve problems more effectively (Gray, 1995; Hood & Hutchins, 1996; Senge, 1990; Wheeler,
Thus, systems thinking encourages leaders to examine the whole system and its interconnectedness, moving away from the “cause and effect” approach to solving problems (Norland, 1994; Senge, 1990, Wheeler, 1995). Utilizing systems thinking will help principals move from being reactionary to becoming proactive in solving problems before they happen. For example, a school may seem to have a problem with students being tardy to class. Often leadership will respond by establishing tougher consequences for students who are late to class. However, a systems thinking approach would require a school leader to reflect on the systems as a whole and how each part impacts each other. The questions should be asked: Why are students late to class? Is it a specific group of students? Does it happen at a specific time of day? How is this problem tied to instruction? Are teachers enforcing the existing tardy policy? How are teachers using the first ten minutes of class? Is the tardy problem tied to student engagement in the lesson?

Most likely issues in schools do not occur in a vacuum. Every action has a reaction; every decision sets a precedent for a future decision. School leaders who work to see the interdependent components versus the individual parts, will be able to eliminate some to the complexity and make the system more manageable (Wheately, 1992). Instead of viewing the tardy issue as only a discipline problem, if the principal uses systems thinking he/she would perhaps look at the issue from an instructional viewpoint. This would provide a bridge to tie the multiple issues back to the main purpose of schools, which is teaching and learning. If students are not in class, they are missing educational opportunities. Punishment usually results in more missed class time by removing the student from the classroom to in-school suspension, or time in the principal’s office - being late to class results in missing more class. Addressing the tardy problem through a systems approach would allow the principal to solve more than one issue at a
time. It also allows the principal the opportunity to focus on short-term and long-term results simultaneously. Principals should ask the questions: 1) How does this decision impact the campus, teachers, and/or students today and the immediate campus goals? 2) How does this decision move the campus, teachers, and/or students toward the long-term campus goals? Changes on the campus must be guided, so that both long term and short-term goals are met. Schlechty (2001) stated, “Systems not only define what must be done, they define what can be done. To bring about dramatic improvements in the results a given system is producing, the structural properties must be changed to accommodate the requirements of whatever new programs are to be included. To fail to make this structural change is to fail over the long term to manage change successfully (p.56).” Using systems thinking will help principals move the campus toward the established goals in a more succinct and sustainable manner.

**Build Bridges for School Improvement (Measurement and Evaluation)**

In addition to developing frameworks for managing systems within the school, the skills in the programming domain, also enable principals to set goals and design anticipated outcomes. The key NPBEA skills required to do this are measurement and evaluation, which entails the ability to examine the extent to which outcomes meet or exceed previously defined goals. Schools focused on continuous improvement have clearly defined goals and specific measurement to determine if the goals were achieved. Simply stated, *what gets measured gets done*. The campus planning process, when utilized correctly, is an excellent tool to guide campuses in the improvement process. However, too often the campus plan is seen as a task instead of tool. It is completed, presented to the school board, and then set aside until it is time to revise it next year. Highly effective principals use the plan as a means for both formative and summative assessment. When it is well developed, the campus plan provides clear expectations,
processes, measurements, resources, and outcomes. A well-written campus plan addresses the specifics needs of the campus on a yearly basis and narrows the focus of the measurement evaluation processes to the problem instructional areas on a campus. The instructional intensity of correctly identifying targeted needs, and correctly measuring and evaluating the progress of those needs, is essential to school improvement. Principals, who are truly focused on continuous school improvement, move beyond the state and national accountability requirements. They are focused on engaging students in relevant and meaningful learning, not just in meeting the test objectives. When students are empowered in the learning process to look beyond the tested objectives and to make relevant connections, learning occurs at a much higher level.

Creating a culture that values continuous improvement is imperative for measurement and evaluation to be an effective tool on the campus. The culture (values, beliefs, rituals, traditions) of the campus, and every member of the campus, must embrace and support continuous improvement through setting goals and constantly measuring the progress of the goals. The principals must collaboratively create and nurture the culture. Making campus planning an ongoing process and making the campus plan a “live” interactive tool can assist the principal in sustaining a culture of continuous improvement. The progress of the goals and strategies identified in the campus plan should be reviewed on an ongoing basis. Specific dates should accompany the targeted student performance goals associated with the formative campus assessments. After each assessment, student progress toward the goals should be evaluated, and instructional strategies and teaching methods should be adjusted.

**Build Bridges for Best Practice (Curriculum Design and Instructional Leadership)**

Principals who are strong instructional leaders ensure quality instruction is taking place on a daily basis and that every student has access to a curriculum that is both guaranteed and
viable. In today’s changing world, principals must create learning environments that at a minimal focus on: 21st Century Skills, quality instruction instead of instructional programs, and a guaranteed, viable curriculum.

Technology and globalization have radically changed the world eliminating many jobs that can be automated or outsourced. This change has created a renewed interest in education by politicians around the world. The mission of public education has moved from providing a public education to all and a college education to the elite, to providing a high standard of life-long education to all learners (Fullan, 2006). The educational system must now produce a workforce that can quickly apply new knowledge, solve problems, communicate, work well with others, use technology, and be highly innovative. Therefore, schools must adjust their curriculum to meet the needs of society. In order to do this, schools must begin emphasizing the 21st Century Skills. The 21st Century Skills adds three components to the existing core curriculum: learning and innovation skills; information, media, and technology skills; and life and career skills (Trilling and Fadel, 2009). Learning and innovation skills include critical thinking and problem solving, communication and collaboration, and creativity and innovation. Information literacy skills allow students to access information efficiently and effectively, evaluate information critically and competently, and use information accurately and creatively. Life and career skills provide students with flexibility and adaptability, initiative and self-direction, social and cross-cultural interaction, productivity and accountability, and leadership and responsibility (Trilling and Fadel, 2009).

In order to help prepare students for the changing world, strong instructional leaders should focus on quality instruction. First and foremost, students must be actively engaged in the learning. Too many times compliance is mistaken for engagement. If a teacher is lecturing and
students are taking notes, they are being compliant, but they are not actively engaged. Engaged learning is an active process, not a passive one. Engagement means that students are interacting at a high cognitive level with the materials, concepts, and each other in such a way that new learning is taking place.

Secondly, instructional leadership should focus on best practices in lieu of prescriptive instructional programs. While instructional programs may be research-based and aligned to the curriculum, any program is only as good as the teacher implementing it. Highly effective teachers will integrate best practices (Zemelman, Daniels, & Hyde, 2005) into instructional programs. Regardless of the content, they will work to ensure the lesson is student-centered providing learning opportunities that are holistic, authentic, challenging, and experiential. Highly effective teachers understand that powerful learning occurs from cognitive experiences that are developmental in nature, include constructing ideas and systems, practice many forms of expression, and allow for opportunities for reflection (Zemelman, et al., 2005).

Thirdly, the instructional leader must ensure curriculum design moves beyond vertical and horizontal alignment to the standards and toward incorporating more meaningful learning opportunities. For example, some believe memorizing the Periodic Chart of Elements is essential before students can begin engaging in science lessons, but the isolated facts without any connection to context or concepts limits students’ interest. After all, no one expects students to know all of the grammatical rules before engaging in the writing process. Marzano et al. (2005) defines a guaranteed, viable curriculum as one that can be adequately taught in the allotted time (viable), and one that covers specific content in specific courses at specific grade levels (guaranteed). This does not mean that every teacher must be on the same page on the same day. A principal who is a strong instructional leader should support the concept of a curriculum that is
horizontally and vertically aligned, but also allows teachers to move at an instructional pace that meets the needs of the students. The goal is for students to master the content at the expected level for that grade. In addition, the instructional leader should examine the viability of the expected curriculum. A common practice in elementary schools is to require 90 minutes of math and 90 minutes of reading each day. However, this often leaves little time for science and social studies. Thus, the expected curriculum is not viable based on the established schedule.

The principal’s role in developing curriculum may vary from district to district depending on available support staff; however, the principal’s role in instructional management is nonnegotiable. He or she must be engaged with the teachers to ensure appropriate instructional methods are used to create positive learning experiences that address the needs of the learner.

Building Bridges for Leadership Capacity (Staff Development and Resource Allocation)

The role of the principal is extremely difficult and, as previously noted, requires principals to facilitate complex systems, create a culture of continuous improvement, set clear goals and expectations for the campus, provide ongoing measurement and evaluation of expected outcomes, and ensure quality instruction, meaningful learning opportunities, and a guaranteed, viable curriculum. However, none of these things must be, nor can be, accomplished by the principal alone. Lambert (2002), noted, “The days of the principal as the lone instructional leader are over. We no longer believe that one administrator can serve as the instructional leader for an entire school without the substantial participation of other educators (p. 37). Highly effective principals develop leadership capacity on the campus by building both broad-based participation and skillful participation from staff members (Lambert, 1998). The key word is “skillful.” Principals who empower their teachers must have confidence that the teachers can effectively
complete the assigned task. Thus, the principal must ensure that the teachers have the knowledge and skills needed by providing relevant, meaningful, and aligned staff development.

As noted by Whitaker (2003), schools are improved by people, not programs, “There are really two ways to improve a school significantly: get better teachers or improve the ones you have” (p.8). School improvement depends upon quality professional development. Striving for continuous professional development within a school provides the content, process, and context that help create changes in school culture and teacher classroom practice (Lindstrom & Speck, 2004). One method of supporting teachers in their professional development is creating professional learning communities (PLC). The key role of the principal in the PLC is to ensure that teachers have time for planning and collaboration, as well as clear guidelines and expectations for what will be accomplished during that time. This also ties into resource allocation in that the principal is allocating, monitoring, and evaluating fiscal, human, material and time resources to reach campus goals and objectives. PLCs are most effective when the principal’s expectations clearly align the outcomes to the campus goals and objectives.

A second key component for developing staff and ensuring quality instruction is to redirect staff members who are not being successful with students. This entails having courageous conversations about improvement. While this task may be difficult and unpleasant, it is a must if principals are to lead campuses that are truly focused on continuous improvement and student success. Principals must become adept at dealing with conflict, especially when it involves actions that impede student success. Ignoring outdated teaching strategies, passive learning environments, and instruction focused on facts and low-level cognitive skills can be detrimental to the campus and to students. If all teachers are not held accountable, one of two things will happen: 1) the effective teachers will quit producing due to lack of accountability, or
2) the effective teachers will seek employment with a principal who demands all teachers to be highly competent. Principals cannot afford to lose the highly effective teachers in order to avoid the conflict of addressing a low performing teacher.

Conclusion

As noted in the review of literature, quality school leadership is second only to classroom instruction in influencing student achievement (Leithwood et al., 2004). Rural principals can benefit from professional development focused on the NPBEA skills found in the programming domain such as instructional management, curriculum design, staff development, measurement and evaluation, and resource allocation which could have a greater impact on student success on rural campuses. Four specific focal points for improvement in the programming domain include: Building Bridges for Systems Thinking (Programming Domain), Building Bridges for School Improvement (Measurement and Evaluation), Building Bridges for Best Practice (Curriculum Design and Instructional Leadership), and Building Bridges for Leadership Capacity (Staff Development).
References


perceptions of multicultural education. *Education, 125*(1) 111-120.


Appendix A

Principal Assessment of Student Success (PASS)

Principal Assessment for Student Success (PASS) is a principal assessment that has been approved by the State Board of Educator Certification (SBEC) for principal assessment within the state of Texas. According to Texas Education Code (TEC) 21.054, all principals must complete an assessment in order to maintain certification. The overarching goals of PASS include:

1. To determine the level of knowledge and skills for the principalship that each principal assessed demonstrates.
2. To provide quality assessment activities relevant to the role of the principalship.
3. To provide purposeful and constructive feedback related to each principal’s demonstration of knowledge and skills.
4. To provide opportunities for each principal assessed to be reflective about his/her level of knowledge and skills, as well as to his/her plan for professional growth.

PASS is based on three sets of criteria: skills, standards, and knowledge. The skills included in the assessment comprise 14 of the 21 skills identified for the principalship by the National Board of Policy Educational Administration (see Appendix B). The standards are the seven State Board of Educator Certification (SBEC) Standards which are required by the state to be included in the assessment. The knowledge is a compilation of the Ten Components of Effective Schools, the framework components of Instructional Leadership Development (ILD), and the instructional processes from the Student Success Initiative (SSI).

Each criterion is measured multiple times in PASS through a variety of authentic activities within the assessment. PASS contains a self-assessment process, a campus component,
a teacher component, and a student component. All activities are based on authentic data provided by the principal being assessed and are directly connected to his/her campus.

The assessment process occurs over a 30-day period. All online activities are completed within 16 days and are then submitted for assessor review. The assessors are given 11 days to review the online responses and conduct a phone interview with the principal. Each principal’s data and entry is reviewed by two assessors. One assessor is considered the primary assessor and, in addition to scoring the rubrics for each activity, provides written feedback on each activity. The assessment also includes one, face-to-face feedback session in which principals expand on their previous responses with a state-of-the-campus report and a plan of action for a teacher in need of assistance. Each primary assessor provides up to one hour of verbal feedback to each principal being assessed.
Appendix B

National Policy Board of Educational Administration (NPBEA):

Knowledge and Skill Domains

**Functional Domain Skills:**

1. Leadership: Providing purpose and direction, formulating goals with staff and setting priorities based on community and district priorities and student and staff needs.

2. Information Collection: Classifying and organization information for use in decision making and mentoring.

3. Problem Analysis: Identifying problems, identifying possible causes, seeking additional needed information, framing possible solutions.

4. Judgment: Giving priority to significant issues then reaching logical conclusions and making quality decisions.

5. Organizational Oversight: Planning and scheduling own and other’s work so that resources are used appropriately and monitoring priorities so that goals and deadlines are met.

**Programming Domain Skills:**

6. Instructional Management: Ensuring appropriate instructional methods are used to create positive learning experiences.

7. Curriculum Design: With staff, planning and implementing a framework for instruction and aligning curriculum with anticipated outcomes.

8. Student Guidance and Development: Enlisting the support and cooperation of diverse professionals, citizens, community agencies, parents and students to promote the growth and development of all students.
9. Staff Development: Supervising individuals and groups and providing feedback on performance and initiating self-development.

10. Measurement and Evaluation: Examining the extent to which outcomes meet or exceed previously defined goals, or priorities and drawing inferences for program revisions.

11. Resource Allocation: Allocating, monitoring and evaluating fiscal, human, material and time resources to reach campus goals and objectives.

**Interpersonal Domain Skills:**

12. Sensitivity: Perceiving and responding to the needs and concerns of others.

13. Oral and Nonverbal Expression: Making oral presentations that are clear and easy to understand.

14. Written Expression: Expressing ideas and appropriately in writing for different audiences.

(Thomson, 1993).

(Note: only 14 of the original 21 NPBEA knowledge and skill domains were assessed as part of this study)
### Appendix C

**Texas Education Agency: School Accountability Rating**

<table>
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<tr>
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<th>Academically Acceptable</th>
<th>Recognized</th>
<th>Exemplary</th>
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<td><strong>Base indicators</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>TAKS (2006-07)</strong></td>
<td>Meets each standard: • Reading/ELA ... 65% • Writing........... 65% • Social Studies.. 65% • Mathematics .... 45% • Science ............ 40% OR meets Required Improvement</td>
<td>Meets 75% standard for each subject OR meets 70% floor and Required Improvement</td>
<td>Meets 90% standard for each subject</td>
</tr>
<tr>
<td><strong>SDAA II (2007)</strong></td>
<td>Meets 50% standard <em>(Met ARD Expectations)</em> OR meets Required Improvement</td>
<td>Meets 70% standard <em>(Met ARD Expectations)</em> OR meets 65% floor and Required Improvement</td>
<td>Meets 90% standard <em>(Met ARD Expectations)</em></td>
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<tr>
<td><strong>Completion Rate I (class of 2006)</strong></td>
<td>Meets 75.0% standard OR meets Required Improvement</td>
<td>Meets 85.0% standard OR meets 80.0% floor and Required Improvement</td>
<td>Meets 95.0% standard</td>
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<tr>
<td><strong>Annual Dropout Rate (2005-06)</strong></td>
<td>Meets 1.0% standard</td>
<td>Meets 0.7% standard</td>
<td>Meets 0.2% standard</td>
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<td><strong>Additional Provisions</strong></td>
<td>Applied if district/campus would be Academically Unacceptable due to not meeting Academically Acceptable criteria.</td>
<td>Exceptions cannot be used to move to a rating of Recognized.</td>
<td>Exceptions cannot be used to move to a rating of Exemplary.</td>
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<tr>
<td><strong>Exceptions</strong></td>
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<td><strong>School Leaver Provision for 2007</strong></td>
<td>A campus or district annual dropout rate, completion rate and/or underreported student measures cannot be the cause of lowered rating</td>
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*(Texas Education Agency, 2007, p. 42).*
Strength Through Adversity:
The Struggles of the Beginning Teacher

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ABSTRACT

The current severe teacher shortage in the United States is exacerbated by the numbers of beginning teachers leaving the profession after only a few years in the classroom. What do beginning teachers expect? How does the reality of their experience match up to their expectations? Sarah Mitchell wanted to be a “good” teacher and defined “good” in terms of relations with other people – students, colleagues, and administrators. The actual social relations that the teacher experienced in the school differed from what she saw as ideal, particularly with respect to the students and other teachers.

The purpose of this qualitative study was to examine the expectations and experiences of a beginning teacher. The study focused on relations with her administrator, other teachers, and her students. The beginning teacher participating in this study was a high school mathematics teacher who taught in an urban, Title I school in a medium-sized Southwestern city. Data came from observations and written documents as well as from interviews with the teacher.

Keywords: beginning teacher, observation, interview, case study
INTRODUCTION

_Fully responsible for the instruction of his students from his first working day, the beginning teacher performs the same tasks as the twenty-five-year veteran. Tasks are not added sequentially to allow for gradual increase in skill and knowledge; the beginner learns while performing the full complement of teaching duties._

_Lortie (1975)_

Being a beginning teacher is a difficult challenge. According to Ellen Moir (1990), these teachers move through several phases from anticipation, to survival, to disillusionment, to rejuvenation, to reflection; then back to anticipation. During the _anticipation_ phase, they tend to romanticize the role of the teacher and the position. Beginning teachers enter with a tremendous commitment to making a difference and a somewhat idealistic view of how to accomplish their goals. This feeling of excitement carries new teachers through the first few weeks of school.

During the _survival_ phase, the first month of school is very overwhelming for new teachers. They are learning a lot and at a very rapid pace. Beginning teachers are instantly bombarded with a variety of problems and situations they had not anticipated. Most new teachers struggle to keep their heads above water. They become very focused and consumed with the day-to-day routine of teaching. There is little time to stop and reflect on their experiences. It is not uncommon for new teachers to spend up to seventy hours a week on schoolwork. Particularly overwhelming is the constant need to develop curriculum. Veteran teachers routinely reuse excellent lessons and units from the past. New teachers, still
uncertain of what will really work, must develop their lessons for the first time. Even depending on unfamiliar prepared curriculum such as textbooks is enormously time consuming. Although tired and surprised by the amount of work, beginning teachers usually maintain a tremendous amount of energy and commitment during the survival phase, harboring hope that soon the turmoil will subside.

After six to eight weeks of nonstop work and stress, new teachers enter the disillusionment phase. The intensity and length of the phase varies among new teachers. The extensive time commitment, the realization that things are probably not going as smoothly as they want, and low morale contribute to this period of disenchantment. New teachers begin questioning both their commitment and their competence. Many new teachers get sick during this phase. Compounding an already difficult situation is the fact that new teachers are confronted with several new events during this time frame. They are faced with back-to-school night, parent conferences, and their first formal evaluation by the site administrator. Each of these important milestones places an already vulnerable individual in a very stressful situation. Back-to-school night means giving a speech to parents about plans for the year that are most likely still unclear in the new teacher's mind. Some parents are uneasy when they realize the teacher is just beginning and many times pose questions or make demands that intimidate a new teacher. Parent conferences require new teachers to be highly organized, articulate, tactful and
prepared to confer with parents about each student’s progress. This type of communication with parents can be awkward and difficult for a beginning teacher. New teachers generally begin with the idea that parents are partners in the learning process and are not prepared for parents' concerns or criticisms. These criticisms hit new teachers at a time of waning self-esteem.

This is also the first time that new teachers are formally evaluated by their principal. They are, for the most part, uncertain about the process itself and anxious about their own competence and ability to perform. Developing and presenting a "showpiece" lesson is time-consuming and stressful. During the disillusionment phase classroom management is a major source of distress. At this point, the accumulated stress of the beginning teacher, coupled with months of excessive time allotted to teaching, often brings complaints from family members and friends. This is a very difficult and challenging phase for new entries into the profession. They express self-doubt, have lower self-esteem and question their professional commitment. In fact, getting through this phase may be the toughest challenge they face as a new teacher.

The rejuvenation phase is characterized by a slow rise in the new teacher's attitude toward teaching. It generally begins in January. Having a winter break makes a tremendous difference for new teachers. It allows them to resume a more normal lifestyle, with plenty of rest, food, exercise, and time for family and friends. This vacation is the first opportunity that new teachers have for
organizing materials and planning curriculum. It is a time for them to sort through materials that have accumulated and prepare new ones. This breath of fresh air gives beginning teachers a broader perspective with renewed hope. They seem ready to put past problems behind them. A better understanding of the system, an acceptance of the realities of teaching, and a sense of accomplishment help to rejuvenate new teachers.

Through their experiences in the first half of the year, beginning teachers gain new coping strategies and skills to prevent, reduce, or manage many problems they are likely to encounter in the second half of the year. Many feel a great sense of relief that they have made it through the first half of the year. During this phase, new teachers focus on curriculum development, long-term planning and teaching strategies. The rejuvenation phase tends to last into spring with many ups and downs along the way. Toward the end of this phase, new teachers begin to raise concerns about whether they can get everything done prior to the end of school. They also wonder how their students will do on the tests, questioning once again their own effectiveness as teachers.

The reflection phase beginning in May is a particularly invigorating time for beginning teachers. Reflecting back over the year, they highlight events that were successful and those that were not. They think about the various changes that they plan to make the following year in management, curriculum, and teaching strategies. The end is in sight, and they have almost made it; but more
importantly, a vision emerges as to what their second year will look like, which brings them to a new phase of anticipation. Recognizing the phases beginning teachers go through gives us a framework within which we can support these individuals to make the first few years of teaching a positive experience.

In the United States today, there is a major teacher shortage, exacerbated by the attrition of large numbers of teachers – approximately 50 percent – leaving the classroom each year (Ingersoll, 2003; NCTAF, 2003). Many of those teachers leave for retirement, but almost as many leave for other reasons, which include dissatisfaction with teaching (Boe, Cook, & Sunderland, 2008). The most serious levels of teacher shortages are in inner cities and the rapidly growing South and West (NCTAF, 2007).

With respect to the relations of beginning teachers with their students, the research has described major challenges that teachers experience, which include what has been known sometimes as “discipline” and other times as “classroom management”. Surprisingly, many beginning teachers in these studies said they were prepared for discipline with different techniques and ideas, but by the third month of school, they had no clue at what to do next. In the area of relationships with other teachers, studies found isolation and lack of support as major problems for beginning teachers. In many ways, there were on their own – to set learning objectives, to present units and lessons, to handle problems that might arise (Bullough, 1989; Marlow, Inman, & Betancourt-Smith, 1997). As for relations
with administrators, studies (Chester & Beaudin, 1996; Zepeda & Ponticell, 1997) indicated that beginning teachers needed support from administrators also. Often, it seemed, they did not get it.

**REVIEW OF THE LITERATURE**

The literature covers four main areas: the expectations of beginning teachers, the relations that beginning teachers have with their students, the relations that beginnings teachers have with other teachers, and the relations that beginning teachers have with their administrators. Beginning teachers tend to articulate their expectations and perceptions in terms of relations with others, and those relationships tend to be major considerations in their decisions to stay with teaching or leave the profession.

*Expectations of New Teachers*

In 1975 Lortie published a classic study of 94 teachers in the Boston Metropolitan Area called *Schoolteacher: A Sociological Study*. Lortie described five Attractors to Teaching:

1. the *interpersonal* theme, a desire to work with people;
2. the *service* theme, performance of a special mission in our society;
3. the *continuation* theme, work in an environment that they enjoyed in their youth;
4. the *material benefits* theme, attractions such as money, prestige, and security; and
5. the *time compatibility* theme, the work schedules of teachers.

From his interviews, Lortie learned that many people go into the field of education because they want to work with other people – want to *serve* others and
to work with others. The idea that teaching is a valued service is important to teachers. Lortie pointed out that if teaching is to be defined as reputable and honored as a service, then the cultural context – the community – must also uphold that service as a special ideal. Lortie said it is “service” that sets [teaching] apart from many other ways to earn a living” (p. 32). Other researchers have continued to find this theme of service. Joseph and Green (1986) also found that the desire to work with and serve others is a basic motive for people’s decisions to go into teaching.

Teachers’ Relations with Students

Relations with students for beginning teachers can be difficult. Veenman (1984) found that relations with students were the most seriously perceived problem for beginning teachers and those relations were often defined in terms of discipline. Odell (1986) suggested that, even though the new teachers needed help with management of students, the administrators did not feel the need to provide this type of support. The author also concluded that beginning teachers had a difficult time articulating their problems in dealing with their students, since that would seem to imply a lack of personal competence.

For many beginning teachers, the problem with student relations was of utmost importance. Applegate, Flora, Johnson, Lasley, Mager, and Ryan (1977) documented that beginning teachers expressed that, given their college training and natural abilities, they should not have had any problems in their relations with
students. Several of the teachers reported a concern with students’ attitudes that they had not expected, particularly in regard to the students’ lack of respect for authority. The new teachers especially felt that they should not have had so many problems with their students due to behavior, and some of them were unhappy with their inability to “control” their classes.

In *Voices of Beginning Teachers*, Dollase (1992) reported that when it came to classroom management strategies, these new teachers were lost by October and seemed helpless and overwhelmed by December. They did not realize they needed to adjust their management strategies periodically, especially during peak periods of the year – holidays and breaks during the year. New teachers who did not have alternatives to the classroom management problems seemed to be lost by mid-year.

*Teachers’ Relations with Other Teachers*

Researchers found that new teachers’ relations with other teachers were extremely important. There were several studies that explored the many facets of the relationships of these two groups of teachers: self-efficacy beliefs, mentor support, and support from other teachers. According to Chester and Beaudin (1996), it seems that younger inexperienced teachers need high levels of collaboration with their peers in order to feel good about themselves in their new career. If new teachers had received support from experienced teachers in their school, their self-efficacy beliefs were enhanced.
Punch and Tuetteeman (1996) conducted a study on the psychological distress that was associated with misbehavior of students and excessive societal expectations and found that teachers’ stress could be alleviated by praise and recognition from fellow colleagues. Those beginning teachers who had many opportunities to exchange ideas with their colleagues and socialize with the colleagues tended to have less stress in their work environment.

Huffman and Leak (1986) suggested that many beginning teachers simply wanted someone to be there for them. Several beginning teachers said that they just wanted someone “being available” or “having someone to go to with questions big and small”; they wanted the “help of a teacher who was genuinely interested” (p. 23).

**Teachers’ Relations with Administrators**

For many beginning teachers, the relations with other teachers seem to be an important factor, but relations with administrators can be as important. For these teachers, too much attention could be upsetting and cause great distress due to the comings and goings of the administrators. They feared that if they were being observed often, then they must be doing something wrong. Chester and Beaudin’s (1996) findings also suggested that putting off the observations until late in the year could lead to negative self-efficacy beliefs for the teacher, because the teacher might feel that the administrator did not value his or her competence.
Some research has shown that administrative support can help reduce the attrition rate of many beginning teachers. According to Chapman (1984), the more the administrators are involved with their teachers, especially the new teachers, the better the chance that the teachers would not leave teaching. Chapman also felt that, if administrators worked closely through observations and interactions with their beginning teachers, they could contribute to teacher retention in their schools.

**PURPOSE OF THE STUDY**

The purpose of this case study was to examine the teaching life of a beginning high school teacher, exploring her experiences during her first two years of teaching and the decisions that she made regarding her position as a teacher. The case study format was utilized to investigate the complexity of her experiences. According to Hamel, Dufour and Fortin (1993), case study provides the opportunity to establish close ties with the field through a detailed, descriptive story of the actors. This method allowed the researcher to observe how the teacher focused on her particular situation in the classroom and school environment – how she fitted in the social network of the school.

**SIGNIFICANCE OF THE STUDY**

Many beginning teachers are unaware of how to deal with the complex situations they face so they must be prepared to enter the classroom with the self-confidence needed to succeed and stay in the teaching profession. This case study
can help educators understand beginning teachers’ accomplishments and struggles, as they complete their first years in the classroom, and contribute to the literature on teachers’ lives and experiences. Finally, the insights gained might help in transforming teacher education and alternative certification programs to prepare beginning teachers more adequately for the classrooms.

RESEARCH QUESTIONS

Four major aspects of the beginning teachers’ teaching experience were the focus of this study: teacher perceptions and expectations, teacher relations with students, teacher relations with other teachers, and teacher relations with administrators. The following four questions guided the study:

1. What are the expectations and perceptions of the beginning teacher and how did her perceptions change over the course of her teaching career?
2. How does the beginning teacher relate to her students and manage her classroom?
3. How does the beginning teacher relate to other teachers in the school?
4. How does the beginning teacher relate to the administrators in the school?

These foci were chosen because prior studies suggested that beginning teachers’ difficulties are associated with unrealistic expectations, feelings of isolation, discipline problems with their students, and lack of support by administration and other teachers. Prior research suggests that beginning teachers tend to enter the field with high expectations for what they are going to accomplish socially, for instance, to keep students engaged (Marso & Pigge,
1997). These high expectations of beginning teachers may cause emotional exhaustion, according to Schwab, Jackson, and Schuler (1986).

**RESEARCH DESIGN**

*Context*

A medium-sized Southwestern city with a population of approximately 400,000 with an ethnic composition of 70 percent Caucasian, 15 percent African American, seven percent Hispanic, four percent Native American, and two percent Asian served as the setting for this study. The per-capita income is $21,534 and the median household income is $35,400. The percent of families living below the poverty level is 10.9%, with 51.9% of which were female-led households with children under five years.

The school district is the largest school district in the state, with nine high schools. Lincoln High School has a population of approximately a thousand students with three administrators and eighty teachers. The school usually ranks 3rd among the district’s high schools in academic performance. Lincoln High School was built in 1938 with two main buildings. The larger building houses the administrative offices, an auditorium, a cafeteria, two small gymnasiums and a library as well as numerous classrooms for the 10th, 11th, and 12th grade students. The smaller building houses administrative offices and classrooms for 9th grade students.
The participant in my study was a 28-year-old 9th grade mathematics teacher. This teacher was selected due to the fact that she had only taught two years, and her willingness to share her experiences as a teacher for this study. The name of the teacher and the high school used are pseudonyms. The first year she taught 10th, 11th, and 12th grade students in the main building. The second year she was assigned to the freshman academy.

Method

This inquiry focused on a single case and employed several methods of data collection: field observations, document collection, and formal/informal interviews. The study was conducted over a two-month period between October and December. The researcher focused on the teacher’s perceptions and expectations, particularly with respect to her relations with her students, her relations with other teachers, and her relations with the administrators.

Since the study on one beginning teacher’s expectations and experiences, the case-study approach was best suited for this purpose. The beginning teacher’s experiences inside her classroom were observed as a means of describing and analyzing the experiences unique to this teacher. As Stake (1978) explained, with a case study, the researcher and readers should be left with more to think about than less. The case study provides theory to build upon – causing more exploration of the phenomenon instead of a single answer to the question of “why”.
DATA COLLECTION PROCEDURES

Observations

There were three observations conducted in October, November, and December. The researcher kept a journal of informal observations and structured interviews. Following Briggs (1986), the field notes pages for observations were divided into two sections. One part of the notebook page was used to sketch the setting of the classroom and to record any type of interpretations or questions that came to mind during the observations. The other part of the page was used to write detailed descriptive field notes. The observations were conducted while the teacher was teaching her lessons. These observations focused on how the teacher adjusted to her students and her classroom as well as the design of the classroom, teaching techniques, and any other categories of themes that began to emerge during the study.

Interviews

There were three phases of the interview process accomplished with the teacher: (1) one initial interview based on the perceptions of her teaching career; (2) one follow-up interview about her remembrances of her first-year teaching experience; and (3) one final interview comparing her current teaching experience with that of her first year at the school. Although most interview questions were developed by some point before the interviews, all interviews were conducted in a conversational format in which the teacher was encouraged to elaborate on
information (Patton, 1990). The goal of the interview process was to get a detailed account of classroom activities and other occurrences in the school which dealt with students, other teachers, administrators, and mentors, and also the teacher’s interpretations and reactions.

The Phase I interview asked general questions about her teaching experiences, including her teaching style, her philosophy of discipline, effective ways to motivate students, components of an effective lesson plan, her philosophy of education, qualities of a good teacher, and current events in education. During the Phase II interview, the teacher was questioned about her recollections of the perceptions and expectations upon entering her classroom for the first time. This provided insight into how the teacher thought that first year progressed. She explained her struggles with the environment, the students, other teachers, the administrators, and the culture of the school. Finally, Phase III was a reflection interview comparing the kind of teacher she is now compared with the kind of teacher she was two years ago.

**FINDINGS**

*Research Question 1: What are the expectations and perceptions of the beginning teacher and how did her perceptions change over the course of her teaching career?*

The beginning teacher wanted to be a “good” teacher and being a good teacher meant having particular kinds of relationships with students, administrators, and other teachers. During her first year of teaching, Sarah tried to
form a relationship with her mentor but instead reached out to another teacher who seemed to relate to her during a time that she needed guidance and encouragement.

In the first year, she had a tough time adjusting to the mathematics classes that she taught. She was not able to accomplish what she wanted to with her students. When she was offered a similar position, the decision became easier.

I was asked at the end of my first year to move to the Freshman Academy. At first I didn’t know if I wanted to or not, but I decided to because I liked the idea of a smaller building and teaching the same subject all day. Plus I knew the math teachers better in that building and if I needed help I would have a stronger support system. (personal communication, November 30, 2009)

Research Question 2: How does the beginning teacher relate to her students and manage her classroom?

Sarah taught back-to-back double-block classes of math and math remediation. In her interviews she was clear about what type of teacher she wanted to be and how she wanted her students to react to her.

I don’t expect to be their best friend or their buddy. I expect them to respect me. I expect them to look at me as a person who is just trying to help them, not a person who is trying to ridicule them and make fun of them or trying to make them feel stupid. I’m hoping that they see me as someone they feel safe with, and they are not afraid to answer questions. I hope that they have fun. Learning shouldn’t be boring. (personal communication, November 3, 2009)

Sarah’s idea of how she wanted to relate to her students seemed to be a reaction to memories of teachers she had when she was a student. She recalled how teachers treated students – with disrespect and ridicule. Sarah wanted her
students to enjoy her classes and trust her as a teacher. She did not want to be a
teacher who made her students feel stupid and lower their self-esteem. She
explained:

I want to be the kind of teacher that students think they can come to and
confide in. I know it isn’t a contest about who likes whom best, but I don’t
want them to dread coming to my class. I want them to enjoy it or be okay
with it, [to] be comfortable and feel like it’s a safe environment for them
to learn and not feel ridiculed or feel stupid. (personal communication,
November 3, 2009)

Sarah focused on her efforts to make the lessons interesting. She
had the students participate in group work, cooperative learning activities, as well
as individual class work. When there were activities, most students seemed to
enjoy the lessons. However, some students took those opportunities to sleep in
class. All did not go smoothly with “discipline”. There were several students who
gave Sarah a difficult time. Those students talked out of turn, made unnecessary
noises, and were rude and disrespectful to Sarah.

Perhaps out of frustration or lack of knowledge about how to get the
students on task or interested in being in school, there were times when she
treated her students in a manner that she did not want to treat them. She criticized
them for not participating or not doing their work. At least four or five times
during the observation, she got upset with some of the students who would not
participate in the lesson. She remembered her disastrous first year:

My Algebra I class was terrible. It was a repeat class so if my
understanding is correct, most of the students were on at least their third
try to pass Algebra I. I felt like I was just babysitting these kids. There were about five students who really cared to learn anything. The rest were only there because they had to be and told me that. (personal communication, November 30, 2009)

Research Question 3: How does the beginning teacher relate to other teachers in the school?

Chester and Beaudin (1996) discovered in a large study of 173 newly hired and beginning teachers that support from experienced teachers was vital to their self-efficacy beliefs. They needed to know that other teachers in the school liked them and supported them. This was the case with Sarah, who spent quality time working on her relationship with other teachers. She felt she had a good rapport with the other teachers at the school (personal communication, November 30, 2009).

Sarah had the self-confidence that was needed to get through a tough year, and the emotional support that she gained from the staff was an enormous boost to her self-image. Her assistant principal had nothing but good things to say about her. Since Sarah had worked at the same school for two years, she felt that the teachers in her school were extremely helpful. In her first year, a mathematics teacher who shared the same planning period gave her pointers on teaching Algebra and Geometry. She said, “He told me always to have everything prepared before class and to never have to be writing on the overhead during class. That is probably the best advice anyone ever gave me.” (personal communication, November 30, 2009).
Sarah was accepted by many of the teachers. That was not the case during her first year. She lamented, “There were a few male teachers on the same hall as me who would watch my Algebra students walk in and laugh about it because apparently there were several gang members in the class and they found it funny that they would put these students in the same class.” (personal communication, November 30, 2009). Much stress was alleviated from Sarah because of the relationship that she had with the other teachers – the kind of “praise and recognition from fellow colleagues” that Punch and Tuetteman (1996) found to be so important for new teachers.

*Research Question 4: How does the beginning teacher relate to the administrators in the school?*

Sarah had three administrators: a principal and two assistant principals. The administrators divided the areas of responsibility. Mary Johnson, the female assistant principal was responsible for the mathematics department. There were only a few times when an administrator visited Sarah’s class, and that was to ask her questions about particular students.

That was different from Sarah’s first year of teaching when this particular administrator was part of the three-person committee to evaluate Sarah’s entry-year in teaching. In addition, the assistant principal took a personal interest in Sarah’s struggles. She said, “Ms. Johnson would always come by and smile and was helpful when she could be but she did have numerous other things to worry
about. But I always looked forward to seeing her smiling face and hear her words of encouragement.” (personal communication, November 30, 2009).

According to Sarah, the only time that she was observed by an administrator was for the monthly walkthroughs and the formal assessments. Other than that, every now and then, Ms. Johnson might poke her head in the door during a lesson to say hello. She spoke kindly of Ms. Johnson. “She was wonderful” according to Sarah (personal communication, November 30, 2009). During her two observations and the few times that she was able to walk into the room for a minute, she felt that Sarah had good classroom management.

As did the principals in Brock and Grady’s 1998 study, Sarah’s assistant principal equated “good” teaching with “good” classroom management skills. When she walked into her classroom the students were always quiet, and she hardly ever sent students to the office for discipline problems. If she did, it was for serious offenses. Sarah had much respect for this person, and felt that if she had a problem, or a need as a beginning teacher, she could go to her for help or advice. She prided herself on not being afraid to approach her principal or assistant principals with concerns she had with her classroom, students, or other teachers.

CONCLUSION

Research suggested that new teachers start their teaching careers with high expectations – expectations that are sometimes unrealistic. Many people go into
teaching because they want to *serve* others; but they also want to relate to others and interact with their peers and students (Lortie, 1975). Once *reality* enters the picture, many beginning teachers begin to struggle, sometimes changing perceptions of the role of a teacher.

As beginning teachers start their careers, some are prepared for the challenges of working with students in the classroom and some are not. A number of qualitative studies have focused on teachers’ relationships with students, showing that frequently new teachers have problems in this area. Veenman (1984) found that the idea of “classroom management” was an issue in classrooms twenty-five years ago and Goddard and Foster (2001) discovered that beginning teachers still struggle with the notion of “classroom management”.

There is considerable research on the relationships that beginning teachers had with other teachers (Chester & Beaudin, 1996), particularly the relationships new teachers had with their mentors. It is difficult to make generalities about *which* kinds of relations are best for *which* teachers, but, suffice it to say, these relationships were often important to the self-efficacy beliefs of beginning teachers, and without those relationships, many beginning teachers might not have lasted the entire year.

The literature also points to the importance of the beginning teachers’ relations with their administrators. It seems that many beginning teachers want and expect their administrators to visit their classrooms, give constructive
criticism, and say how much they value their presence (Chapman, 1984; Punch & Tuetteman, 1997). Many of the beginning teachers wanted access to their principals, to know that they could talk to their administrators about their students and any problems that they might have.

For many beginning teachers, the relationships that they have with their students, other teachers, and administrators can affect their decisions to stay teaching the next year. It was evident to this researcher that the isolation this beginning teacher experienced was her largest problem. Her classroom was down a long hallway far away from any other classroom, and because of this isolation she had no one to talk with if she had a problem. “I had a mentor teacher but she was in the other building and, by the end of the day, I usually had figured it out by then” (personal communication, November 30, 2009).

For her, a good teacher was someone who showed concern for her students’ academic as well as for their personal welfare, kept order in her classroom, and was actively involved with the staff of her school. She was not able to create the kinds of relationships she had hoped with some of her students. During the last few months of the school year, teachers are expected to make decisions about where they wanted to be the next year. Sarah reflected on her disastrous first year, “I never thought about quitting. I knew that this was the job that I wanted and I hoped that I would get to be a better teacher. I never really
thought that the kids were that bad, I just felt like I didn’t know how to manage them” (personal communication, November 30, 2009).

Contributions of the Study

What kind of contribution is made by a study of one beginning teacher in a unique setting in a medium-sized Southwestern city? What kinds of insights can be derived from it? The major contribution is what it takes to be a “good teacher”. Sarah wanted to be a good teacher, and she thought of quality in terms of relations with other people, including students, other teachers, and administrators. To Sarah, a good teacher motivated her students – got them excited about learning. Dolley’s (1998) study, good teachers were seen as being caring, committed, creative, reflective in thinking, and having internal locus of control; and in Norton’s (1997) study, good teachers were described as creative, flexible, enthusiastic, and intuitive in their teaching. These studies focused on qualities that are manifested particularly in the teacher’s interactions with students.

The beginning teacher’s perceptions of what makes a good teacher was complemented and complicated by perceptions from other educators in the building. The teacher’s administrator commented that Sarah was a good teacher because she had her classroom well organized, kept her students on task, did not have many discipline problems, and did not need an excessive amount of assistance (after the first year).
Beginning teachers, and especially first-year teachers, have to deal with learning the “ropes” of teaching, developing their own teaching style, understanding the culture and how it fits into teaching strategies and classroom management, and adjusting to teaching while still maintaining some type of personal life. This study addressed how extremely difficult it was for these beginning teachers. Without the support of administrators and other teachers, especially mentors, it would be difficult for a beginning teacher to get through a year of teaching.
ACKNOWLEDGMENTS

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REFERENCES


The Muses of Sir Arthur Sullivan

Arthur Sullivan is widely known for his collaboration with W. S. Gilbert, which resulted in the celebrated operettas *The Pirates of Penzance*, *The Mikado*, and many others. The combination of Gilbert’s lyrics and Sullivan’s melodies has captivated audiences in English-speaking lands for well over a century. Considerably less well known are Sullivan’s more than 100 art songs, which have been little studied and are rarely heard today. Most of these songs were published during Sullivan’s lifetime, though a few remain in manuscript. Fewer than twenty are available in modern editions that are faithful to the original sources, and all the original editions are out of print. Thus a large body of the music of a man who was perhaps the most successful English composer of the nineteenth century remains unknown and unavailable to today’s musicians and educational repertoire.

Drawing from archival materials such as his original letters and diaries as well as published biographies, Sullivan’s solo songs can be easily placed within the context of his professional career and personal life. It is evident that Sullivan had two great lovers. He never married, but the relationships he had with these women greatly influenced his compositions, as displayed in his song dedications. For example, the turbulent love affair he had with Rachel Scott Russell corresponds with dark romantic art songs composed during this time. Their affair lasted almost five years and their engagement was quickly dissolved due to the Scott Russell family’s disapproval of Sullivan.

Sullivan set many of Tennyson’s texts for his art songs. Many of these compositions he dedicated to the women in his life and those that shaped his musical career. According to many scholars, Sullivan was the “undeclared” music laureate for the royal family and Queen Victoria herself. Tennyson and Sullivan collaborated on the song cycle, *The Songs of the Wrens*. It took five years to get it published due to Tennyson’s lack of interest and stubborn demeanor, even offering Sullivan £500 to terminate the project. Sullivan refused. My paper will focus on the relationship between Sir Arthur Sullivan and Lord Tennyson and the music Sullivan created as a result of this relationship. Also, I wish to explore the vast opportunities a rediscovery of his art songs may bring for music education.
Implementing Educational Gaming in the Mathematics Classroom: Phase I, Professional Development

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Abstract

This document describes the use of the educational gaming technology, *Tabula Digita*, during the professional development phase of the *Dimension M Project*. Included is a brief introduction to *Tabula Digita* and a brief discussion of the evaluation of Phase I. The purpose of Phase I was to provide professional development to mathematics educators, with the goal of improving the quality of teaching using online, educational gaming software. It was found that teacher concerns about implementation of the software were associated with finding time to fit-in its use and obtaining time in a computer laboratory. Of the fifteen teacher participants, most felt that the Multi-Player Missions would have the most impact on students enjoying/appreciating mathematics, that the Instructional Modules would have the most impact on students learning mathematics, and that the Single Player Missions would have the most impact on students doing mathematics.
Implementing Educational Gaming in the Mathematics Classroom: Phase I, Professional Development

Phase I of the *Dimension M Project* was implemented during the Spring and Summer of 2010 at the Institute for Math Learning at West Virginia University (WVU). Support for the project was made available from the West Virginia Department of Education, The Center for the Advancement of Stem Education, and participating Blue Ribbon Mathematics Partnership Counties located in north central West Virginia (www.blueribbon.ws). This document focuses on the use of educational gaming technology, *Tabula Digita*, during the professional development phase of the project. The purpose of Phase I of this project was to provide professional development to mathematics educators, with the specific goal of improving the quality of teaching using online educational gaming software.

**Software Used**

*Tabula Digita* has four primary components for the *Dimension M* math product series. Those components include Instructional Modules, Single Player Missions, Multi-Player Missions and the Educator Portal. The Educator Portal includes an online management system for student performance data as well as many resources for a teacher implementing gaming technology. The Instructional Modules were developed based on the work on lesson planning by Hunter (1990). This component is made up of web-based flash modules. The modules are presented "in story" to complement the educational video game missions. The modules are meant to teach students concepts and skills that are practiced within the missions. The Single Player and Multi-Player Missions were developed based on the *Learning by Doing* instructional theory of Schank, Berman, and Macpherson (1999). The Single
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Player and Multi-Player Missions are designed to foster skill development and the learning of key concepts through goal-based scenarios.

Program for Professional Development

Fifteen mathematics educators participated in the project representing seven middle/high schools in four counties in West Virginia. Due to several uncontrollable factors, the framework for the professional development included two one-day meetings during the spring semester followed by a three-day workshop in June. Phase II of the project will include three, one-day follow up sessions and online interactions throughout the academic year with the teachers, implementation of the materials in the classroom, and project evaluation using student performance data.

Phase I of the project had the following objectives for teacher participants:

• Demonstrate knowledge of educational pedagogy related to implementing digital gaming
• Demonstrate knowledge of philosophy of game-based, mathematical learning
• Demonstrate skills to navigate through Instructional Modules, Single Player and Multi-Player Missions in DimensionM and Dimenxian
• Demonstrate skills to navigate through the Dimension M Educator Portal
• Develop an Implementation Plan for next academic year (completed by August 1, 2010)

The project made use of the Tabula Digita mathematics gaming software. The activities were correlated to the West Virginia Content Standards and Objectives. Each school received a netbook computer with case and software and student licenses of Tabula Digita mathematics gaming software (1000 total seat licenses for each of three years of the project).
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Reflection Sheets

Each participant was asked to respond to reflection prompts at the end of each meeting day. Overall, participants felt comfortable with the material to which they were being exposed. The last workshop reflection prompts were evaluated for trends regarding concerns for implementation of the gaming software into the classroom. Of the 15 participants, five were concerned about getting computer laboratory time for their students and three were concerned about finding time in their schedule to include the materials. Only one participant mentioned concern about learning to "play" the games.

Predictions

Each participant was asked to make predictions with respect to their students’ engagement with the educational gaming software materials during Phase II of the project. Reflective data will be collected at the end of the pilot implementation year. Selected, preliminary results of the predictions follow.

Teachers were asked to predict which of the three components of *Tabula Digita*, Instructional Modules, Single Player Missions, and Mulit-player Missions, would have the greatest impact on each of the following: a) students enjoying/appreciating mathematics, b) students learning mathematics, and c) students doing mathematics. Fourteen of the fifteen responded that the Multi-Player Missions would have the most impact on students enjoying/appreciating mathematics, thirteen of the fifteen felt that the Instructional Modules would have the most impact on students learning mathematics, and ten of the fifteen felt that the Single Player Missions would have the most impact on students doing mathematics.
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Phase I Workshop Evaluations

Each participant was asked to complete an anonymous project evaluation. An analysis of selected questions on the evaluation follows. Some participants chose to not respond to all questions of the evaluation.

The content was at the appropriate mathematical level (average score out of 5).

10- 5's, and 3- 4's Avg. 4.77

The work assigned in this workshop will enhance my teaching.

8- 5's, and 5 - 4's Avg. 4.62

The workshop experience will help me teach more effectively.

9- 5's, 3 - 4's and 1 - 3 Avg. 4.62

The discussions about how to teach were useful.

8- 5's, 4- 4's and 1 - 3 Avg. 4.54

The materials provided were useful.

11- 5's, and 2 - 4's Avg. 4.85

Overall ratings out of 10 for material was Avg. 9.46

Discussion

Based on an analysis of the reflective responses collected during the workshop, it appears that most concerns surrounding the implementation of the gaming software into the classroom are associated with making time in the schedule to fit-in the use and obtaining time in a computer laboratory. Only one teacher expressed concern with learning to use the software herself. It should be noted that County Partnership Forms were required prior to registration and it is anticipated that resources such as computer laboratories will be available for the students. In addition, teacher participants were required
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to turn in an implementation plan by the beginning of the school year and it is expected those will help
teachers to pace the year taking into account using the technology. It is intended that other
implementation concerns that arise throughout the year will be addressed in discussion boards via the
on-line project site during Phase II.

When making predictions with respect to how using each of the components would affect
students, most teachers felt that the Multi-Player Missions would have the most impact on students
enjoying/appreciating mathematics, that the Instructional Modules would have the most impact on
students learning mathematics, and that the Single Player Missions would have the most impact on
students doing mathematics. Teachers were asked to make the predictions after having several hands-on
sessions with each of the components. Recall that the Instructional Modules, according to Tabula
Digita, are meant to teach students concepts and skills that are practiced within the missions. In their
predictions, teachers validated the intent of the Instructional Module component use. It is not surprising
that teachers chose the Multi-Player Missions as the component most likely to impact students’
enjoyment. These missions are often played by using teams and almost always are played in groups.
There is a strong social underpinning connected to this component when used as intended. It could be
that teachers anticipate that students will enjoy the social aspect of Multi-Player Missions. Finally,
Single Player Missions set up the structure for students to do their own work in "real time". While
obtaining success in the multi-player team setting is more likely to occur if all team members are
"pulling their weight", in order to be successful in a Single Player Mission, an individual must be able to
"do the math". Again, the teachers validated the intent regarding how the missions are intended to be
implemented.
Finally, though the teachers plan to implement this gaming technology in 6th grade, 7th grade and Algebra I classrooms, analysis from the project evaluation indicates that teachers found the material to be at the appropriate level and felt that it would be useful. Some of the teachers plan to use the material to pre-teach concepts, others plan to use it for review or re-teaching. Some of the teachers will be using it in an Algebra Support course which is a companion course for Algebra I for students determined to be at risk of not succeeding. Some teachers plan to work sequentially through all missions, while others are planning only to use those that are directly tied to the content required in the course. These different implementation plans are being taken into consideration for the evaluation design which will be used in Phase II of the project.

References


ABSTRACT

Intercultural Field Experiences in Alaska: Contextual Learning in Teacher Education

This paper presents findings from research that examined intercultural field experiences as a strategy to prepare teachers in Alaska to work effectively with indigenous students and a growing diverse student population. Since 2007, pre-service teachers from the University of Alaska Anchorage have had the opportunity to participate in an optional program component which consists of spending two weeks interning in Alaska Native village schools. The study of this program component was guided by two primary research questions: 1) What do pre-service teachers experience during the intercultural field experience; and 2) What are the implications for using these kinds of experiences to prepare teachers for diverse classrooms in the Alaska context? Analysis of the longitudinal data indicate that the intercultural field experiences have provided opportunities for interns to examine and raise critical questions regarding the socio-cultural-political contexts of education that are particular to Alaska. Moreover, this contextualized learning approach has assisted interns in examining the relationship among their own sociocultural consciousness or identities and teaching and learning. These findings have implications for teacher education programs regarding the role of intercultural field experiences as intentional sites for contextualized learning in support of critical reflection related to social-cultural issues.
Proceedings Submission

Culturally Relevant Teaching: Connecting Affirmative Beliefs with Practical Classroom Skills

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Culturally Relevant Teaching: Connecting Affirmative Beliefs with Practical Classroom Skills

Abstract

The changing demographics of children in grades K-12 in the United States are impacting the needs of pre-service teacher preparation. One practice that may address these factors is culturally relevant teaching. This study presents the reported beliefs and perceived competency related to culturally relevant teaching practices of pre-service and in-service general and special education teachers. One hundred and eight participants completed the Culturally Relevant Teaching Survey. Results of the two-way ANOVA demonstrated highly statistically significant differences in culturally relevant teaching skills by teacher type and ethnicity. However, no statistically significant differences were noted in participants’ beliefs about culturally relevant teaching. Implications for preparing pre-service and in-service teachers to provide culturally relevant teaching are discussed in addition to future research directions.
H-VAMP: Home Visit Asthma Management Program of New Mexico

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ABSTRACT

We used Certified Asthma Educators (AE-C) to teach parents/guardians and their children asthma management and control techniques. Participating families (20) were low-income and recruited from local pediatricians and family practice physicians. They were scheduled to receive 3 in-home visits from the AE-C’s, 2 visits with an asthma specialist, referrals to local support resources and an asthma care package complete with
physician-approved medicines and inhalers. Goals were to improve overall Quality of Life of both the patients and their families by achieving the following objectives: 1. knowledge of asthma as a chronic but manageable disease, 2. skill in taking their medications, 3. skill in cleaning their asthma equipment (i.e., inhalers, spacers), 4. awareness of and removal or avoidance of asthma “triggers” in their home and school. We took baseline measures of FEV (forced expiratory volume), PER (peak expiratory rate) and related pulmonary assessments as well as knowledge, quality of life perceptions, number of days lost from school and number of visits to the hospital. The number of triggers identified in the home was also recorded. Participants were instructed on how to manage each without for example always having to “remove” them (e.g., pets could receive regularly washings or put somewhere else away from the patient). Follow-up visits were scheduled for 6, 9 and 12 weeks. Data was entered on EXCEL and “subjects as their own controls” over time was the analytic strategy. With the exception of “trigger removal” preliminary results show that the majority of objectives were favorably impacted by the program. Follow-up data is in progress and is encountering a wide array of challenges. These are examined with respect to the targets for this intervention: low income families. We present the program intervention as a prototype for effective asthma control and reduction in other states with a high prevalence of asthma related health problems in these populations.

Introduction
The prevalence (i.e., total existing cases) and incidence (i.e., total new cases) of both adult and adolescent asthma has increased over the past 5 years (*National Health Statistics Report, 2008*). While Fatality Rates (FR) for asthma are less than other diseases like pancreatic cancer or unintentional injuries, the cost of treating asthma is a horrific cost to the U.S. health care system as well as to the state of New Mexico. According to researchers at the Centers for Disease Control, the United States spends $18 billion dollars in asthma care yearly (*Moorman, Rudd & Johnson, 2007*). Moreover because asthma is relatively easy to control and manage with appropriate medication, lifestyle and environmental modifications, the NIH have provided a number of grants to states who have research and intervention teams in place for achieving this critical objective (*http://www.nih.gov/news/health/dec2009/nhlbi-02.htm*). Asthma Allies, a not-for-profit organization from New Mexico was one of 13 teams awarded funding to test out the effectiveness of various strategies in asthma control and management.

**Epidemiology**

New Mexico is among the poorest and most ethnically diverse states in the nation (*http://www.unm.edu/~shri/images/NMReport200304.pdf*). The 2004-2007 prevalence rate for young people with a diagnosis of asthma was estimated at 64,000 (*ICD-9 codes 493.0-493.92*). It also has an extremely high rate of asthma in its southeast quadrant (*http://nmhealth.org/ERD/HealthData/Asthma*). The average hospital stay during 2004-2007 for those under 15 statewide was 21.7 / 10,000 population. For the southeast quadrant it was more that twice this figure: 58 / 10,000 population. For Emergency
Department admissions the state reported 45.4 / 10,000 population while the southeast reported 89.1/10,000 population. For comparative purposes the ER rate nationally is 23.9 / 10,000 population. Reasons for these substantial discrepancies vary but the high concentration of petrochemical industries in this area remains a major public and adolescent health concern (http://nmhealth.org/ERD/HealthData/Asthma/Epi%20Report%202003_17_2009.pdf). It is also important to note that asthma causes more missed school days, ER visits and hospital admissions than any other disease in the nation in the adolescent population. Added to this is the daunting finding by researchers that population disparities in asthma prevalence, especially for African Americans, continue to persist (Gold & Wright, 2005).

Data from the National Health Interview Survey (CDC/NCHS, January-March, 2010, p.97), document this disparity in Figure 15.6
As shown both Black age cohorts (i.e., under 15 as well as 15 and over) relative to Hispanic and white cohorts, substantially higher prevalence rates of asthma are reported. Such disparities cause a heightened concern for public health authorities because of the excessive financial as well as personal costs associated with this disease.

Ultimately, since asthma can be controlled and effectively managed in an overwhelmingly high majority of instances, the health care dollars for multiple and chronic repeat visits to a provider for asthma complaints, is clearly a major financial drain. In a time of national recession and health care crisis for so many poor families, the need to rigorously test out innovative and cost-effective preventive and control interventions regarding asthma morbidity and mortality, is critical (The Nation’s Health, 2010).

**Methods**

Asthma Allies of New Mexico is a Not-For-Profit organization that has worked in various communities around the state for over five years. The team includes Certified Asthma Educators (AE-C), Registered Respiratory Therapists (RRT), university faculty and a cadre of volunteers who are trained to assist in a wide array of interventions. The specific focus of the current H-VAMP project was to secure 30 low-income families with diagnosed asthmatic parents and/or children. These patients were referred from pulmonary physicians, internists, community-based health clinics and organized community outreach activities as well as others in the state.
Participants.

Patients were visited by team members in their homes and provided a baseline evaluation of their: asthma severity, pulmonary function (FEV1, FEV1%, FVC), exhaled nitric-oxide (eNO), in-home asthma “triggers” (type, location and how to manage), number of ER visits, hospital stays, missed school days, knowledge of asthma, skill at using and cleaning their asthma tools, and perception of their Quality of Life. There were two instruments developed for assessing these objectives, one for adults and one for the children.

Conceptual Basis of the H-VAMP Program.

There has been minimal research exploring the effectiveness of using serial home visitations by Certified Asthma Educators to help families control asthma (Garbutt, Banister, Highstein & Sterkel, 2010). Research does clearly indicate that asthma triggers are consistently prevalent in homes. Pets, carpets, smoking and mold are but a few of the triggers for asthma (Phipatanakui, 2006). Yet many poorer families have limited knowledge of this wide array of triggers for their children’s or their own asthma. Knowledge of how to use available medications and skill in using as well as cleaning asthma tools (i.e., chambers, inhalers) are also deficient. Clearly, if such families need this kind of education it is probably best that the educators deliver it in the environment where the asthma occurs.
Bandura’s Social Cognitive Theory suggests that people learn new behaviors in their environment by: 1.) observing models, 2.) developing self efficacy, 3.) practicing performance accomplishments (i.e., skill acquisition) and, 4.) being provided with positive reinforcement for their efforts (Bandura, 1999). In H-VAMP each of these elements is targeted by the asthma educators and the respiratory therapists during each home visit. To the extent one agrees that people change behaviors via this logic, the H-VAMP intervention can be considered conceptually grounded and operationally implemented via contemporary health behavior theory.

Research Design, Data Collection & Time Analysis.

Recruitment of participants began during December of 2009 and is ongoing. Since a formal “control” or “comparison” group was not feasible we elected to employ a subjects-as- their-own-controls method (Gay, 2009). This approach allows researchers to collect baseline data on objectives, conduct multiple follow-up assessments at set intervals, plot the progress of each individual and then aggregate the data for the group over the total time period. We scheduled follow up on the patients at minimum 2 times and for some three times over an 8-month period. At each of these home-based visitations patients were interviewed and data collected on each objective. Figure 1 depicts this design.

Figure 1: Subjects (Ss) as Their Own Controls

For each Ss (N=21) , per Objective :

Baseline - > Follow-Up1 - > Follow-Up2 - > Follow-Up3 - > Final Aggregate Score
Individual as well as group “trend lines” over data collection points are also constructed in this design to show both individual gains across objectives and the entire group performance. Where statistical or more sophisticated quantitative analysis is desired, regression will be used to quantify (i.e., predict) both individual and group gains. This particular strategy was not seen as applicable to these preliminary data but will be planned for in future analyses when more complete and robust data sets are collected.

Data was entered into an EXCEL Database (Microsoft EXCEL, Book 1, 2003). With the exception of those objectives addressing frequency (i.e., number of days missing school, number of visits to a provider), scores were scaled for interval level measurement. Results were graphically portrayed by objective for both individual patients and for the entire group. At time of submission for publication these data were not yet ready for this plan of analysis.
Each patient was assigned apriori a code number for anonymous identification and tracking purposes. The first patient recruited, for example is: h2010004, gender was coded m/f, status was a (adult) or c (child). Major program objectives and the specific value ranges for the cognitive measures are presented in Table 1.

**Discussion**

The increasing prevalence rates for asthma in the state of New Mexico, especially in its southeast quadrant, stimulated the current research and intervention effort. The
multifaceted aspects of this disease make effective and long-term management of asthma in both adults and children, problematic. Not only must parents and guardians confront the fact that asthma has myriad and synergistic causes (i.e., genetic, environmental, behavioral) they must also be motivated to control it by way of sustained medication. Moreover they must be carefully persuaded to remove and/or neutralize asthma triggers in the home. Recognition of these as well as related challenges is crucial to effective asthma control in low income families. The major barriers experienced by our team are summarized next.

**Medication.**

Many families are poor and lack health and/or prescription coverage. A large majority of these patients require “controller meds” but are unable to obtain them because they cannot provide proper identification (i.e., social security #, birth certificates). Moreover the county does not have the resources to assist these patients obtain these medications.

**Language.**

More than fifty percent of the families speak only Spanish yet our team only has one asthma educator fluent in Spanish. The result is that many families have to wait to see that asthma educator and thus many become despondent which leads to lack of adherence to her recommendations.

**Socioeconomic status.**

Recommending that families remove or neutralize asthma triggers is problematic: some are inexpensive such as replacing pillow cases and mattresses with plastic covers, which H-VAMP provides. Others however are very costly: leaky gas stoves, moldy floors and roofs, formaldehyde-leaking cabinets, each require substantial financial investment. For
low income families such expenditures inevitably take a back seat to day-to-day requirements. Additionally, at the present time county resources and regulations do not cover these improvements.

**Literacy & Education.**

Home visitations as a method for improving control of asthma is considered the state-of-the-art strategy for managing this disease. We wrote all educational and behavioral action materials at a fifth-grade reading level yet many families had difficulty following instructions particularly those involving medication use and care of their devices (i.e., cleaning spacers, inhalers). The frustration generated from such scenarios for both the patient and the asthma educator, ultimately impacts adherence negatively.

**Family Dynamics.**

While the majority of patients had supportive families, there were two who had spouses that were chronic smokers. One of these was persuaded to always smoke outside, away from the patient. However there was one family where the spouse refused to smoke outside or even away from the patient and this caused great stress and strain on both the patient and the asthma educator. The degree to which patients have support from their spouse and family in following the recommendations from the asthma educator remains one of the most important factors in successful asthma control using home visitations.

**Conclusion**

The H-VAMP intervention to help low-income patients in New Mexico effectively manage their asthma showed promise in its first year of operation. Ultimately we were able to recruit approximately 19 patients and collect baseline pulmonary, health behavior,
cognitive and residence-based environmental data. Follow-up data consisting of second and third home visitations is still in progress. These data have been exceedingly difficult to collect due to the multiple barriers that surround this unique health promotion target.

Programs aimed at asthma control in other states in the U.S. and specifically those designed for implementation in low-income and/or minority populations, will want to consider these barriers closely during the planning stages of their interventions. The overall feedback from patients and families on the benefits of participating in the H-VAMP program have been highly and consistently favorable. We have ongoing qualitative data being collected that documents this impression. The high costs associated with uncontrolled asthma in low-income populations demands that states invest in campaigns that motivate to patients to take preventive action. Such interventions must be designed and implemented so that factors of convenience, expense, benefit, relative advantage and most importantly, self-efficacy are optimized for patients in the program. Our program has established a sound base from which to achieve these factors and in the long-term accomplish effective management of asthma as a disease.

Postscript

A recent paper published in the *American Journal of Public Health* (Garcia-Retamero & Galesic, 2009), examined adults with low “numeracy” skills (i.e., lower comprehension of quantified information) and the degree to which such individuals understand and thus act on treatment “risk reduction” advice from their providers. It was suggested that health
care providers at all levels investigate new learning methods that help such patients better understand what specific medical recommendations (i.e., prescription dose/frequency) actually mean. One such method consists of using “icon arrays” which present quantified information graphically instead of numerically or in narrative form (p.2199). Such teaching/learning techniques are at the forefront of a growing research literature designed to help patients with all varieties of disease and disability better understand what medical as well as general health and prevention advice entails (Duryea & Hrncir, 2009).

The H-VAMP program staff has integrated this new teaching into each of their home visitations. Yet despite this innovation many cross-cultural barriers remain with low-income patients with chronic asthma and continual testing of how to best overcome them remains a research imperative.

References


Digital Self: Primary Students and Computer Art

By Jenny Evans

ABSTRACT

This study evaluates primary students, aged 6-11, exploring their creation of a digital and virtual self, while learning they learned positive uses of blogging on Facebook for a research study at a small computer art camp. Using action research as well as a pre- and post survey that evaluated the growth of knowledge in digital art, along with separate analysis of meanings and expression identified symbols, colors, feelings, and subject matter.

This study offers an opportunity to combine computers, art, learning, and playing. Campers learned to use MS Paint, Adobe Photoshop, and the Virtual World of Pet Society to create a digital self in a decentralized classroom. This study demonstrated that primary students are capable of creating meaningful digital art and a virtual self with professional, 21st century technology. The campers in their self-portraits established individual meaning.

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Purpose of Study

My intent with this study was to use spring break camp to determine whether primary aged campers (age 6-12) were capable of creating and editing meaningful digital and virtual art, while evaluating it via a social network. Experts, like Gude, state that art education must include helping students increase their capacities to make meaning (2008).

Following the theory that children learn by playing and experiencing, Gee (2009), stated, “Games and virtual worlds [microworlds] can allow kids to experience how the words [technological terminology] attach to the world and to experience it [virtual worlds]” (p. 7). This comparison contributed to ascertaining whether the art created by the students was meaningful.

Meaningful art is a broad term. This study used it in the simplest sense of the word that the campers explored. What do their pictures say without words? According to Rudolf Arnheim (1997), “Art is the capacity to express the nature and meaning of something through its sensory appearance” (p. 11). Another definition is “the ability to engage and entertain ideas and images; it is the ability to make use of images and ideas to re-imagine one's own life experiences. It is the ability to investigate and represent one’s own experiences” (Gude, 2008, p. 103). The art in this camp contains self-portraits.

The camp/study is about the self and by default necessary for the art to have meaning. Gude explained (2008) that the expression of the students’ emotions and feelings into meaning is necessary. Aesthetics matter because through aesthetic practices people make individual and collective meaning. Meaning making is the ability to utilize ideas and images, to re-imagine one's own life experiences in order to represent ones personal experiences (Gude, 2008).

As art educators, it is our job to introduce and engage our students to the techniques that
make or provoke deeply engaged experiences. In this study the campers connected meaning to expression by commenting on the virtual gallery.

**Research Questions**

1. What kinds of digital art can young campers ages 6-11 distinguish and identify?
2. What digital artworks can campers create and what do they mean to the campers?
3. What kinds of self-presentation (symbols, color choices, and patterns) do campers demonstrate when exploring digital identity?

**Methods**

Qualitative research is the collection and analysis of data in order to gain insights into a situation (Pitri, 2006). This study was qualitative and more specifically, used a participant observation approach. As a participant observer I taught, described, analyzed, and interpreted a class to fully understand it (Stokrocki, 1997) but also used an action research method to improve as a teacher from my participants.

Action research is a relatively new method of research in art education used to study teaching practice (Mertler, 2009), though it has been used in other fields. Margaret Riel (2007), and Ernest Stringer (2007) both used action research and argue that it necessary to evolve the teaching process. All styles of action research are cyclical with variations of study: action, analysis and reflection.

As recent as 2006, art education researcher, Sara McKay, challenged art educators to ‘live the question’ by encouraging participants to think broadly about sources of learning in art. Action research provides an opportunity to create situation-specific knowledge and is thus associated with qualitative methods. Other educators, such as Eisner (1991), Stout (1993), and
Sullivan (1993) agree that action research is natural to art education. Action research is describing a constantly changing educational situation, rather than generalized knowledge.

**Description of Program**

Campers (6 girls, 4 boys, aged 6-11) participated in a computer art camp in a decentralized classroom. The pre and post survey evaluated what the campers’ knowledge. There were four general lessons. They also completed one art criticism with the artwork that they chose from their virtual gallery.

A general and flexible outline is as follows:

- **Monday** – general introduction, with the pre-survey, lab etiquette, take photographs of the campers and follow Lessons: for Paint, for Opening a *Facebook* Account, and for *Pet Society*.

- **Tuesday** – begin Lesson for: *Adobe Photoshop* – Special Effects of Filters, continue with *Pet Society*, take additional class photographs, and continue social networking.

- **Wednesday** – begin Lesson for: *Adobe Photoshop* – Copy and Paste, continue in *Pet Society*, take additional class photographs, and continue social networking.


- **Friday** – complete comments, art criticism, all lesson plan requirements, post-survey, and share virtual gallery with parents.

Campers daily posted their digital art, comments on other students’ art, and responses to my questions posted via *Facebook*. I took digital photos and videos of the campers and uploaded them to *Facebook* to build the a library for the campers to use for editing during
camp. I created a secure Internet environment in order to ensure the safety of minors on the Internet and within a social network. I set up the entire social network, with privacy settings prior to camp. All parents signed a written consent allowing their children to participate in the study as well as be on the Internet and *Facebook*. I monitored the *Facebook* accounts for misuse.
Results

Description of Observations During Class

On Monday, the campers were introduced to MS Paint and Facebook following the MS Paint lesson plan and the Lesson Plan for Facebook. They completed self-portraits, some used the shape templates to create the roundness of the face while others drew it freehand with the mouse, see Figure 1 and Figure 2. The campers were quickly bored with limitations. They complained that they had done this type of art previously; this was not new to them. The campers were required to create at least three pictures, one being a self-portrait. Many did more than were required.

All of their artworks were posted to their virtual gallery within Facebook. Using the social network did not appear difficult. The campers quickly grasped the concept of “tagging” digital photos of themselves. By “tagging” the campers were identifying themselves in the digital photos or artworks, clicking on the picture and automatically attaching a label with their name. Campers made minimal comments in Facebook.

The introduction of the virtual world, Pet Society was a welcomed break from step-by-step learning of how to upload a picture to Facebook. The campers asked few questions, then explored the virtual space on their own. I challenged them to “dress” their avatar (virtual-selves). The second challenge of the day in Pet Society was to take a photo and post it to their virtual galleries, see Figure 3. All met the challenge. Many of the campers did not want to leave when the class was over at noon.

On Tuesday, I introduced Adobe Photoshop following the Special Effects Lesson. The campers noticed the similarities to MS Paint, the tool bars, the tools, the layout, and the menu bar. They were amazed at the simplicity of using the filters. Shouting out “oooo, aaahhh, you
did that with just one click!” After one five-minute demonstration, they were eager to try themselves. Students were required to edit at least three digital photos taken during camp, post them to their virtual galleries, and make comments on their own as well as others. All campers exceeded the minimum of at least three pictures, one camper made 13 variations. They quickly grasped the concept of “save as” and re-opening the original image to start the process again. They were eager to see what each other was working on and creating. The comments were easily made, see Figure 5. Grammar was not proper; complete sentences were a rarity; but the meaning was easy to interpret.

We also returned to Pet Society. They were required to take pictures of their avatar in their home, a friend’s home, and out shopping or around town. The Pet Society required that they work together rather than in competition, which is different than traditional games requiring competition, a winner and a loser. They were asking each other questions, such as where they got an item or so many coins, etc. I was only called for them to show me their progress, how they had redecorated, the fish they caught, or how the seed they planted turned into a tree. I was no longer the educator, but the spectator.

Wednesday, during transition time (drop off, sign in, etc), the campers explored an online program called Mr. Picassohead (www.mrpicassohead.com). This gave them the opportunity to create another self-portrait using tools based on the abstract designs of Pablo Picasso.

The campers were given a short ten-minute demonstration the Adobe Photoshop, copy and paste Lesson. They recalled finding an original digital photograph in the virtual gallery, saving it to the desktop, and opening the file in Photoshop. One picture, Figure 7, used copy and paste multiple times. Switching the heads of the boys to the girls was a very comical and
popular artwork, Figure 8. The boys were devastated when their heads were placed on a girl’s body wearing a dress.

*Pet Society* filled the final 50 minutes. The kids focused on checking on pets, petlings, planted seeds, friends, and the newest things in the shops. There were several image changes to their avatars. Today the theme was green, mostly due to St. Patrick’s Day. Some changed their color; others just changed their clothes. There was collaboration between campers on how to best achieve status or coins. The challenge today was to capture a picture of a special place in the Pet Society, post it in the virtual gallery, and explain why it was special. Unfortunately, camp ended before all could complete this task.

Thursday, the campers spent some time tagging digital photos that were taken the previous day. Campers were asked to select one image of their choice to work with in *Photoshop*. The challenge today was to use the copy and paste technique and apply a filter. Most of the campers saved the work by doing a “save as” after each copy and paste or filter process. When they posted their images to the virtual gallery, it documented the progression of their creation.

Friday the campers completed the post survey, and were asked to select from their virtual gallery “the best picture EVER.” It could be created with any of the software used during camp. I then asked verbally the following questions: “On the first comment line please describe your picture (what do you see), on the next comment line tell me what kinds of art do you see (colors, patterns, etc.), on the next comment line write what does it mean (the symbols, colors, shapes, etc.), and finally on the last comment write how well was the picture made and why.” There was a lot of prodding on my part to get them to respond with more than four words. I had to make a rule that the comments had to be at least five words in length, in order
to prevent them from saying: “it’s me, it’s cool, or I like it.” They appeared to want to work with Photoshop more than write comments.

Seconds upon completion of the art criticism, they quickly selected a picture to work with in Photoshop. I noticed that they used copy and paste and filters. They took risks (more extreme variations of the filters). In one image the camper copied herself six times, and used a different filter for each one, plus a filter for the background, for example: canvas, blur, neon, outline, and sketch. Other campers even used the drawing tools to add in their own graphics.

The campers spent the final hour in Pet Society. They were eager to share with each other “tricks” to getting around or finding the most coins or points. When their parents arrived the campers shared their virtual galleries, taking the time to explain how pictures were made, where the picture was taken, or why they chose that specific picture to alter and change.

Using action research posed its own challenges. At times I was pulled in either the direction of the teacher or the desire to collect data as the researcher. There were times when I was about take a picture when a camper called out my name, requesting assistance or wanting to share a new discovery. In this case documentation was lost in order to continue teaching. It would have been easier to have a third party in the room to document or a video camera set up in the back corner of the room.

Data Analysis

Responses from the pre survey identified the existing digital knowledge of the campers. All of the campers used computers; however, 91% use computers at home, 58% at school, 41% at the library, 25% local community center, or 16% at a friend’s house. Overall, 75% said that they created digital art, yet, when asked what digital art was 16% incorrectly identified it as
drawing and painting. The majority of campers 91% said it was art made on a computer, including 16% cartoons and eight percent pictures from a digital camera.

Campers responded to what a virtual world was with 58% as a computer game, or not the real world (66%). The campers stated that 66% visited Webkinz, 33% Club Penguin, 33% Neo Pets, 25% Barbie Girls, 16% Toontown, and 58% said they visited one that was not listed.

There were four types of artworks; digital art, pencil sketched art, painted picture, and a digital photograph. For each question, the campers were asked “Can you guess how this was made,” and given multiple-choice answers of the four different types of art. These questions would specifically answer: what kinds of digital art processes can campers ages 6-11 identify.

When the campers saw a digital drawing, 66% correctly identified that it was created on the computer. While the remainder 33% that thought it was painted picture. For the pencil drawing, 83% correctly identified it as drawn with pencil. When presented with a traditional painting, I thought the campers might be confused as technically it is a digital photograph of a painted picture. Eighty three percent correctly identified the painting as a painting. Finally the campers were presented with a digital photograph. One hundred percent identified the digital photograph correctly.

The post survey used the same four types of artworks. The campers were again asked “Can you guess how this was made,” exactly like the pre survey. These questions were designed to specifically answer: could they correctly identify digital art after spending a week in computer art camp. There was evidence of improvement in identification of digital art (36%), pencil drawing (20%), and painting (20%). Participating in camp assisted the campers in identifying different types of art.
In addition to art identification the post survey also included defining digital art. Campers defined digital art as art done/made on the computer (90%). When describing a virtual world, 81% responded “fake, not real, or on a computer.” There were questions about their avatars, (see Table 2); name, color, why that color, why that clothing, if they went to the style shop, and what did they change? When describing themselves seven mentioned the color while four listed emotional descriptors (happy, sweet, and cool). Clothing and outfit styles were chosen because of personal preference, regardless of cost. None of the virtual selves were naked. They responded that their virtual self was that specific color due to their favoritism of that color; none of the campers selected a color that matched their natural skin tone. Seven of the campers altered their avatar in the Style Shop during the week by changing a body part (eyes, ears, nose, mouth, head shape, or decorative symbol), while two changed their names. All of the other items visible the campers have purchased with their coins or earned by completing tasks, most left them in their room visible for all to see. Four of the campers included pictures of their “egg collection,” due to the spring season. There was not a dominant colored avatar, all were different from each other.

The post survey also asked the campers’ opinions about software, challenges, and enjoyment. The favorite software of all of the campers was Pet Society (63%), Photoshop (48%), Facebook (27%), and MS Paint (18%). Four campers noted having difficulty with Facebook. All of the campers (100%) responded that they enjoyed camp.

Analyzing the campers’ artworks and their meanings was key to this study to determine what the artworks mean to them and their symbolism. Table 2 satisfied the requirements for Feldman’s art criticism: describe, analyze, interpret and judge. The campers were unaware that they were doing an art criticism, they just responded to the questions asked. In reviewing
the art criticism, meaning seems minimal, yet it is there with statements like: “double friends and double me” or “who I want to be.” The campers shared what is important to them, what they thought was cool, who they wanted to be. For example, this student in Figure 9, not only describes the location of this picture, but also why he is “proud” of this picture. Not only is he collecting, but also he is 66% done with his egg collection, which in this game, in two days is a feat of luck that none of the other campers achieved. Yet, in his post he is not taunting or teasing the other campers.

This camp took place during the week of March 15th. This included St. Patrick’s Day, the first day of spring, and the middle of Lent. This was visible in the virtual world, *Pet Society*, but not reflected in any of the other art. Other variations included totally transforming the original image to be completely unidentifiable, Figure 10. The camper would not “tag” anyone in the photo and left a caption of “guess who?” Responses would lead to guesses of not only whom the mystery person was but also which filter was used to create the artwork.

One camper posted Figure 11, in her virtual gallery. It was obvious by the end of the week that she loved pets. She not only posted it in her virtual gallery, but also took it upon herself to make sure that if another camper had petlings (virtual pets for their avatar) that they took care of them, fed them, and did not lose them. She would post status reminders for the sake of the petlings. She carried her love of pets into the virtual world, making that her communal cause.

In Figure 12, the camper defended her pink spiral on her forehead as something cute and to match an existing mark on her forehead in reality. It is a representation of her, but not her exactly. She has a pet at home (in the real world), the same exact pet is not available in the virtual world, so she took another pet, a cat. Having a pet is important to her. She took
liberties to explore and try new things to improve her self-image. Throughout the week she tried several hairstyles, in various colors, a few different pairs of glasses, even her outfits changed, but the spiral on her forehead remained there the entire time.

What does this mean?

From the first minute of camp, the campers were on the computers using technology. We went through general instructions of opening a program, logging in to the social network, and uploading pictures. The repeat of those instructions was not necessary the remainder of the week as the campers completed the task without additional instruction. Couse and Chen (2008) found similar results when they studied young children’s (3-6 yr.) investment and motivation in learning using Tablet computers.

Ongoing throughout the camp, I also noticed that the campers were teaching each other. When students discovered something they announced an invitation to all campers to come over to their computers so they can demonstrate how to do it. Ryan Shin (2010) had the same experience stating “the digital world does not emerge from a vacuum state without having relationships… in a digital world people are connected, supporting and critiquing each other in the social context of their technologies”(p. 39).

Campers’ verbal communications during the week were similar to their posted comments. They shared their discoveries with each other rather than quietly keep it to themselves. There were other instances where a camper would ask “how did you do that?” Thus providing the opportunity for one camper to demonstrate to another camper on the desired effect was achieved. Catchings and MacGregor (1998) found a similar results stating, “Letting each student tell the group about her or his favorite effect and how to achieve it
provides a great way for them to learn more about the program and it encourages the collaborative tendencies that are paramount to the successful use of this medium” (p. 23).

**Gender Differences**

It is interesting to note the difference between genders. When looking at the examples in Figure 13 and Figure 14, anyone could almost guess as to which was created by a boy or a girl. But this gender specific style is only visible when the campers used the *MS Paint* software. When just using the filters or copy/paste in *Photoshop*, the gender differences are harder if not impossible to notice. Within *Pet Society*, the gender differences are obvious as the girls chose to wear dresses and the boys wore pants or shorts (one wore a tire).

**Age Differences**

When comparing the differences with age, the youngest camper was six and the oldest was eleven. Developmentally there is a large gap. One is just learning to read while the other is beginning puberty. In the first example, Figure 15, the youngest camper uses multiple techniques of a special effects filter and a painting tool. His title was “two mes,” meaning that in the original that he used the liquefy filter and the digitally painted version of him as well. Neither portrait is flattering or truly identifiable by the viewer. Figure 16, by the oldest camper was completed using multiple filters (the pixelating and the pencil effect). The digital outcome highlights the young lady, is flattering, and identifiable. She clearly wanted a nice digital artwork of herself that viewers could identify.
Conclusions

Primary students in this study, when given the opportunity to learn digital editing technology, are capable of creating meaningful digital pictures and using a social network responsibly (they chose the “be kind” rule). The children in this study excelled at learning in a decentralized classroom. They quickly met the requirements and went on to investigate the software and meet their own personal goals of exploration.

The first research question asked ‘what kinds of digital art can young campers ages 6-12 distinguish and identify?’ The survey demonstrated improvement. Previous studies by Unsworth et. al, (2005) and Slovie and Kloek (2007) also documented that children, under the age of 12 are capable of using computers, reinforcing this study. Thomas (2005) also studied children online. In her study, children, aged 13 learned how to use the online environment without an expert or educator. Marsh’s (2009) study with children aged 5-11, in Club Penguin, stated that 52% of the 175 children used virtual worlds on a regular basis. According to the pre-survey, this camp had different results. One hundred percent of the campers stated that they previously used a virtual world.

Research question two focused on meaning in the campers’ artworks: ‘what digital artworks can campers create and what do they mean to the campers?’ The campers utilized a variety of software in a progression allowed each lesson to build on the previous lesson. This created inquiry and invited the campers to be curious to learn more.

The art criticism questions were part of the data interpretation to obtain meaning. According to Gude (2008) a core concept of art education is students’ need to increase their ability to make meaning. Meaning-making is the aptitude to employ and think about ideas and images; the ability to make use of images and ideas to re-imagine one's own life experiences;
the ability to examine and symbolize one’s own experiences, to enhance students' abilities to engage, to analyze, to apprehend, to make, and to enjoy. These campers spent a week exploring their identities. Most of the students presented themselves in the moment. For example, if they were feeling sad, they altered their virtual self to be sad.

Figure 17 illustrates the expression of emotion. She is happy, giggling, she is in her favorite color, and her fellow campers concur that she is cute and laughs a lot. She was happy to be in a virtual world that she could easily manipulate. Later in the week, she posted the second image. She is clearly not happy, perhaps pouting even. She even takes the time to caption her photo and explain, “I am sad. I have no coins to shop.” Most campers followed the adage, ‘what you see is what you get.’ They were not looking to be something that they were not. They were just being themselves, making friends, and being cool.

These campers had individual meanings when exploring their identities. What is key here is to note that they were capable of expressing themselves and what was meaningful to them about their personality, lifestyle, pets, virtual collections, and culture. Karen Murphy (et. al, 2003) also concluded “images can lead children to discuss the events with adults and peers and then perhaps use them as a basis for writing, drawing, or other form of processing and expression” (p. 3). Drawing about their identity is another possible stepping stone in discussing it with parents, teachers, or counselors.

Leigh and Heid (2008) stated that children find comfort and greater ease in expressing themselves when drawing. Drawing is an opportunity to allow children to open up and share themselves with others. By exploring their art, we can learn what part of their culture is important to them and what they are willing to share. Educators can teach how the culture is shaped and how to shape the culture by providing the students with the tools of contemporary
aesthetic investigation. Through such signifying practices individuals make meaning of their lives and they make purposeful meaningful lives (Gude, 2008).

The third research question asked: “what choices of self-presentation (objects, color, and patterns) do campers demonstrate when exploring digital identity?” Girls were typically in dresses, with a bow or flower, while boys selected hats and pants. All of the items in their homes (with the exception of the items provided) were purchased and displayed by them, for example, their egg and pet collections or the trophies that they had earned. They most commonly chose room 1, to put their favorite or most important items in, which is the entry point to their house and the first room a visitor would see.

Campers had no problems creating pictures of their identity or a virtual self. For example, this camper posted these five portraits, Figure 18. All of the pictures, though created with different software, illustrate the same general statement about the same camper. She is feminine, and loves the color pink. Even at nine years old this camper knew what part of her personality she wanted to illustrate and share with others.

The virtual gallery within Facebook allowed students to see each other’s pictures in real time. As soon as they were created, they were posted for viewing and evaluation. A virtual gallery extends the exhibition experience beyond the physical space. Exhibiting student artwork completes the artistic experience. A virtual gallery provides opportunities for other people—teachers, classmates, students, school staff, and the public not only to view, but also appreciate, and praise student artists. Burton (2010) stated that, this contemporary gallery format “also creates venues for critique and discussion that would not be possible otherwise” (p. 48).
During this study campers did not receive a grade or were not forced (no consequence if not completed) to complete the requirements of the camp, yet every camper exceeded the requirements. What were their motivations if there was no incentive? These campers communicated, learned, played, posted, and taught each other without a dangling carrot. This kind of motivation is intrinsic motivation, coined ‘Motivation 3.0’ by Daniel Pink a 21st century philosopher, defines intrinsic motivation as “for artists, scientists, inventors, school children, and the rest of us, … it is the drive to do something because it is interesting, challenging, and absorbing – is essential for high levels of creativity” (2008, p 46).

Additionally, action research also needs to continue in the field of art education. Action researcher McKay (2006) challenges art educators to continue to inquire into the unknown, to continue to explore the new and unknown, to make new connections and reveal new knowledge about teaching and learning in art. The more educators know the more they can teach and share. “The goal is to work towards a better understanding of their situation in order to affect a positive personal and social change” (Riel, 2007, p. 1). Action research is a challenge. It is a give and take process of teaching and documenting, but the challenge is to do both to improve education.

Art, technology, and children are the seeds of our future and when carefully grafted together each cause the other to grow in unexpected and random ways furthering their potential and the impacts on future seedlings. As Aristotle once was quoted, "the whole is greater than the sum of the parts.” We, as a human race, need all of them, if we neglect any part, it's to our detriment. Everyday we are preparing children for jobs of the future. The careers of the twenty-first century work are more challenging, more creative. “Solving challenging problems requires an inquiring mind and the willingness to experiment one’s way to a fresh solution… it
Bibliography


Figures

Figure 1: *MS Paint* Freehand Student Example

Figure 2: *MS Paint* Template Student Example

Figure 3: *Pet Society* Example

Figure 4: *Photoshop* Special Effects Example with a pink outline filter

Figure 5: *Facebook* comments example

Figure 6: *Mr. Picassohead* example

Figure 7: *Photoshop* cut and paste example

Figure 8: *Photoshop* head switch example
Figure 9: Pet Society Example of meaning in comments

Figure 10: Photoshop “guess who” example

Figure 11: Pet Society cause

Figure 12: Pet Society self presentation example

Figure 13: Photoshop artwork by female camper

Figure 15: Photoshop artwork by youngest camper

Figure 16: Photoshop artwork by oldest camper
Figure 17: Pet Society examples of mood expression

Figure 18: Self presentation, *MS Paint*, *Photoshop*, Pet Society, *Photoshop*, and *Mr. Picassohead* by the same camper
ENHANCED-GROUP MOORE METHOD: EFFECTS ON VAN HIELE LEVEL OF GEOMETRIC UNDERSTANDING, PROOF-CONSTRUCTION PERFORMANCE AND BELIEFS

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Paper Description:

This is the first study that tried using another variation of the Moore’s Method on college students named as *Enhanced-Group Moore Method*, when it was originally meant for graduate level of students. Results revealed an increased van Hiele level of geometric understanding and proof-construction performance of the future mathematics teachers. The students' agreement on beliefs about proofs provided useful information for the difficulties encountered in doing proofs.

ABSTRACT

This study aimed to improve the van Hiele level of geometric understanding, enhanced proof-construction performance and determine the beliefs about proofs of the future mathematics teachers using the Traditional Method (Instructor Based) and the Enhanced-Group Moore Method. The impact of the two teaching methods was analyzed to find out which would yield better results in terms of van Hiele levels, beliefs about proofs and proof-construction performance.
The study used the quasi-experimental method of research and employed qualitative and quantitative analysis. The only section of Bachelor of Secondary Education (BSEd) major in Mathematics students (20) officially enrolled in Math 233 (Plane and Solid Geometry) at a State University in the Eastern Visayas was the subject of this study. These future teachers were alternately distributed into two groups (control and experimental) based on their ranked mean grade on their prerequisite subjects (Basic Mathematics and College Algebra). The two groups were comparable in terms of their mathematical ability.

The study used three instruments, the van Hiele Geometry Test, the Proof-Construction Test and the Proof Beliefs Questionnaire.

Within the framework of the limitation of the study, the Enhanced-Group Moore Method raised a higher van Hiele level (from level 1 to 3) of the future teachers compared to the Traditional Method (from level 1 to 2). The proof-construction performance of the prospective mathematics teachers was improved from clueless to intermediate which was better compared to that in the control group (from clueless to novice). In regards to the future teachers’ beliefs about proofs, they believed that a theorem has no exception, the dual role of proof is to convince and to explain and the validity of proof depends on its internal logic.

Quantitative results revealed that there was a significant difference on the van Hiele levels and proof-construction performance of the future mathematics teachers before and after the study. The future teachers exposed to the Enhanced-Group Moore Method yielded better results in terms of van Hiele levels and proof-construction performance compared to that
exposed to the Traditional Method (Instructor Based). In addition, there was a
significant relationship between the proof-construction performance and van
Hiele levels of the future teachers and no noteworthy changes occurred on
the future teachers’ beliefs about proofs.

Moreover, qualitative assessments showed that the Enhanced-Group
Moore Method creates “damay effect”, develops self-confidence, effective
communication, and exchange of ideas towards a common goal. It also
develops the values of sharing and helping others and both groups expressed
their difficulties in proving theorems attributed to poor prerequisite skills. They
prefer the two-column form of proof associated to direct proof compared to
paragraph form which they associate to proof by contradiction. The future
teachers from both groups were in favor with the sequence of the presentation
of the lesson and especially to the incentives given.
Access to UK higher education via a Life Sciences Foundation year at University of Manchester.

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The Life sciences foundation year at Manchester University is designed to cater for students from a wide range of educational backgrounds and each application is considered individually. Students include those that have studied arts, languages or social sciences previously and have decided that they wish to pursue a degree in biosciences and those that have slightly underachieved in their school science exams through no fault of their own. Applicants are also accepted from non-UK establishments and those returning to higher education. Relevant experiences in employment, together with any previous qualifications, are taken into account for students returning to study after a period away from it.

This one–year programme covers common core units in biology, chemistry and mathematics. Following successful completion of the foundation year, students have a guaranteed place on the first year of any of the Faculty’s 3 and 4yr undergraduate degree programmes.

To cope with the problems of such diversity, the academic year consists of maximum exposure to small class teaching and continual access to tutorial help. Assessment is by frequent, short tests, practical write-ups, followed by end-of-semester exams. A student initiative for self-help groups has been supported with a mentoring scheme. The progression onto a Life Science degree programme demonstrates the successful achievement of this foundation year for these students and past students have shown excellent progression at degree level and onto postgraduate course.
1. Title of the submission.

**Health Care for America: A Grass Roots Health Care Campaign**

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6. Abstract:

   Health Care for America: A Grass Roots Health Care Campaign trained local university students to perform basic vital signs (blood pressure, heart rate, respirations). Once trained (tested and proficient status acquired) students provided a free door-to-door canvassing in an underserved, high-risk multicultural population in a central Illinois community. The final phase of the project
consisted of student and community member feedback obtained in an effort to identify successes and barriers.

This session provides an in-depth look at the implementation, methodology, results, and future plans for of this unique health promotions project. Attendees will be asked to participate in an experiential activity that conjures up creative ways to influence citizens of rural communities to utilize preventative health practices.
Shifting from a culture of deficit-thinking to a culture of success for all

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Abstract: A culture of success is the conditions and campus culture which must be established in order to promote optimal learning for all students and move toward closing the achievement gap. This qualitative study was to examine the attitudes, values, beliefs, professional practices, and professional behaviors of an area superintendent and two principals and to measure their impact and effectiveness in closing the achievement gap. During the course of this study the researcher examined strategies that diminished low expectations and deficit-thinking in school leadership and in the teaching staff, which produced high achieving students.
Leveling the Playing Field: The Normed-Opportunity Paradigm

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Abstract:

In order to begin the enormous task of truly providing a quality education for all students, we must examine our own values, beliefs, and practices. We must also begin to shift our outlook so that we can truly meet the students’ needs. The first step is to accept the student where they are, rather than expect the students to come prepared to meet our dominant culture ideals. No student has the same life or educational experience; this is not to be viewed as yet another difference or excuse or label to be used. This is really to begin to understand how unique it is to educate students in the 21st century versus the 20th century. The Normed-Opportunity Paradigm can begin to provide a framework so that we are able to evolve past the Deficit-Thinking Paradigm.
What's the Story?

A Study of Novice Teachers’ Narrative Understandings of Classroom Events
Kathy Carter and Kathy Stoehr, University of Arizona
Teaching, Language and Sociocultural Studies

Purpose of Paper

The objective of this paper is to report the most recent results from an ongoing, multi-year research initiative at a large Research I University in the Southwestern United States. The purpose of this line of inquiry is to learn about how novice teachers develop narrative understandings of teaching. In particular, this study explores the cognitive understandings and personal sense-making strategies used by novices to “story” the classroom events they routinely observe in the field.

The present paper is an analysis of the written well-remembered events and spontaneous stories told and recorded by a diverse group of 307 elementary and secondary preservice teacher education students during the first semester of their fieldwork and professional preparation sequence. The qualitative analysis of the content of these narratives focuses on the identification of basic story structures, themes, and meaning attached to these stories from the field. The most recent findings, to be presented in this paper, address some important, emergent, and heretofore unexplored issues in preservice teachers’ narrative understandings of teaching; these issues include considerations of audience, advice, and authenticity. This close examination into preservice teachers’ images of classroom events and schooling opens
questions for further study. In addition, the findings also provide promise in helping a teacher education community develop curriculum and tasks in narrative forms of pedagogy which allow both novice and practicing teachers to confront and reflect upon their personal and developing “storied” sense of classrooms within a professional community of meaning.

**Perspectives/Theoretical Framework**

Learning to teach is a pervasive and continuous process in the lives of teachers. As children, would-be teachers acquire cultural norms and expectations about schooling, and for long periods of time, they observe teachers at work. Basic knowledge and beliefs about teachers, teaching, curriculum, and learning are thus accumulated early. Later these conceptions and attitudes are shaped and refined through a variety of formal and informal experiences as teachers prepare for and enter the profession and as they develop through their careers (Lortie, 1975; Ovens & Tinning, 2009).

Despite general agreement that teachers’ understandings are fundamentally important in teaching and that these understandings change over time, much can still be learned about what teachers come to comprehend about teaching processes, their students and the curriculum, especially as they enter the field and begin to situate their knowledge in the complex settings where they will one day work.

In recent years, researchers have begun to explore the utility of a research framework which uses narrative methods in order to focus more explicitly on
what is learned, how that knowledge is acquired, and how observed classroom events are “storied” by novice teachers (see, for example, Carter, 1993, 2007, 2009; Carter & Doyle, 2003; Gudmundsdottir, 1997; Munby & Russell, 2001). During these years, and thanks to an active research community in teacher education, much has been learned about the promise of story in our attempts to understand teaching and teacher knowledge. Even so, the years have shown us not only promise in attending to the storied nature of teaching, but we have also come to understand that much still needs to be learned about the nature of story and its value to the educational enterprise.

In teacher education, much of this work on story has centered on the use of cases (Munby & Russell, 2001), teachers’ curriculum knowledge (Gudmundsdottir, 1997), and teachers’ life history (see, for example, Elbaz-Luwish, 2001). It is important to note, however that the teachers’ stories referred to in this tradition are still, for the most part, stories told to researchers or for research purposes rather than stories authored and shared spontaneously in an attempt to describe classroom life and the impact of one’s educative experiences. The present work is a gentle point of departure from earlier modes of inquiry as it aims to look closely at self-selected and spontaneous stories told by novices early in their professional coursework sequence and experiences in the field.

Data Sources
The sample for this study included both written and spontaneously told narratives of 307 students enrolled over a 2 1/2 year period in 10 sections of an introductory general teaching methods course offered at a large Research I University in the Southwestern United States. Nearly 65% of these students were female, 35% were minority group members, 20% were bilingual, and a wide range of both elementary and secondary teaching majors were represented.

**Methods and Context**

Participants in this study were enrolled in the first course in the teacher preparation professional sequence. This course focuses on general methods of teaching and classroom processes and instruction. Attached to this 4-unit course is a 45-hour field component, where students are provided various assignments aimed at reflection on course content and its application to teaching events. Two major assignments were designed with a narrative focus in mind: (1) well-remembered events (WRE’s) from the field (written and detailed descriptions of well remembered events of preservice teachers’ own choosing from their field-placement observations and/or teaching); and (2) detailed logs of stories related to schooling that preservice teachers spontaneously told to identified others during the semester. In addition, students kept descriptive journals of actual advice given them by individuals who listened to their stories. Finally, students were asked during each of the 14 weeks in the semester to select one narrative from their written well-remembered events or from their story logs to “retell” verbally to colleagues in the class. For purposes of this study,
these well-remembered event narratives, spontaneous story logs, and oral retellings were reviewed and carefully analyzed in order to identify the basic story structures (characters, sequence, plot, pattern of action) embedded in the texts. Using iterative and thematic qualitative analysis techniques, including constant comparison methods (see Bogdan and Biklen, 2006), attention then turned to the documentation of thematic elements in these stories, to the choices of the audiences with whom these stories were shared, to the students' reflections regarding the purpose in and the veracity of their oral retellings, and to the nature of advice given by the varied audiences who listened to preservice teachers' stories.

Results

In this work, we have begun to uncover and define some significant genres (such as “humiliation” and “victory and elation” narratives, “bumpy moment” classroom stories, “in the trenches” stories, personal stories of teaching fatigue and frustration, and “sheer joy of it” teaching narratives. Importantly, we have learned that the emergence of decidedly different genres of stories is loosely connected to temporal boundaries of the semester. For example, the results of this analysis suggest strongly that during the first few weeks of their field experience, preservice teachers regularly anchor their conceptions of teaching and learning in relatively simple story structures that are imbued with either powerful personal feelings of humiliation and pain or high levels of individual elation and triumph. By mid-semester, this genre of stories became noticeably
less in number. In their place, other stories emerged, suggesting a possible shift in interpretive lens, which ran parallel to expected increases in their fieldwork/classroom involvement. The majority of stories told in the midweeks of fieldwork were stories that clearly captured many cognitive complexities of classroom life for which they felt unprepared. Story genres in these weeks primarily involved two types of narratives: (1) “bumpy moments” and (2) stories of surprise and revelation in classrooms. This “bumpy moment” genre was a prolific period of storytelling for new teachers; reviews of story logs indicate that each teacher candidate told these stories more often than any other genre. Also prominent in this time period were stories which revealed preservice teachers’ shattered preconceptions, loss of idealism, and their feelings of cultural dissonance. These types of stories carried through the semester, with only a few new themes appearing in novice teacher stories late in the semester. Nevertheless, about 15% of students shifted to telling stories which were characterized by relatively more complex characterization and plot structure. Themes for these stories were: (a) “stories of repair” during difficult classroom events, “something wonderful happened to me today in class” stories, and “stories of sage advice” and “so much to learn.”

Finally, this study illustrated that for the most part, preservice teachers’ stories of teaching rarely find their way to the conversational floor in the teacher education professional sequence. In other words, a central body of novice teacher narratives are told to trusted audiences (significant others, spouses,
parents, and siblings), but are not often shared with teacher educators, university mentors, or supervising teachers. Following an iterative and careful analysis of preservice teachers’ records of reactions and advice given to them by “outside others” a number of potentially worrisome findings emerged. Across all of these “outside other” audiences, the central pattern of reaction was often directed toward lesson-like, single answer simplification of novice teachers’ stories. Indeed, one prominent finding was that the typical “outside” audiences who heard their stories often offered unsolicited directives to novices about how to get “authority” and “control” or how to achieve quick fixes to complex classroom dilemmas. Other regular patterns of outsiders’ reaction appeared to be rooted in gender-based expectations and relational roles. For example, themes of advice given to young female preservice candidates by male outsiders (such as fathers, older brothers, and boyfriends) were often reduced to simplifications based on protective concerns about the female preservice teachers’ age, physical appearance, and body shape and size. In short, reactions were not often about the teaching story itself, but rather were enveloped into deeply felt personal worries for the preservice teacher. Dated indicated that mothers of preservice candidates were the most commonly selected audience for preservice teachers’ stories. Importantly, thematic features were also present in mothers’ advice. Most prominent was a collapsing of the many narrative details of managerially difficult classroom events into an impromptu commentary on the lack of quality parenting. Preservice teachers
noted that their moms often circumvented the story to express their pride that their son or daughter was raised differently and therefore never behaved in such a “despicable” manner during school. Established patterns of personal reaction were also found to exist for other audiences (siblings, roommates) and will be described carefully in the paper.

Finally, data analysis resulted in a careful examination of the possible effect of audience on the expressions of preservice teachers’ narrative understandings. Results from the present analysis clearly indicate that rich and complex classroom stories are regularly reshaped into comparatively simpler ones, largely as a result of the demands to receive and attend to advice from personal and/or available audiences. This reshaping obviously has worrisome implications for authentic and careful reflection about classroom events.

**Educational Importance/Implications**

The completed analysis of the various genres of stories written and told by preservice candidates appears to have captured a portion of the distilled experience of teacher education students as they enter their preparation journeys. In analyzing these stories, it became clear that one possible peril embedded in fieldwork is that the reflection, accomplished alone and without conversation in a professional community of meaning, runs the risk of singular interpretation and a reconstruction of events with a personal bias to present oneself in a certain light. When confined to outside advice and purely personal reflection, then, preservice teachers run the risk of egocentric understandings
and may not be able to position their thinking in the professional perspectives of others, in moral or pedagogical dilemmas, or in contexts of systems, politics, and other contexts of meaning.

In summary, despite recent efforts exploring the use of narrative in teacher education, the question remains to be seen whether or not we as a community of teacher educators and scholars can revisit our pedagogical practice to encourage, through the use of story, communities of professional conversation and communities of meaning. In these contexts, story may still hold promise to open new interpretations of teaching, interpretations which better represent the complex work of teaching, the moral and social dimensions inherent in this work, and the memorable impact of judgment, analysis, and action in classroom events.
References


**PAPER FOR PRESENTATION AND PUBLICATION**

1. **TITLE OF THE SUBMISSION**

DEVELOPMENT AND VALIDATION OF AN INTERDISCIPLINARY MANUAL FOR USE OF PARENTS, TEACHERS AND HEALTH PROFESSIONALS IN THE EDUCATION OF CHILDREN WITH CHRONIC ILLNESS (CWCI)

2. **NAME OF THE AUTHORS**

3. **AFFILIATION OF THE AUTHORS**

4. **ADDRESSES OF THE AUTHORS**

5. **E-MAIL ADDRESSES OF THE AUTHORS**

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6. ABSTRACT AND/OR FULL-PAPER

ABSTRACT

This research is a three-phased descriptive and quasi-experimental study with an ultimate goal of developing an Interdisciplinary Teaching Manual that can be used by parents, teachers and health professionals to promote therapeutic healing of children with chronic illness (CWCI) through enjoyable education with incidental cognitive and psychomotor benefits.

The first phase of the study gathered baseline data on the demographic, health condition, learning / education, psychosocial and support system characteristics of CWCI which were used as springboard in analyzing the educational needs of these children. Moreover, the study also investigated on the practices of the interdisciplinary team members specifically the parents, teachers and health professionals in the education of CWCI which is crucial in achieving successful educational outcomes. Four research questionnaires were developed and validated to gather data from four groups of respondents comprising 80 CWCI, 80 parents of CWCI, 14 teachers and 28 health professionals handling CWCI. CWCI respondents of the study belong to 3 to 9 age group either confined or has regular outpatient check-ups because of their illness in the following six major hospitals serving as research locales, namely: a.) East Avenue Medical Center (EAMC) in East Avenue, Quezon City, b.) Fe Del Mundo Hospital (FDH) formerly Children’s Medical Center in Banawe, Quezon City, c.) National Children’s Hospital (NCH) in E. Rodriguez, Quezon City, d.) Philippine Children’s Medical Center (PCMC) in Quezon Avenue, Quezon City, e.) Philippine General Hospital (PGH) in Taft Avenue, Manila, and lastly f.) Philippine Orthopedic Center (POC) in Banawe, Quezon City.

Based on educational needs of CWCI realized in phase 1 of the study, and with special focus on the psychosocial characteristics of these children, the second phase of the study commenced as the researchers developed a manual that can address the special needs of the CWCI. The manual was validated by ten experts belonging to the field of special education, pediatric health care (i.e. developmental pediatrics, pediatric internal medicine and oncology, family medicine and pediatric nursing), rehabilitation medicine (physiatrist and physical therapist), educational psychology, research and administration.

In an attempt to further test the effectiveness of the manual in addressing the psychosocial needs of CWCI, the CWCI and parent respondents of the study were divided into control and experimental groups where the CWCI of the latter were given copies of the manual for utilization and monitoring. The CWCI experimental group was given at least three weeks of continuous manual use or at least a completion of ten manual activities prior to being post-tested for changes in psychosocial characteristics.

The third and last phase of the study involved the post-testing period wherein both the control and the experimental groups were made to answer the psychosocial characteristics part of the questionnaire used in phase 1 of the study. Results of the pre-test and the post-test scores for both control and experimental groups of CWCI and parent respondents were compared using t-test of paired samples.

Overall, results revealed that CWCI are faced with multifaceted challenges brought about by their health condition and other related socioeconomic factors. They are faced with health, cognitive and psychosocial issues that affect the quality of their lives including their family. Health and psychosocial issues intertwine to produce problems concerning school attendance, learning and cognition as well as intrapersonal and interpersonal relations of CWCI. Depressed health and emotional being of the CWCI contribute to daily activity limitations, including those in school that result eventually in pressing further psychosocial issues with the child including his/her family.
CWCIs, their parents, teachers and health professionals consider education and learning of CWCIs as a positive impetus for the well-being of CWCIs. Specially noted are those therapeutic teaching activities that improve the psychosocial characteristics of CWCIs like art therapy, play therapy, music therapy and drama/role playing. And considering such premise, the interdisciplinary teaching manual, which can be used by the parents or health professionals involved with the CWCIs even when the child is required to stay at home or be confined in the hospital, which was developed and validated in this study was proven effective in improving the psychosocial characteristics of CWCIs based on an improved post-test psychosocial scores in both intrapersonal and interpersonal psychosocial characteristics.

FULL PAPER SUMMARY

Chapter 1
INTRODUCTION

Background of the Study

Because of medical advances children with chronic conditions who decades ago would have died as a result of their condition are now surviving (Jackson et. al., 1992). The number of this diverse group of children is increasing in the classroom. Their needs pose a challenge to schools. Children with chronic health conditions are more likely to miss days from school (Sangler et al., 1991 in Bessel, 2001); experience school phobia and school avoidance that can cause re-entry problems (Lansky, et al., 1975 in Coniglio & Blackman, 1995); need specialized health care; require special education services or homebound teaching (IDEA, 1997); and experience psychosocial challenges that hampers the child’s concept of self (Paguio, 2005, Bramble & Curk, 1998, Falvo, 1999, Livneh, 2005).

In Paguio’s (2005) study, children with cancer experienced several side effects of treatment that affects their psychosocial functioning specifically self-esteem and anxiety levels. A child’s illness is often accompanied by stresses like hospitalizations, pain and malaise, extended diagnostic studies, surgery, medications, diet restrictions, activity limitations, school absences, and frequent medical crises. These stresses generate a number of fears, anxieties and grief reactions (Arnold, 1990).

This is where therapeutic teaching becomes very significant in the lives of these children since attitude change/behavior modification, values formation and self-improvement/personality development are its main concerns pedagogically. It is focused on achieving objectives from the affective domain with incidental learning from cognitive and psychomotor domains (Dizon, 2003).

School health advocates agree that meeting the needs of these children requires collaboration among students themselves, their families, school personnel, and health care providers. The call for a closer partnership has been recognized across the diverse missions of health training, service, and research and in reference to the needs of specific populations, such as those with chronic illness, children and adolescents with severe disorders, and ethnic minorities. Especially needed are studies that assess need and assist state and local agencies to plan for community-based services that are effective, consumer responsive, and cost-efficient. In times of resource limitations, needs assessments become essential tools for determining programmatic priorities, identifying gaps in service provision, and preparing grant proposals to secure funding for creation or expansion of programs (Wolf, 1994).

This study recognizes the importance of needs assessment in the education of children with chronic illness (CWCIs) as springboard for the development of an interdisciplinary manual that is effective, consumer responsive and cost-efficient. The manual is facilitative of education that promotes psychosocial healing and incidental cognitive learning and of these children despite the health challenges
they face. Likewise, the manual aimed to facilitate collaboration among the members of the interdisciplinary team (e.g. parents, teachers and health professionals) involved with the child by reiterating the roles and norms they can practice in the education of CWCI and by encouraging them hands-on delivery of the child’s education using the guided activities in the manual.

Meeting the needs of special children can pave the way towards successful educational programs which according to Hallahan et al. (2000) can be determined by how well parents and professionals are able to work together.

There is a dearth in the literature, however, of health service professionals’ delivering hands-on education to children whose health needs they cater to. Chronically ill children spend much time and exposures to health professionals and are vulnerable to hospital confinement that halts their formal school attendance. The financial burden of the families of CWCI brought about by the demand of the child’s condition affect the continuation of the child’s education (Morcos, 2000 & Nickel, 2000 in Medina, 2004)

There is a great need to develop a practical and feasible approach to promote continuity in the child’s education despite health and financial challenges of the child. Thus, other than parental participation, this study pioneered in the involvement and actual participation of health service professionals in the education of CWCI through direct delivery of early basic primary education to these children.

In the Philippines, only the Philippine General Hospital (PGH), East Avenue Medical Center (EAMC) and Fe Del Mundo Hospital (FDMH) have initiated the implementation of educational programs or projects that support or facilitate the education of children with chronic illness. There is great demand to address the educational needs of those children confined and regularly brought to hospitals other than through the means initiated and provided by these aforementioned hospitals. There is a challenge for special education in the country to develop and produce relevant materials that can support and facilitate quality education for these special children whose health condition and economic situations demand creative, flexible and adaptive techniques or materials that fit their current situation.

**Statement of the Problem**

The study was conducted to investigate the educational needs of children with chronic illness and the practices (roles and norms) of the members of the interdisciplinary team (e.g. parents, teachers, health professionals) involved with the children in facilitating their education. The study developed a manual that can be used by the members of an interdisciplinary team to ensure not only the continuity of a regular education in early primary level but also to address the therapeutic and cognitive needs of special children that affect their learning and development, thus enhancing the quality of their lives.

In gathering the baseline data as prerequisite for the development of the manual, answers to the following specific questions were sought:

1. What are the characteristics of Children with Chronic Illness (CWCI) in terms of the following aspects:
   a. Demographic profile
   b. Health condition
   c. Learning or education
   d. Psychosocial state
      i. Intrapersonal characteristics
         1. Anxiety manifestation
2. Self-esteem
   ii. Interpersonal characteristics
      1. Relationship with parents
      2. Relationship with teachers and classmates
      3. Relationship with health professionals

   e. Other support system
      i. Family support system
      ii. Health and Educational support system

2. What are the special education needs of CWCI based on the characteristics mentioned in specific question number one?
3. What does the literature say regarding the ideal practices of members of the interdisciplinary team in the education of CWCI specifically on the following:
   a. Roles undertaken as member of the team
   b. Norms in terms of:
      i. Prioritized responsibility
      ii. Communication to other members of the team
      iii. Level of involvement in educating the child

4. What are the perceived practices of the members of the interdisciplinary team specifically on items stated in specific question no.3?
5. Is there significant difference among the perceived practices of each member of the interdisciplinary team handling the CWCI?
6. Is there nonconformity between the ideal and perceived practices of the interdisciplinary team respondents?
7. What are the pre and the post-test scores of CWCI and parent respondents’ control and experimental groups regarding the psychosocial characteristics of the child specifically:
   a. Intrapersonal characteristics
      i. Anxiety manifestation
      ii. Self-esteem
   b. Interpersonal characteristics
      i. Relationship with parents
      ii. Relationship with teachers and classmates
      iii. Relationship with health professionals

8. Is there a significant difference between the pre and the post test scores of CWCI and parent respondents and between control and experimental groups regarding the psychosocial characteristics of the child stipulated in specific question no.7 after manual implementation?
9. Can the educational needs of CWCI be met by a manual intended for interdisciplinary use?

Significance of the Study

The study’s end goal was the production of a therapeutic teaching manual. The developed manual aimed at helping decrease if not eliminate the negative effects of chronic health impairment mainly in the psychosocial dimension that hampers the child’s intrapersonal behavior (e.g. self-esteem and anxiety level) and interpersonal behavior (e.g. relationship with other people) and incidentally in the cognitive and psychomotor domains. Regardless of whether the child is capable of reporting back to school, required to be confined in the hospital or even just stay at home to rest or recuperate, holistic learning can still be attained through the collaborative efforts of the parents, teachers and other professionals who can do actual hands-on teaching using the manual activities as a guide. This in the end can lead to an improved quality of life for CWCI.

The primary beneficiaries of this study and the manual output are the CWCI as they receive, at some point, the answers to their needs which are not only physical in nature but also psychosocial and cognitive. Moreover, the parents, teachers and health professionals servicing CWCI will
also benefit from this study as they learn new ways of helping their child achieve the benefits of education by learning basic instructional strategies and directly delivering the appropriate therapeutic teaching approaches for their child’s emotional healing along with the curriculum content for early primary education. Likewise, they will be able to understand the practices (roles and norms) of the other members of the interdisciplinary team in the education of CWCI. There will be better rapport among interdisciplinary team members involved in the care and education of the child. Such occurrence can open doors of better communication leading to optimal care and educational services for the child.

Most importantly, this research is significant as it pioneered the development of a teaching manual that can be used by all hospitals catering to the pediatric population to facilitate therapeutic healing. The country today does not have any existing locally published material on therapeutic teaching activities specifically designed for chronically ill children with psychosocial problems that is intended for interdisciplinary use in different hospitals.

Scope and Delimitation of the Study

The study aimed to develop and validate a manual that addresses the special education needs of CWCI mainly focusing on the therapeutic healing context with concomitant cognitive and psychomotor needs addressed. Likewise, the developed manual aimed to promote better collaboration among interdisciplinary team members (e.g. parents, teachers and health professionals) involved with the child by reiterating the roles and norms they can practice in the education of CWCI and by encouraging them on the hands-on delivery of the child’s education using the manual guided activities.

The study involved three phases. The first phase covered the preliminary data gathering to assess the needs of CWCI and the practices (roles and norms) of the members of the interdisciplinary team in the education of CWCI. The second phase involved the development of the manual output based on the needs assessed and collaboration practices analyzed in the first phase while the third and last phase covered the validation of the developed manual by experts and actual quasi-experimental testing. A general overview of the scope of the study is presented as an outline in Figure 1 of the succeeding page.
Figure 1. General Overview of the Scope of the Study

PHASE 1

Educational Needs Assessment of CWCI based on the following characteristics:
- a. demographic profile
- b. health condition
- c. learning and education
- d. psychosocial state
- e. other support system
  e.1. family
  e.2. health and education

Analysis of Interdisciplinary Collaboration Practices of Parents (P), Teachers (T), and Health Professionals (HP) in the Education of CWCI

IDEAL PRACTICES

PERCEIVED PRACTICES

P

T

HP

PHASE 2

Development of a Therapeutic Teaching Manual that Addresses the Psychosocial and Incidental Cognitive and Psychomotor Needs of CWCI and Reiterates Practices (Roles and Norms) of Interdisciplinary Team Members in the Education of CWCI

PHASE 3

Validation of the Interdisciplinary Manual

1. Does the manual explain how chronic health conditions affect the learning of the CWCI?
2. Does the manual promote enjoyable learning on the part of the CWCI thru therapeutic teaching methods?
3. Does the manual improve the psychosocial behaviors of the CWCI?
4. Does the manual promote incidental academic advancement of the child despite the challenges he/she facing as defined by his/her:
   a. Demographic characteristics
   b. Health condition
   c. Learning and educational characteristics
   d. Psychosocial state
   e. Available support systems
5. Does the manual promote interdisciplinary collaboration through reiteration of the practices (roles and norms) in the education of CWCI?
Chapter 2
THEORETICAL AND CONCEPTUAL FRAMEWORK

This chapter presents the review of related literature and studies, theoretical framework, conceptual framework, research hypotheses, and definition of terms used in the study.

Children with Chronic Illness (CWCI) are faced with psychosocial and educational challenges and needs that are results of multifaceted factors brought about by their: a) demographic profile; b) health condition; c) learning and educational characteristics; d) psychosocial state, and e) available support systems (e.g. family, education and health). Medina (2004) states that CWCI (e.g. school-age children with leukemia) manifest a wide range of special health care, educational, and social emotional needs. Apparently, there is interplay of health, learning, socio-emotional and family aspects in these children. Their chronic health condition significantly affects their education and school performance. It is vital then that the needs of these children are fully understood and properly identified in order to realize the appropriate special education provisions and services for them.

Children and even adolescents with chronic illness experience more academic difficulty than their healthy peers (Thies, 1999). Studies have recognized that illness alone may affect the learning of these children due to the stresses brought about by extended hospitalizations, frequent absences, separation from parents, siblings and peers, and painful medical procedures (Brown, 1999).

Some children, by virtue of acute or chronic medical problems, are unable to attend school regularly. Absence from school for any period will disrupt the educational process and should prompt the school administrator or child’s parent to request non-school based instruction. This instruction should be considered as soon as possible for a child who may be absent for a prolonged period or for a child repeatedly absent for brief periods (Taras, 2000).

Concomitant with all the health and learning challenges a CWCI face, psychosocial problems emerge significantly. All stresses generate a number of fears, anxieties and grief reactions (Arnold, 1990). Psychosocial adjustment problems including poor self-esteem, poor self-satisfaction, less ambitious deals, death anxiety, increased depressive symptoms (Greenberg et al., 1989 & Blackman, 1995), poor social skills and increased incidence of behavioral problems, particularly social isolation (Mulhern et.al, 1989; Sawyer et al., 1989 in Conglio & Blackman, 1995), school reintegration problems, and school phobia are experienced (Varni, et.al in Bessell, 2001). Study of Koocher et al. (1980) reports that anxiety and depression are strongly related to overall psychological adjustments.

The education of students with physical and health disabilities requires the coordinated effort of an educational team. This is to implement and teach the students the various physical management and self-help procedures correctly (including health care procedures). The educational team may have several members who will need to collaborate for a successful program depending on the student’s needs and type of objective being considered.

Collaboration among these three groups of people involved with the child is crucial in achieving success in terms of improving the quality of life of the chronically ill child through continuous and normalized education they deserve like that of their able-bodied peers. Such collaboration can be met if there is significant agreement between the ideal and perceived practices of the parents, teachers and health professionals as to roles they undertake and the norms they engage into as well as if the perceptions they have regarding each other meet or synchronize.

Cognizant of the value of addressing the health and educational needs of CWCI and the importance of collaboration among interdisciplinary members involved with the child, this study developed and validated a manual that aimed at helping decrease if not eliminate the negative effects of chronic health impairment mainly in the psychosocial dimension that hampers the child’s intrapersonal...
behavior (e.g. self-esteem and anxiety level) and interpersonal behavior (e.g. relationship with other people) and incidentally in the cognitive and psychomotor domains. The manual utilized therapeutic teaching as an approach to the different set of activities to develop and promote emotional healing among CWCI. Regardless of whether the child is capable of reporting back to school, required to be confined in the hospital or even just stay at home to rest or recuperate, holistic learning can still be attained through the collaborative efforts of the parents, teachers and other professionals who can do actual hands-on teaching using the manual activities as a guide. This in the end can lead to an improved quality of life of these children.

Four Models of the Study

The manual output of the study utilized four models as basis for development. These are: a) health-related quality of life model in the field of medicine / health to understand the health circumstance of CWCI in relation to many other factors, b) the psychosocial development framework of Erikson as rationale for the consideration of therapeutic teaching approach in the manual output of the study, c.) the family centered model in education, and c) the ecological model of Brofenbrenner (1979, 1995) in educational psychology to as premise for the involvement of the interdisciplinary team especially the parents in the education of CWCI.

Considering the eclectic influence of the four models mentioned, the paradigm of the study was developed which is presented as Figure 2.
Figure 2. Research Paradigm

Conformity between the IDEAL and PERCEIVED PRACTICES among IT in educating CWCI

LEGEND:
- CWCI - children with chronic illness
- T - teachers
- HP - health professionals
- L/E - learning or education
- OSS - other support systems
- HC - health condition
- DP - demographic profile
- IT - interdisciplinary team
- P - parents
- PS - psychosocial state
- Improving Quality of Life of Children with Chronic Illness (CWCI)

Optimal Educational Outcomes
The Variables in the Paradigm of the Study

The lives of Children with Chronic Illness (CWCI) involve an interplay of many factors which are related to their: a.) demographic profile, b.) health condition, c.) learning and education, d.) intrapersonal (e.g. self-esteem and anxiety) and interpersonal (e.g. relationships with parents, teachers & health professionals) psychosocial characteristics and e.) support system (e.g. family, health, education). Such factors entail certain needs that require special provisions that must be addressed for the benefit of the child.

Research has established the effects of chronic illness in the psychosocial and educational dimensions of these children, thus, developing a material that answers to these needs of CWCI in these dimensions will help optimize educational outcomes that can lead to an improved quality of life for these children.

Concomitantly, partnerships or collaboration among the members of the interdisciplinary team who are the parents, teachers and health professionals involved in the care and education of the CWCI are crucial in achieving optimal outcomes that are predictors for the child’s quality of life. Such partnerships/collaboration can be strengthened by the understanding of each member’s practices (roles and norms) in the education of CWCI. The more conformity there is between the ideal and perceived practices of the interdisciplinary team, the more favorable will the educational outcomes be for the child.

Overall, developing a manual that can be used collaboratively by the interdisciplinary team to educated and promote therapeutic healing of CWCI can help achieve optimal educational outcomes that can improve the quality of life of these children.

Research Hypotheses

Considering the element of interdisciplinary team collaboration in the education of CWCI, understanding of the practices (roles and norms) of each member of the team is important. To test whether there is significant difference among the perceptions of the parents, teachers and health professionals as to their practices (roles and norms) in the education of CWCI, the following hypotheses were tested:

\[ H_0: \text{There is no significant difference among the perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI.} \ (\mu_p = \mu_T = \mu_{HP}) \]

\[ H_1: \text{There is significant difference among the perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI where there is at least one inequality among the group.} \]
\[ (\mu_p \neq \mu_T \text{ or } \mu_p \neq \mu_{HP} \text{ or } \mu_T \neq \mu_{HP}) \]

Literature established the ideal practices in the education of these children and realizing the conformity between what is ideal and what is perceived by the parents, teachers and health professionals can aide in reiterating important contents of the manual pertaining to the roles and norms each one can have in educating CWCI. Therefore, the following hypotheses were tested if the t-value is negative:

\[ H_0: \text{There is conformity between the ideal and perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI.} \ (\mu \geq 4.5) \]
There is nonconformity between the ideal and perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI. ($\mu < 4.5$)

AND the following hypotheses if the t-value is positive:

$H_0$: There is no significant agreement between the ideal and perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI. ($\mu < 4.5$)

$H_1$: There is significant agreement between the ideal and perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI. ($\mu \geq 4.5$)

In the final phase of the study, the manual was validated by testing its effectiveness in improving the psychosocial characteristics of CWCI. The CWCI and parent respondents were divided into control and experimental groups who were both pre and post tested. In testing for differences in their scores, the following hypotheses were tested.

To test for the difference in the scores of pretest and post-test for both control and experimental groups:

$H_0$: There is no difference in the pre-test and post-test CWCI psychosocial characteristics scores for both groups of CWCI and parent respondents ($\mu_{POST-TEST} - \mu_{PRETEST} = 0$)

$H_1$: There is a difference in the pre-test and post-test CWCI psychosocial characteristics scores for both groups of CWCI and parent respondents where the mean of post test is higher than pretest ($\mu_{POST-TEST} - \mu_{PRETEST} > 0$).

To test for the difference in the scores of the control and experimental groups:

$H_0$: There is no significant difference between the psychosocial scores of the control and experimental groups. ($\mu_{POST-TEST} = \mu_{PRETEST}$)

$H_1$: There is a significant difference between the psychosocial scores of the control and experimental groups where the mean of the experimental group is higher than the control group ($\mu_{POST-TEST} > \mu_{PRETEST}$).

Definition of Terms

Cancer (CA) - is the abnormal growth of cells that can affect any organ of which leukemia and lymphomas are the most common types in children. Treatment includes chemotherapy that weakens the immune system. Late stages of which are usually fatal.

Children with chronic illness (CWCI) – In this study, it pertains to children between 3 to 9 years of age who are diagnosed with a condition that is either long term, not curable, or has residual features resulting to limitations in daily living or requires frequent hospital admissions or visits. These children are currently admitted in a hospital for at least one week in duration, or are actively engaged as outpatient clients due to their health condition.

Chronic disease – a long term condition not curable or has residual features that result in limitations in daily living requiring special assistance or adaptation in function. It lasts for 3 months or more in 1 year or requires frequent hospitalizations or doctor follow-up visits.
Health professionals – refers to the like doctors, nurses, physical therapists and occupational therapists who render related services to CWCI.

Interdisciplinary collaboration – pertains to the partnership and cooperation made by parents, teachers, and health servicing professionals in the care and education of CWCI.

Norms – pertains to the set of behaviors manifested by parents, teachers, and other professionals in terms of prioritizing responsibilities, communicating with other members of the interdisciplinary team, and committing oneself in the care and education of CWCI.

Other health impairment – conditions leading to having limited strength, vitality or alertness, including a heightened alertness to environment stimuli that results in limited alertness with respect to the educational environment, that is due to chronic or acute health problems.

Practices – pertains to roles and implemented norms of parents, teachers and health professionals in the education of CWCI.

Therapeutic Teaching – pertains to the teaching pedagogies in form: a.) music therapy, b.) bibliotherapy, c.) play therapy, d.) dance therapy, e.) creative drama, and f.) arts and crafts (Dizon, 2003) which aim to facilitate emotional healing of exceptional children like those with chronic illness through relaxation, enjoyment, direct or indirect skill-building, and planned opportunities for creativity.
Chapter 3
RESEARCH METHODOLOGY

This chapter describes the research design, locale, respondents, instrumentation and data collection procedure used in the study.

A. **Research Design**

This study is primarily descriptive and quasi-experimental in design.

B. **Research Locale**

The hospitals which served as research locale of the study were: a.) East Avenue Medical Center (EAMC) in East Avenue, Quezon City, b.) Fe Del Mundo Hospital (FDH) formerly Children’s Medical Center in Banawe, Quezon City, c.) National Children’s Hospital (NCH) in E. Rodriguez, Quezon City, d.) Philippine Children’s Medical Center (PCMC) in Quezon Avenue, Quezon City, e.) Philippine General Hospital (PGH) in Taft Avenue, Manila, and lastly f.) Philippine Orthopedic Center (POC) in Banawe, Quezon City.

C. **Population and Sampling**

The study utilized purposive sampling utilizing inclusion and exclusion criteria to screen the CWCI. A total of 84 CWCI, 84 parents of CWCI, 14 teachers and 28 health professionals served as respondents in the study.

D. **Instrumentation**

There are four research questionnaires used in the study. These are: a.) research questionnaire no.1 for the CWCI respondents; b.) research questionnaire no. 2 for the parent respondents; c.) research questionnaire no. 3 for the teacher respondents; and lastly d.) research questionnaire no. 4 for the health professional respondents.

All of the four instruments were validated by experts and were then pilot tested using test-retest method which yielded to high reliability.

E. **Data Collection**

Population screening and selection of qualified respondents was done using form A presented as Appendix F. Consent of the qualified respondents was taken. Once consent is given, Form B presented as Appendix G was used to gather the necessary contact information for follow-up purposes. Data to answer the objectives of the study were gathered by letting the respondents answer the research instruments. CWCI were guided in understanding the questions if they are not able to read yet.

During the manual implementation phase, the researcher monitored weekly through phone calls and/or hospital visits the compliance of the experimental group in delivering the activities of the manual using the monitoring sheet presented as Appendix I. The interdisciplinary team member who rendered the activity to the child was also noted.

After manual implementation, the CWCI and parent respondents of both experimental and control groups were made to answer again the statements with 4-pt measurement scale as answering option located in section F and section G respectively, of their research instruments. This is to re-evaluate the psychosocial characteristics of the CWCI after manual utilization.

For the experimental group, data from section F of their respective instruments were gathered using the same methods used in Phase 1 of the study. For the control group, section F of the
research instruments for both CWCI and parent respondents were mailed with detailed mechanics as to how to answer and mail back the post-test tools. Appendix J presents the mechanics.

F. Statistical Treatment Used

Descriptive-correlational statistics were used to treat the data gathered in the study. The weighted mean was interpreted using the scale in the succeeding table.

### TABLE 1
WEIGHTED MEAN ANALYSIS OF PERCEIVED PRACTICES (ROLES AND NORMS) OF PARENTS, TEACHERS AND HEALTH PROFESSIONALS

<table>
<thead>
<tr>
<th>Rounded Mean Value</th>
<th>Computed Weighted Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4.50 – 5.00</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>3.50 – 4.49</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>2.50 – 3.49</td>
<td>Uncertain</td>
</tr>
<tr>
<td>2</td>
<td>1.50 – 2.49</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1</td>
<td>1.00 – 1.49</td>
<td>Disagree</td>
</tr>
</tbody>
</table>

Analysis of Variance (ANOVA) was used to test the significant difference among the perceptions of the parents, teachers and health professional respondents was tested using. Agreement between the ideal and perceived practices was tested using One-Sample t-test. The weighted mean was used to treat the data answering specific question number 7 regarding the pre and post-test scores of CWCI and parent respondents. All statements were treated in negative state and were interpreted using the scale presented in Table 2.

### TABLE 2
WEIGHTED MEAN ANALYSIS OF CWCI PSYCHOSOCIAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Rounded Mean Value</th>
<th>Computed Weighted Mean</th>
<th>Interpretation</th>
</tr>
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<td>Very High Self-Esteem</td>
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In answering specific question number 8, significant difference between the pre and post test scores for each control and experimental group in the study, data gathered were treated using One-sample t-test where the test value is equal to zero (0). Since the responses were all treated as negative statements, the ideal situation is that the pretest score is greater than the posttest score. The 31 psychosocial statements were summarized into 5 variables namely: A.) Self-esteem, B.) Anxiety, C.) Relationship with Parents, D.) Relationship with Teachers and Classmates, and E.) Relationship with Health Professionals.
The results of the control and experimental groups were compared using Two-sample independent t-test. The input variables are the five mentioned in the previous paragraph (A to E) which are the differences between the pre-test and post-test scores.

Data were treated using Excel and SPSS Version 13 program operations for Windows.

G. The Manual Output

The manual developed in the study was based from the health, education, support system and most important, the psychosocial profile and needs of CWCI gathered from the first phase - preliminary data gathering, of the study duly validated by ten experts in the field of special education, pediatric health care (e.g. developmental pediatrics, pediatric internal medicine and oncology, family medicine and pediatric nursing) and rehabilitation medicine (physiatrist and physical therapist) and educational psychology, research and administration. Profile of the content validators of the manual is presented in Appendix K. The manual was originally developed and validated in English language and was then translated by a professional linguist to Filipino for the use of the experimental group of respondents of the study. The succeeding paragraphs highlight the content and significance of the manual.

The manual is divided into two major books. The first book focuses on the manual rationale which is further divided into two major chapters. The second book of the manual presents the different therapeutic teaching activities and basic academics for CWCI ages 3 to 9 years old. It is further subdivided into three sub-booklets namely: a.) Preparatory to Primary Education Program: Level 1 for ages 3 to 4 years old, b.) Preparatory to Primary Education Program: Level 2 for ages 5 to 6 years old, and c.) the Early Primary Education Program: Level 3 for ages 7 to 9 years old. The manual also explains the method to use in assessing the psychosocial and academic progress of the child as the manual is being used. It incorporated the tools with corresponding scale of measurement to check the development of the child in the process of therapeutic teaching.

H. Methodological Limitations

The researcher encountered situations that limited the methodology of the study. The application for research locale inclusion was restricted by the varied hospital research protocols, high cost research application fees and administrators who rejected the conduct of the study in their facility.

Concerning the population and samples, randomization for true experimental design was not followed due to the fast rate of patient discharge for inpatients and the highly variable outpatient physician or treatment program appointments that transpired yielding to quasi-experimental design.

During the preliminary data gathering phase, physical limitations on the part of the researcher was experienced. During manual utilization period, follow-up procedures done to monitor the delivery of manual activities to the child and filling-out of activity monitoring sheets were dependent upon honesty-based parental reports during phone call conversations and actual meetings. Relative to the post-testing of the study, a drop-out rate of 13% transpired during the last phase of data gathering.
This chapter presents the results and analyses of the responses of the four groups of respondents in the study namely the CWCI, parents, teachers, and health professionals handling CWCI.

I. A. WHAT ARE THE DEMOGRAPHIC CHARACTERISTICS OF CWCI?

Fifty-two percent of the respondents were boys and 48% were girls mostly belonging to the 7 to 9 years old (62%) age group. Eighty-seven percent (87%) have siblings mostly 1 to 2 in number (46%) and 37% of them were first born children. Fifty seven percent have both parents giving them company at home. When analyzed in terms of sole parental involvement however, it can be noted that mostly mothers (21%) accompany the CWCI. It was evident that other than the parents of CWCI, siblings (87%), grandparents (31%) and CWCI Aunts and Uncles (21%) were the top three other people accompanying CWCI at home. It can be noted that 74% of the CWCI have parents who are still married.

Findings also showed that 83% of the CWCI respondents were Roman Catholics which serve as a good foundation for coping with the challenges of the child’s health condition.
I. B. WHAT ARE THE CHARACTERISTICS OF CWCI WITH RESPECT TO THEIR HEALTH CONDITION?

Majority or 62% of the CWCI respondents have had their illness for one year already and 18 of the 84 respondents have other illnesses commonly Pneumonia. Eighty-five percent (85%) have history of previous hospitalization with 38% being hospitalized at least once or twice. Average duration of stay in the hospital is for at least 4 to 6 days (33%) to 1 to 2 weeks (25%).

Twenty-five out of 28 or 89% of the health professional respondents have CWCI patients who are undergoing treatment. Health professionals have patients receiving medications (25 of 25 health professionals), have CWCI undergoing chemotherapy (18 of 25), and undergoing infection treatment (16 of 25). There is significantly high percentage of CWCI undergoing chemotherapy (72%) and infection treatment (64%) programs.

Out of 84 CWCI respondents, 45 or 53% knew what their health condition was, 9 or 11% were not aware, while 30 or 36% were uncertain. Majority of those who were aware of their health condition were diagnosed to have Leukemia. Top three initial reactions were: a.) sad (mean=22.5 out of 84), and b.) crying (mean=14.5 out of 84). Given the initial reaction of CWCI and parents, majority of them still believe that the health condition will be immediately resolved (mean=52 out of 84).

Doctors are commonly the first source of information regarding the health condition of the CWCI followed by the mother of the CWCI. Teachers on the other hand showed their reliance on the mothers of the CWCI for information concerning the health condition of the CWCI.

Overall survey for the CWCI, parent and teacher respondents shows a mean score of 23.67 reflecting generally a little knowledge by the respondents concerning the health condition.

In terms of health impairment manifestation, majority (79%) of their CWCI patients manifested moderate weakness of the body. Furthermore, results of the study also revealed that in the school setting, teacher respondents stated that the symptoms usually occur during activities (79%) and that majority occurs sometimes (50%).

I. C. WHAT ARE THE CHARACTERISTICS OF CWCI WITH RESPECT TO THEIR LEARNING / EDUCATION?

Results show that 61% of the CWCI respondents attend a public school. Twenty-nine per cent of them belong to Grade 2, 21% Grade 1, 20% Nursery, 18% Kindergarten, and 12% Grade 3. At the time of the research, 56% of the CWCI had stopped schooling.

Sixty percent already have previous history of disruption of formal schooling. In terms of CWCI absenteeism from regular classes, majority (mean=23) of the CWCI were absent from their classes 1 to 2 times a week. The most common reason for the absences is because the CWCI is symptomatic of illness (mean=38.33).

When the perceptions of health professionals were asked regarding the health condition of the CWCI leading to school disruption, 82% of the health professionals agreed that the health condition of the child does lead to disruption.

Findings revealed that the CWCI themselves, the parent and the teacher respondents believe that the activities given in school do not stress the child. Moreover, majority of the respondents stated that English is the most common subject of difficulty and the most common specific learning difficulty is focusing.
Most common specific class performance difficulty based on direct teacher respondent observations was lack of concentration. Most of the health professional respondents meanwhile, believe that the health condition of CWCI pose a limitation to the schooling of these children. Teasing of classmates (mean=58.5) is the topmost unpleasant school experience among CWCI.

I. D. WHAT ARE THE PSYCHOSOCIAL CHARACTERISTICS OF CWCI?

An overall mean of 2.22 of the psychosocial component of the research instruments for all four respondents using the 4-point scale of measurement which implies that the indicators of psychosocial characteristics which were all statistically treated as negative statements were often experienced by the CWCI. All variables for both intrapersonal and interpersonal characteristics range between a mean score of 2.03 as lowest and 2.36 as highest.

I. D.1. Intrapersonal Psychosocial Characteristics of CWCI, Anxiety Manifestation and Self-Esteem

A significantly high number of CWCI and parent respondents replied that the relationship became more close (mean=68). Parent respondents justified the relation of the CWCI to God becoming closer after having the health condition.

It can be noted that there is inconsistency with the CWCI’s description of their relationship with God. This can be explained by the high and low emotional moments often experienced by CWCI and their parents concerning their relationship with God which leads to answers that may change overtime depending on the current level of personal issues being faced.

Results of the respondent’s self-esteem revealed an overall mean score of 2.4 which implies that they often manifest low self-esteem.

I. D.2. Interpersonal Psychosocial Characteristics of CWCI: Relationships with Family

Concerning the interpersonal psychosocial characteristics majority of the CWCI respondents became more close to their parents (mean=67). Ninety-two per cent of the parent respondents on the other hand when asked about their closeness to their CWCI given the health condition reported that they became closer. The top three reasons given by the parents for the established closeness between them and their CWCI were: a.) parents became more affectionate with the CWCI (98%), b.) parents pity their child because of the health condition (92%), and c.) parents always attend to the needs of the CWCI (91%).

Although the fact that there is good relationship between CWCI and their parents is validated, it can still be noted that parents develop a more closer relationship with their child given the health condition (92%) than CWCI developing close relationship with their parents (67%).

On the contrary, results of the study revealing parents who were uncertain if the have established closer relationship with their CWCI given the health condition reasoned that the increased moodiness and irritability of their child made them uncertain with their answers.

When asked about the relationship of the CWCI to their siblings given the health condition, results showed that majority of the parent and CWCI respondents themselves answered that their relationship became closer (mean=43) after the CWCI was diagnosed of the condition while some stated that the relationship became distant (mean=19) and others were uncertain of what to answer (mean=11). The top five reasons given by parent respondents to justify the closeness of CWCI and their siblings were: a.) they want to be with each other always, b.) the innately love each other, c.) the healthy siblings pity the CWCI, d.) they are fond with each other and e.) they do not quarrel with each other. Parents who answered that their CWCI were not close to their other child/ren given the health condition
stated that it was because a feeling of jealousy exists (14 out of 28 parents) among siblings because of the attention being given whenever the child is sick and because their CWCI seem to be more irritable and moody (9 out of 28) always wanting to be attended to which keeps his/her sibling/s distant.

Results of the 4 – point scale research instruments assess the relationship of the CWCI with their family members revealed an overall mean score of 2.48 which implies that the psychosocial indicators which were all treated as negative statements are sometimes experienced by the CWCI. Indicator statements on specific interpersonal relationship with family member resulted in mean scores ranging between 1.98 and 2.6 which are interpreted to occur as sometimes among CWCI except for items 17 and 19 which occur often.

I. D.3. Interpersonal Psychosocial Characteristics of CWCI: Relationships with Teachers and Classmates

Results of the 4-point scale research instruments to assess the relationship of the CWCI with teachers and classmates revealed an overall mean score of 2.39 implying that the psychosocial indicators which are all treated as negative statements were often experienced by the CWCI. Indicator statements on specific interpersonal relationship with teachers and classmates resulted in mean scores ranging between 2.27 and 2.61 which are all interpreted to occur often among CWCI except for item no 21 which sometimes occur. Consequently, when asked concerning the closeness of CWCI to their friends after being diagnosed of the health conditions, a collaboration of the answers of both the CWCI and parent respondents revealed that majority have a distant relationship given the health condition (mean=41). A mean score of 28 was derived from those who answered that the relationship became close and a mean score of 15 are for those who are uncertain with their answers. CWCI did not express any reason to justify their answers, however, reasons given by parents why their children have a distant relationship with friends given the condition were: a.) CWCI are avoided by friends (44%) and b.) friends of CWCI are scared that the condition is contagious (36%). Reasons given for stating that there was a closer relationship were: a.) CWCI were visited by friends (87%), b.) CWCI received letters from friends (65%), and c.) friends help the CWCI (43%). Those who were uncertain of what to answer reasoned that: a.) the CWCI and his/her friends are far from each other (50%) and b.) they do not communicate with each other, hence they are unsure (31%).

On the contrary, however, some CWCI (mean=21) still established a close relationship with their peers and teachers. This is consistent with the findings of Spinetta et al. (1998) on psychosocial relationships of children with leukemia that demonstrated these children to enjoy school as they interact with peers. Such children were also not teased or injured at a rate higher than classmates although absences can be a major deterrent to academic achievement.

I. D.4. Interpersonal Psychosocial Characteristics of CWCI: Relationships with Health Professionals

Results of the 4-point scale research instruments used to assess the relationship of CWCI with health professionals revealed an overall mean score of 2.03 implying that the psychosocial indicators which are all treated as negative statements were often experienced by the CWCI. Indicator statements on specific interpersonal relationships with health professionals resulted in mean scores ranging between 1.78 and 2.26 which are all interpreted to occur often among CWCI.

When asked about the unwanted health experiences of CWCI when hospitalized, results revealed that the top five answers given by CWCI and parents were: a.) when being injected (mean=80), b.) unable to play with friends (mean=69.5), c.) drinking too many medications (mean=62), d.) when required to stay for long at the hospital, and e.) when talking to doctors, nurses and other health professionals in the hospital.
I. E. WHAT ARE THE CHARACTERISTICS OF CWCI IN TERMS OF OTHER SUPPORT SYSTEMS?

I. E.1. Family Support System

Results revealed that 58% of the family of CWCI respondents would fall on the low income group with a combined monthly income of less than 5,000 pesos, 30% with income ranging from 5,000 to 18,000 pesos, and 12% ranging between greater than 18,000 to 32,000 pesos. Changes in family expenditures given the health condition of the child showed that 75% of the parent respondents encountered great increase in their family expenditures, 64% have increased their family debt, 38% pawned family items, 32% were almost unable to buy medications for the child, and 15% have minimal increase in expenditures. Fifty-seven per cent of CWCI families rely on the fathers as source of financial support during illness, 32% from mothers, 15% from grandparents, 8% from siblings of CWCI who are working, 7% from sponsors or private agencies, and 6% from other members of the family (e.g. aunts/uncles and cousins).

When specifically asked about the commonly encountered difficulties in taking care of their CWCI, the top three difficulties mentioned were: a.) buying of prescribed medications (69%), b.) hospital and other health expenses (58%), c.) rushing of the CWCI to the hospital (52%).

There is equal varied response among parents of CWCI in their acceptance of the CWCI health condition. Thirty-seven per cent of the parent respondents answered that they have slightly accepted their child’s condition, 34% have not accepted, and 29% have fully accepted.

Concerning parental relationships, when parents were asked about the status of their relationship with their spouses given the health crisis of their child, 66% of the parent respondents answered that they and their spouses became close, 20% became aloof or distant to each other and 14% were uncertain of their answer.

The most common reason given for being close was because parents of CWCI and their spouses help each other in facing the problem (55%). The most common reason given for being aloof / distant was because couples rarely see each other (71%), while the most common reason for uncertainty of response was because the couples are busy with work.

In terms of relationship between other family members other than the parents of CWCI given the health crisis of the child, 86% of the parent respondents replied that the family members became close, 7% became aloof or distant to each other and 7% were uncertain in their answers. The three most common reasons given for being close were because: a.) of the common desire of the family members for the CWCI to recover, b.) the family wants to make the CWCI happy and c.) the family inherently loves each other. The most common reason given for being aloof / distant was because couples rarely see each other (67%) and they quarrel because of all the problems (67%).

Results of the study revealed that 27% of parent respondents noticed no change in their behavior in terms of dealing with the CWCI. For those who noticed some changes, the top three changes most commonly observed were: a.) siblings became thoughtful with the CWCI (32%), b.) siblings became more caring with the CWCI (22%) and c.) siblings were jealous of the attention given to the CWCI.

I. E.2. Health and Educational Support System

In terms of support whenever symptomatic of illness, showed that majority of the parent and CWCI respondents stated that the mothers of CWCI are the primary persons that render personal support to the child (mean=51), followed by the father (mean=26), sibling (mean=15), helper (mean=9) and grandparent (mean=6). Even health professional respondents agree that mothers are the persons most commonly coordinating with them regarding the CWCI health needs and condition. For CWCI and
parent respondents, when they were asked if the CWCI receives instantaneous response to be treated whenever symptomatic, a significant number of the CWCI and parent respondents replied that whenever symptomatic, the child is immediately brought to the doctor or hospital (mean=50.5) while only some replied that they are unable to immediately bring the child to a doctor (mean=31) and very few were uncertain of what to answer (mean=2.5). The three most common reasons given for being able to immediately attend to the child whenever symptomatic were: a.) family members help each other, b.) they find ways to resolve the problem and c.) they loan money to address the needs of the child. The most common reason given for not being able to immediately attend to the child was because they have no money to use to bring the child to the hospital or doctor.

Concerning educational support for the CWCI, results showed that some CWCI respondents do not receive any personal support at all when they attend to their homework (mean=7.33). Some, however, answered they have and the three most common people rendering personal support to the child were: a.) mothers (mean=30.33), b.) father (mean=13.67), and c.) sibling (mean=13). Table 96 presents details of the data.

Results of the study revealed that 64% of the teacher respondents admitted that they know little about the health condition of the CWCI they handled, 29% stated that they know just enough and only 7% replied that they know much about the condition. In terms of actual knowledge, the top three were: a.) that CWCI have many activity limitations because of their health status (64%), b.) that CWCI require medication during class hours (43%) and c.) that CWCI have restrictions in exposure (36%).

Based from the findings, it can be noted that more than half of the teacher respondents of the study know a little about chronic health condition of the students they handle. The three most common sources of their knowledge about the CWCI health conditions were: a.) medical books (50%), b.) medical personnel (50%) and parents of CWCI themselves (43%).

Ninety-three percent (93%) of the health professional respondents believe that the health condition of the CWCI can pose a limitation to the child’s education and 50% of those who said so believe that it can affect these children to a moderate extent. Teacher respondents of the study, on the other hand, stated that frequent absenteeism (86%) is the most common difficulty they encounter in handling CWCI, followed by the CWCI’ inability to participate in class (43%) and that the child easily gets tired when in school (43%).

Whenever symptomatic in school, the three most common initial reactions of the teacher respondents were: a.) they give the CWCI ample rest time (100%), b.) they call for help (57%), and c.) they slowly pace the teachings with the child (43%). All of the teacher respondents render special considerations to the CWCI.

Moreover, three of the most commonly given special considerations by teachers were: a.) take home / special assignments (100%), b.) excused absences (86%) and c.) longer time in taking examinations (57%). All of the teacher respondents do not consider the special considerations they give to CWCI as additional burden to them.

Health professional respondents on the other hand perceived the same as the teachers in giving special considerations in the education of CWCI. Three of the most commonly given special considerations were: a.) excused absences (100%), b.) non-participation in strenuous activities such as those in physical education subject (89%), and c.) take home / special assignments (86%).

Teacher and health professional respondents also stated that in terms of restrictions in school, CWCI should be restricted in running races (mean=13.5), strenuous games (mean=11), cleaning the classroom (mean=6), and jogging (mean=5). Some, however believed that no restriction in activities
may be given provided that activities are done with precaution (mean=4.5). Both health professionals and teachers agree to suggest art as substitute activity for CWCI.

In terms of support from classmates, the five most commonly observed behavioral support were: a.) checks-out if CWCI feels okay (mean=65.5), b.) donates money to help (mean=27.5), c.) writes letters to CWCI (mean=25.5.), d.) reminds the CWCI to take extra caution during activities (mean=20.33), and e.) helps the CWCI in understanding the lessons (mean=14).

Considering the CWCI diagnosis, 43% of health professionals suggested home-based schooling, 29% suggested resumption to schooling in regular set-up with special education provisions, 14% suggested hospital-based schooling, and 7% suggested temporary halting of schooling and resumption with regular schooling without special education provisions.

When given option to choose special education services, results revealed the following: a.) tutorial program (mean=16.5), b.) part-time special education placement (mean=13.5), c.) home study program (mean=10) and d.) full-time special education placement (mean=4.5).

Relative to the recommendations given by professionals concerning special education services, majority of the CWCI and parent respondents attest that teachers of CWCI give remedial classes to help the child cope with unclear lectures/lessons (mean=56) although some not do so (mean=23).

Other than the remedial classes for unclear lessons, a significant number of CWCI were given special sessions for missed topics in class (mean=31.67) although some were not (mean=24.33). When asked if they believe that tutors are needed to facilitate the education of the CWCI, significant number of CWCI, parent and teacher respondents agree that it is needed (mean=42) and only a few believed that it was not needed (mean=13.33).

Results of the study revealed that there is no special teacher attending to majority of the CWCI respondents while hospitalized (mean=45) and only few have them (mean=4.5.)

For those who have special teachers, data presented showed that activities done include counting, drawing, praying, singing, coloring and basic academics.

When all of the respondents were asked if special teachers were needed to help CWCI, data showed that majority answered it as necessary (mean=39.75), few said it is not necessary (mean=3.75) while there were some who were uncertain of their answer (mean=4.5).

The top five reasons presented as to why special teachers are needed were: a.) CWCI want to continue their studies, b.) to decrease CWCI boredom, c.) for CWCI to learn, d.) CWCI wants visitors, and e.) CWCI wants other teachers.

For some who did not recognize the need for special education teachers in hospitals, the reasons given were: a.) additional expenditures for the CWCI family, b.) CWCI like the teacher in his/her own school, c.) activities can physically and mentally exhaust the CWCI and d.) studying serve as additional stress to the sick child.

When asked if they are agreeable to have parents as special teachers for CWCI, significant number of respondents agreed (mean=40) while few were not agreeable and uncertain of what to answer (mean=8).

The top five reasons for agreeing were: a.) to promote continuity in education, b.) to decrease boredom in hospital, c.) to decrease depression, d.) for the CWCI to learn, and e.) CWCI will be at ease when taught by parents.
Reasons given by the respondents for not agreeing were: a.) some parents may have no capability to teach, b.) parents are not real teachers, c.) parents do not have time, d.) parent do not know what to teach, e.) activities may be additional stress to the sick child. Reasons given by the parent respondents themselves for being uncertain of becoming special teachers for their hospitalized or housebound CWCI were: a.) they are not sure if they have the ability to teach the way teachers do, and that b.) their CWCI became easily irritable and moody which make teaching hard.

When asked if they are agreeable to have health professionals as special teachers for CWCI, findings showed that majority of the respondents agreed (mean=25.25) while some did not agree (mean=19.5) and others were uncertain of their answer (mean=7.75).

The top five reasons for agreeing were: a.) to continue learning/education of CWCI, b.) CWCI listen to health professionals more, c.) health professionals are capable to teach, d.) decrease depression of CWCI, and e.) health professionals know the needs of their CWCI patients. Reasons given by the respondents for not agreeing were: a.) CWCI fear health professionals, b.) CWCI are aloof with health professionals, c.) teaching may disturb health professionals from their work, d.) health professionals might refuse to teach.

In terms of the health professionals’ willingness to teach CWCI, when asked if they are agreeable to be special teachers of CWCI, results showed that 53% of the health professionals agreed with the proposal, 29% were uncertain and 18% refused to accept.

Forty-seven per cent of those who expressed willingness agreed to render special education for less than half an hour, 20% for half an hour to one hour, and 13% declared no time duration as long as they are off duty. Table 124 presents the data.

Recommendations given by professional respondents in order to make parent and health professionals effective special education teachers for CWCI were: a.) guiding instructions on what to teach (mean=11.5), b.) formal training / seminars / teaching units (mean=10.5), and c.) teaching modules (mean=8).

II. WHAT ARE THE SPECIAL EDUCATION NEEDS OF CWCI BASED ON THE CHARACTERISTICS MENTIONED IN SPECIFIC OBJECTIVE NUMBER ONE?

Based from the data gathered in specific objective number 1, it can be noted that majority of the CWCI, parents and teacher respondents lack knowledge concerning the chronic health condition. CWCI have a health condition that demands thorough knowledge and understanding not only on the part of the child and parents themselves but also on the part of the family, classmates and teachers of the child. The extent of awareness should be given directly by the health professional in-charge to ensure comprehensive and accurate information concerning the condition of the child. The information must encompass discussions concerning the nature, accompanying health impairment, signs and symptoms of the illness including their frequency and occurrence, the treatment program, medication requirements and its effects as well as anticipated hospitalization occurrences which can help the CWCI and the people involved with them (e.g. family, classmates/peers and teachers) be oriented with their condition and needs.

A significant number of the CWCI study in public schools and majority of them stopped schooling because of their health condition. Absenteeism is one significant factor leading to school absences which are often brought about by the symptomatic episodes of the illness. Regardless of the child’s health condition however, the CWCI themselves, the parent and teacher respondents still consider the positive effects of schooling (e.g. not notice time, enjoy learning, forgets pain etc.). Considering this matter, there is a need to develop special education programs that will address the absenteeism issue
among CWCI with special provisions for teaching / activities in school done in hospitals in order to maximize the positive effects learning and education on the child.

Learning difficulty is evident among CWCI, and teacher respondents believe that such difficulty presents moderate to high limitations in the schooling of the child. Subjects in school that were observed to be problematic were those that require focusing, computation, reading, speaking and analyzing. English, Math and Science were significantly identified as areas of difficulty and other than frequent absenteeism, class participation and easy exhaustion from activities were also observed. Along with the academic issues that lead to low grades among CWCI, they are also commonly teased and avoided by people in school. Moreover, there are a lot of reminders and restrictions that need to be followed to protect the health of the child. Considering these learning and educational needs of CWCI, collaboration among health and educational disciplines should prosper and ensure the implementation of awareness and training programs for the protection of the child’s health in school as well as development and carrying out of special and adapted activities modified to fit the learning needs of CWCI. Home and /or hospital-based educational programs should also be developed and provided by special education teachers to facilitate continuance of the child’s learning. The program should advocate strengthening the weak areas of the child in academics, affective and psychomotor domains through activities or worksheets that focus on subject areas of difficulty and emotional well-being as a whole.

Children with chronic illness face psychosocial problems brought about by the stress and issues linked with their health condition. Self-esteem is affected, anxiety levels are higher, relationships with family members, classmates and teachers and most especially health professionals are affected. The importance of faith and strong family relationships are important in helping the CWCI and his/her family deal with the stresses brought about by the condition. The unpleasant experiences of the CWCI in hospitals and during the process of treatment make them aloof towards health professionals. Anxiety and refusal to cooperate with them were commonly observed among CWCI. Relative to this fact, it is important that guidance and psychotherapy sessions are provided to the child. Activities that promote psychosocial or emotional healing should also be developed and implemented whether child is at home, in school or in the course of treatment. This will help the CWCI overcome the psychosocial issues linked with his/her health condition. Moreover, it will be helpful if the parents, teachers and especially the health professional collaborate and cooperate in the carrying-out of such psychosocial activities to promote development and increase in positive intrapersonal competence and interpersonal behavior of the CWCI.

A significant number of CWCI families earn a low monthly income that is not enough to sustain the needs of the family including the huge health and educational needs of the CWCI. A considerable increase in the regular expenditure of CWCI families is evident with support primarily coming from the father as family provider. The burden of compliance to prescribed medications, frequency of hospitalizations and related health needs are predominant set of difficulties encountered by the family in taking care of CWCI. Relative to these financial needs, a wide network of agencies, public and private, should be broadly advertised and extended to reach-out especially to less fortunate members of society with CWCI as members.

In terms of educational support system, teachers are open in giving special considerations in teaching CWCI in the form of take home assignments, longer examination time, non-strenuous activities, etc. and this is also what health professionals recommend in terms of special educational provisions for CWCI. Teasing / bullying in school by classmates of CWCI are also balanced by those who offer concern for the welfare of their classmate with chronic illness. At home, mothers of CWCI primarily offer support in attending to their school homework.

Considering the educational support system for CWCI, it is evident that teachers, classmates, most consistently the mothers, are open in rendering assistance to the child. Such openness to help will be made more effective if proper knowledge regarding the actual needs of the child based on
the nature of his/her condition is disseminated. Teaching considerations, modifications and stressing of certain issues and concerns in school activities may be done if the teachers themselves know the consequences of the child’s health conditions and other related problems that comes with it. Trainings for teachers and parents can be given to enhance teaching methodologies that can be utilized. An awareness program for the school community can be given to promote deeper understanding of the CWCI and how their condition affects their quality of life.

When CWCI are hospitalized, it is significant that there are no special education teachers that render learning activities for the child despite the acknowledgement of the benefits of teaching-learning activities in forgetting pain, decreasing boredom, etc. and the recognition of the need for CWCI teachers (e.g. tutors, special education teachers). The concept of having health professionals do hospital-based teaching activity during their free time is also a rational provision considering the shortage of special education teachers and to facilitate better rapport between the highly anxious CWCI and their health service professionals. Home-based teaching is also a practical approach to consider especially for those CWCI who are expected to recuperate at home because of the health condition. Such approach will cater to parents doing hand-on teaching to their children which are consistent with the goals of the Family Centered Model (Mahoney & Wheeden, 1997).

In the light of empowering parents and other potential teachers (e.g. health professionals) to uplift the quality of life of the CWCI through teaching, development of relevant teaching materials like teaching manuals, modules and activity guides can be helpful. Such materials are cost-effective and practical means of addressing the shortage of special education teachers, promoting continuity of the child’s education, attaining the positive benefits of learning and education in the midst of chronic health condition, decreasing anxiety levels of CWCI to health professionals, improving the relationship of parents and their CWCI and overall addressing the academic and psychosocial needs of the child.

III. WHAT DOES THE LITERATURE SAY REGARDING IDEAL PRACTICES (ROLES AND NORMS) OF MEMBERS OF THE INTERDISCIPLINARY TEAM IN THE EDUCATION OF CWCI?

Families notify the school of the student’s health management needs and diagnosis when appropriate. They notify schools as early as possible and whenever the student’s health needs change. They provide a written description of the student’s health needs at school, including authorizations for medication administration and emergency treatment, signed by the student’s health care provider. They participate in the development of a school plan to implement the student’s health needs and meet with the school team to develop a plan to accommodate the student’s needs in all school settings. They authorize appropriate exchange of information between school health program staff and the student’s personal health care providers and communicate promptly significant changes in the student’s needs or health status to appropriate school staff.

Families provide an adequate supply of student’s medication, in pharmacy-labeled containers, and other supplies to the designated school staff, and replace medications and supplies as needed. This supply should remain at school. They provide the school a means of contacting you or another responsible person at all times in case of an emergency or medical problem and educate the student to develop age-appropriate self-care skills. Likewise, they promote good general health, personal care, nutrition, and physical activity.

Family members are able to lead the care coordination team effectively and/or be active participants when they are knowledgeable about their child’s condition and their skills and strengths are supported.
Students with chronic illness on the other hand must notify an adult about concerns and needs in managing his/her symptoms or the school environment. And they should participate in the care and management of his/her health as appropriate to the developmental level.

Schools identify students with chronic conditions, and review their health records as submitted by families and health care providers. Teachers arrange a meeting to discuss health accommodations and educational aids and services that the student may need and to develop an Individualized Education Program (IEP), or other school plan, as appropriate. The participants should include the family, student (if appropriate), school health staff, IEP coordinator (as applicable), individuals trained to assist the student, and the teacher who has primary responsibility for the student. Health care provider input may be provided in person or in writing.

Educators of a CWCI provides a sound, comprehensive educational opportunity for that child in the least restrictive environment. The student’s physical needs should be planned for and modified or accommodated. However, once that is accomplished, educators should be free to be the child’s teacher, rather than feel that they must also be the child’s nurse. Educators will need the support of the school nurse and administrators to ensure freedom to go about being a teacher. With parent and student consent, educating the rest of the class about their friend’s health condition may enable everyone to go about their daily business of learning as usual. Many educators report that working with a special child is challenging and rewarding.

Teachers provide nondiscriminatory opportunities to students with disabilities. They should be knowledgeable about and ensure compliance with laws protecting the child’s rights. They should clarify the roles and obligations of specific school staff, and provide education and communication systems necessary to ensure that students’ health and educational needs are met in a safe and coordinated manner. They implement strategies that reduce disruption in the student’s school activities, including physical education, recess, offsite events, extracurricular activities, and field trips. They communicate with families regularly and as authorized with the student’s health care providers and Ensure that the student receives prescribed medications in a safe, reliable, and effective manner and has access to needed medication at all times during the school day and at school-related activities. They must be prepared to handle health needs and emergencies and to ensure that there is a staff member available who is properly trained to administer medications or other immediate care during the school day and at all school-related activities, regardless of time or location. They ensure that all staff who interacts with the student on a regular basis receives appropriate guidance and training on routine needs, precautions, and emergency actions. They provide appropriate health education to students and staff, and a safe and healthy school environment. They ensure that case management is provided as needed and ensure proper record keeping, including appropriate measures to protect confidentiality and share information. Teachers promote a supportive learning environment that views students with chronic illnesses in the same way as other students except for their health needs. Likewise, teachers promote good general health, personal care, nutrition, and physical activity.

The primary care pediatrician's role in coordination care within the medical home concept is not fixed or determined by a defined set of tasks but is a dynamic process driven by the health status and developmental progress of the child, the specific needs of the child and family, the primary care pediatrician's expertise with children with special health care needs, and the availability of other professionals to provide coordination in care.

IV. WHAT ARE THE PERCEIVED PRACTICES OF THE MEMBERS OF THE INTERDISCIPLINARY TEAM SPECIFICALLY ON ITEMS STATED IN SPECIFIC OBJECTIVE NO.3?

General description of the results concerning the perceived practices of parents, teachers and health professional respondents revealed an overall mean score of 4.33 which can be implied that in general, the respondents agree to the practices each member of the interdisciplinary team
have in the education of CWCI. Mean scores for specific sub-areas range between 3.96 and 4.65, implying that the respondents agree with the statements given which are all ideal roles and norms of the different members of the interdisciplinary team. Exception however is given to areas pertaining to norms/culture of teachers and roles of health professionals wherein the respondents strongly agree with the given statements.

Results revealed that the respondents agree to the specific roles of parents in the education of CWCI as revealed by an overall mean score of 4.42. Specific statements under this area resulted in mean scores ranged between 3.88 and 4.69. Among the statements concerning parent roles, the top five highest agreements were noted in the following: a.) parents promote overall personal care for the child, b.) parents should notify the service professionals of the health management needs of the child, c.) parents promote physical activity that can help the child, d.) parents should attend educational and support-oriented meetings for the education of the child, and e.) parents should provide information about the child and family to service professionals.
Results revealed that the respondents agree to the specific norms/culture of parents in the education of CWCI as revealed by an overall mean score of 3.96. Specific statements under this area resulted in mean scores ranging between 3.29 and 4.55. Among the statements concerning parent norms/culture, top three highest agreements were noted in the following: a.) parents communicate to other professionals rendering services to the child, b.) parents take full and great responsibility in the education of the child, and c.) parents take a lead role in the evaluation of the child’s services.

Results revealed that the respondents agree to the specific roles of teachers in the education of CWCI as revealed by an overall mean score of 4.28. Specific statements under this area resulted in mean scores ranged between 3.67 and 4.83. Among the statements concerning teacher roles, top five highest agreements were noted in the following: a.) teachers provide the necessary comprehensive education for the CWCI, b.) teachers provide general education of the CWCI, c.) teachers promote supportive learning environment for the CWCI, d.) teachers implement strategies that reduce disruption in the student’s school activities, and e.) teachers must learn to how to promote a safe and healthy environment for CWCI.

Results revealed that the respondents strongly agree with the specific norms/culture of teachers in the education of CWCI as revealed by an overall mean score of 4.58. Specific statements under this area resulted in mean scores ranging between 4.23 and 4.93. All of the statements were strongly agreed upon by the respondents except only for item number 44 concerning the norm/culture of teachers wherein they communicate with the other service providers as authorized which was interpreted as agree.

Results revealed that the respondents strongly agree with the specific roles of health professionals in the education of CWCI as revealed by an overall mean score of 4.65. Specific statements under this area resulted in mean scores ranged between 4.52 and 4.90, all of which were interpreted as strong agreement of the respondents to the statements given.

Concerning the level of involvement the parents, teachers and health professionals should have in the education of CWCI, general results revealed that respondents believe that all of these members of the interdisciplinary should be involved in the education of CWCI as implicated by an overall mean score of 4.48. The highest mean score was met by the teacher respondents (mean=4.96), followed by the parent/guardians (mean=4.79), then by the health professionals (mean=3.69) which implies that respondents believe that the greatest involvement in the education of CWCI should come from the teachers, followed by the parents and the least from the health professionals.

V. IS THERE SIGNIFICANT DIFFERENCE AMONG THE PERCEIVED PRACTICES OF EACH MEMBER OF THE INTERDISCIPLINARY TEAM HANDLING THE CWCI?

To test the null hypothesis that there is no significant difference among the perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI ($\mu_p = \mu_t = \mu_{hp}$), one way Analysis of variance (ANOVA) was done to treat the data statistically. Results revealed values at less than $\alpha 0.05$ level of significance for the roles and norms/culture of parents and
teachers and value less than $\alpha 0.10$ level of significance for the norms / culture of health professionals. Tests were not significant for areas concerning the perception of respondents about the roles of health professionals and the level of involvement of the members of the interdisciplinary team in the education of CWCI. Therefore, the null hypothesis is rejected specifically on areas A, B, C, D at $\alpha 0.05$ and F at $\alpha 0.10$ implying that there is significant difference among the perceptions of parents, teachers and health professionals as to the roles and norms/culture of parents and teachers as well as to the norms/culture of health professionals in the education of CWCI. The succeeding table presents the data.
## TABLE 3
SIGNIFICANT DIFFERENCE AMONG PERCEIVED PRACTICES OF PARENTS, TEACHERS AND HEALTH PROFESSIONALS IN THE EDUCATION OF CWCI

<table>
<thead>
<tr>
<th>AREA</th>
<th>PRACTICES OF INTERDISCIPLINARY TEAM MEMBERS IN EDUCATION OF CWCI</th>
<th>F</th>
<th>SIG</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Roles of Parents</td>
<td>54.79</td>
<td>.000</td>
<td>Significant at ( \alpha ) 0.05</td>
</tr>
<tr>
<td>B</td>
<td>Norms/Culture of Parents</td>
<td>16.16</td>
<td>.000</td>
<td>Significant at ( \alpha ) 0.05</td>
</tr>
<tr>
<td>C</td>
<td>Roles of Teachers</td>
<td>34.20</td>
<td>.000</td>
<td>Significant at ( \alpha ) 0.05</td>
</tr>
<tr>
<td>D</td>
<td>Norms/Culture of Teachers</td>
<td>12.39</td>
<td>.000</td>
<td>Significant at ( \alpha ) 0.05</td>
</tr>
<tr>
<td>E</td>
<td>Roles of Health Professionals</td>
<td>1.80</td>
<td>.169</td>
<td>Not significant</td>
</tr>
<tr>
<td>F</td>
<td>Norms / Culture of Health Professionals</td>
<td>2.98</td>
<td>.054</td>
<td>Significant at ( \alpha ) 0.10</td>
</tr>
<tr>
<td>G</td>
<td>Level of Involvement</td>
<td>1.83</td>
<td>.165</td>
<td>Not significant</td>
</tr>
</tbody>
</table>
VI. IS THERE NONCONFORMITY BETWEEN THE IDEAL AND PERCEIVED PRACTICES OF THE INTERDISCIPLINARY TEAM RESPONDENTS?

To test the first null hypothesis that there is conformity between the ideal and the perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI, \( \mu \geq 4.5 \) was used if the t-test score results to positive value. The second null hypothesis that there is no significant agreement between the ideal and the perceived practices (roles and norms) of parents, teachers and other health professionals in the education of CWCI, \( \mu < 4.5 \) was used if the t-test score results to negative value. One sample t-test was done to statistically treat the data. Results revealed values less than \( \alpha 0.05 \) level of significance for all areas with t-test scores to be negative in all areas except for area E pertaining to roles of health professionals. Therefore, the first null hypothesis is rejected specifically on areas A, B, C, D, F and G implying that there is nonconformity between the ideal and the perceived practices in the education of CWCI in areas pertaining to roles and norms/culture of parents, teachers, norms / culture of health professionals and level of involvement of each interdisciplinary member. The second null hypothesis on the other hand is rejected specifically on area E at \( \alpha 0.05 \) implying that there is significant agreement between the ideal and perceived practices (roles and norms) of the respondents as to the roles of health professionals in the education of CWCI. The succeeding table presents the data.
TABLE 4

NONCONFORMITY BETWEEN IDEAL AND PERCEIVED PRACTICES OF PARENTS, TEACHERS AND HEALTH PROFESSIONALS IN THE EDUCATION OF CWCI

<table>
<thead>
<tr>
<th>AREA</th>
<th>PRACTICES OF INTERDISCIPLINARY TEAM MEMBERS IN EDUCATION OF CWCI</th>
<th>t</th>
<th>SIG</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Roles of Parents</td>
<td>-6.34</td>
<td>.000</td>
<td>Significant at α 0.05</td>
</tr>
<tr>
<td>B</td>
<td>Norms/Culture of Parents</td>
<td>-9.41</td>
<td>.000</td>
<td>Significant at α 0.05</td>
</tr>
<tr>
<td>C</td>
<td>Roles of Teachers</td>
<td>-7.27</td>
<td>.000</td>
<td>Significant at α 0.05</td>
</tr>
<tr>
<td>D</td>
<td>Norms/Culture of Teachers</td>
<td>-1.70</td>
<td>.046</td>
<td>Significant at α 0.05</td>
</tr>
<tr>
<td>E</td>
<td>Roles of Health Professionals</td>
<td>3.70</td>
<td>.000</td>
<td>Significant at α 0.05</td>
</tr>
<tr>
<td>F</td>
<td>Norms and Culture of Health Professionals</td>
<td>-6.83</td>
<td>.000</td>
<td>Significant at α 0.05</td>
</tr>
<tr>
<td>G</td>
<td>Level of Involvement</td>
<td>-2.13</td>
<td>.035</td>
<td>Significant at α 0.05</td>
</tr>
</tbody>
</table>
PHASE 3: Manual Post-testing and Validation

VII. WHAT ARE THE PRE AND THE POST-TEST SCORES OF CWCI AND PARENT RESPONDENTS’ CONTROL AND EXPERIMENTAL GROUPS REGARDING PSYCHOSOCIAL CHARACTERISTICS?

For the pre-test and the post-test psychosocial scores of the CWCI and parent control groups of the study, an overall pre-test mean score of 2.23 was noted for CWCI respondents with an overall post-test mean score of 2.19. Mean scores for the pre-test ranged between 2.05 and 2.51 while mean scores for the post-test range between 2.02 and 2.45. Scores decreased by a difference of 0.04 during the post-testing period. On the other hand, an overall pre-test mean score of 2.27 was noted for parent respondents with an overall post-test mean score of 2.26. Mean scores for the pre-test range between 1.83 and 2.45 while mean scores for the post-test range between 2.21 and 2.30. Scores decreased by a difference of 0.01 during the post-testing period. Table 5 presents the data.

<table>
<thead>
<tr>
<th>PSYCHOSOCIAL AREAS ASSESSED BY CWCI AND PARENT CONTROL GROUPS</th>
<th>CWCI</th>
<th>PARENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Post-test</td>
<td>Pre-test</td>
</tr>
<tr>
<td>A Anxiety manifestation</td>
<td>2.07</td>
<td>2.02</td>
</tr>
<tr>
<td>B Self-esteem</td>
<td>2.20</td>
<td>2.18</td>
</tr>
<tr>
<td>C Relationship with Family Members</td>
<td>2.51</td>
<td>2.45</td>
</tr>
<tr>
<td>D Relationship with Teachers and Classmates</td>
<td>2.34</td>
<td>2.26</td>
</tr>
<tr>
<td>E Relationship with Health Professionals</td>
<td>2.05</td>
<td>2.02</td>
</tr>
<tr>
<td>OVERALL MEAN</td>
<td><strong>2.23</strong></td>
<td><strong>2.19</strong></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>0.04</td>
</tr>
<tr>
<td>N</td>
<td>42</td>
<td>33</td>
</tr>
</tbody>
</table>

For the pre-test and the post-test psychosocial scores of the CWCI and parent experimental groups of the study, an overall pre-test mean score of 2.52 was noted for CWCI respondents with an overall post-test mean score of 2.79. Mean scores for the pre-test ranged between 2.19 and 2.73 while mean scores for the post-test range between 2.69 and 2.87. Scores increased by a difference of 0.04 during the post-testing period. On the other hand, an overall pre-test mean score of 2.36 was noted for parent respondents with an overall post-test mean score of 2.77. Mean scores for the pre-test range between 2.00 and 2.52 while mean scores for the post-test range between 2.72 and 2.80. Scores increased by a difference of 0.41 during the post-testing period. Table 6 presents the data.

<table>
<thead>
<tr>
<th>PSYCHOSOCIAL AREAS ASSESSED BY CWCI AND PARENT EXPERIMENTAL GROUPS</th>
<th>CWCI</th>
<th>PARENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Post-test</td>
<td>Pre-test</td>
</tr>
<tr>
<td>A Anxiety manifestation</td>
<td>2.47</td>
<td>2.69</td>
</tr>
<tr>
<td>B Self-esteem</td>
<td>2.62</td>
<td>2.87</td>
</tr>
<tr>
<td>C Relationship with Family Members</td>
<td>2.61</td>
<td>2.71</td>
</tr>
<tr>
<td>D Relationship with Teachers and Classmates</td>
<td>2.73</td>
<td>2.87</td>
</tr>
<tr>
<td>E Relationship with Health Professionals</td>
<td>2.19</td>
<td>2.83</td>
</tr>
<tr>
<td>OVERALL MEAN</td>
<td><strong>2.52</strong></td>
<td><strong>2.79</strong></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>0.27</td>
</tr>
<tr>
<td>N</td>
<td>42</td>
<td>40</td>
</tr>
</tbody>
</table>

To test the null hypothesis that there is no difference in the pre-test and post-test psychosocial characteristics scores for both groups of CWCI and parent respondents \( (\mu_{\text{POST-TEST}} - \mu_{\text{PRETEST}} = 0) \), one sample t-test was used to treat the data.

For the CWCI respondents, results revealed values lower than \( \alpha = 0.05 \) level of significance in the following psychosocial areas: A - anxiety manifestation, B-self-esteem and E-relationship with health professionals all under the experimental group. Therefore, the null hypothesis is rejected for these three aforementioned areas (A, B and E) for the experimental group, thus, for these three areas there is significant difference in the pre-test and the post-test psychosocial characteristics scores for the experimental group of CWCI where the mean of post test is higher than pretest. Table 7 presents the data.

<table>
<thead>
<tr>
<th>PSYCHOSOCIAL AREAS ASSESSED BY CWCI CONTROL AND EXPERIMENTAL GROUPS</th>
<th>t-test value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>A Anxiety manifestation</td>
<td>0.434</td>
<td>0.017</td>
</tr>
<tr>
<td>B Self-esteem</td>
<td>0.451</td>
<td>0.044</td>
</tr>
<tr>
<td>C Relationship with Family Members</td>
<td>0.414</td>
<td>0.259</td>
</tr>
<tr>
<td>D Relationship with Teachers and Classmates</td>
<td>0.488</td>
<td>0.153</td>
</tr>
<tr>
<td>E Relationship with Health Professionals</td>
<td>0.290</td>
<td>0.000</td>
</tr>
</tbody>
</table>

For the parent respondents, results revealed values lower than \( \alpha = 0.05 \) level of significance for all areas under the experimental group and for area E (relationship with health professionals) only of the control group. Therefore, the null hypothesis is rejected in all areas for the experimental group and area E of the control group, thus, for the parent respondents there is significant difference in the pre-test and the post-test psychosocial characteristics scores for all psychosocial areas in the experimental group and area concerning the relationship of CWCI with health professionals under the control group where the mean of post test is higher than pretest. Table 8 presents the data.

<table>
<thead>
<tr>
<th>PSYCHOSOCIAL AREAS ASSESSED BY PARENT CONTROL AND EXPERIMENTAL GROUPS</th>
<th>t-test value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>A Anxiety manifestation</td>
<td>0.412</td>
<td>0.000</td>
</tr>
<tr>
<td>B Self-esteem</td>
<td>0.352</td>
<td>0.000</td>
</tr>
<tr>
<td>C Relationship with Family Members</td>
<td>0.456</td>
<td>0.000</td>
</tr>
<tr>
<td>D Relationship with Teachers and Classmates</td>
<td>0.315</td>
<td>0.000</td>
</tr>
</tbody>
</table>
To test the null hypothesis that there is no difference between the psychosocial scores of the control and experimental groups ($\mu_{\text{post-test}} = \mu_{\text{pre-test}}$), two sample independent t-test was used to treat the data.

Results revealed values lower than $\alpha$ 0.05 level of significance in the following psychosocial areas: E – relationship with health professionals for both CWCI and parent respondents, and B – self-esteem for parent respondents only. Values lower than $\alpha$ 0.10 level of significance was also noted in the following psychosocial areas: A – anxiety manifestation for both CWCI and parent respondents and C – relationship with family members for parent respondents only. Therefore, the null hypothesis is rejected for all these aforementioned areas. Thus, we can say that there is significant difference between the psychosocial scores of the control and the experimental groups for CWCI respondents where the mean of the experimental group is higher than the control group for areas of anxiety manifestation and relationship with health professionals, and that there is significant difference between the psychosocial scores of the control and experimental groups for parent respondents where the mean of the experimental group is higher than the control group in all psychosocial areas. Table 9 presents the data.

**TABLE 9**

**DIFFERENCE BETWEEN CONTROL AND EXPERIMENTAL GROUP PSYCHOSOCIAL SCORES**

<table>
<thead>
<tr>
<th>PSYCHOSOCIAL AREAS ASSESSED BY CWCI AND PARENT</th>
<th>CONTROL AND EXPERIMENTAL GROUPS</th>
<th>Significance</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWCI</td>
<td>PARENT</td>
<td>CWCI</td>
<td>PARENT</td>
</tr>
<tr>
<td>A Anxiety manifestation</td>
<td>0.097</td>
<td>0.074</td>
<td>Significant @ $\alpha$ 0.10</td>
</tr>
<tr>
<td>B Self-esteem</td>
<td>0.163</td>
<td>0.003</td>
<td>Not significant</td>
</tr>
<tr>
<td>C Relationship with Family Members</td>
<td>0.450</td>
<td>0.094</td>
<td>Not significant</td>
</tr>
<tr>
<td>D Relationship with Teachers and Classmates</td>
<td>0.338</td>
<td>0.071</td>
<td>Not significant</td>
</tr>
<tr>
<td>E Relationship with Health Professionals</td>
<td>0.000</td>
<td>0.009</td>
<td>Significant @ $\alpha$ 0.05</td>
</tr>
</tbody>
</table>

**IX. CAN THE EDUCATIONAL NEEDS OF CWCI BE MET BY A MANUAL INTENDED FOR INTERDISCIPLINARY USE?**

Based on the results of the study that tested the effectiveness of the interdisciplinary therapeutic teaching manual by comparing pre and post test psychosocial scores, it can be noted that: a.) as answered by CWCI, there is significant difference in the pre-test and the post-test psychosocial characteristics scores for the experimental group where the post test mean is higher than the pre-test mean in areas of Anxiety, Self-esteem and Relationships with Health Professionals; b.) as answered by parent respondents, there is significant difference in the pre-test and the post-test psychosocial characteristics scores in all psychosocial areas (anxiety, self-esteem, relationship with family, relationship with classmates and teachers and relationships with health professionals) for the experimental group and area concerning the relationship of CWCI to health professionals under the control group where the post test mean is higher than the pretest mean; and c.) in comparing overall changes between the control and the experimental groups, results revealed significant difference between the psychosocial scores of the control and the experimental groups for CWCI respondents where the mean of the experimental group is higher than the control group for areas of anxiety manifestation and relationship with health professionals.
professionals, and that there is significant difference between the psychosocial scores of the control and the experimental groups for parent respondents where the mean of the experimental group is higher than the control group in all psychosocial areas.

Considering the aforementioned results, it can be concluded that the interdisciplinary therapeutic teaching manual was able to meet the educational needs of CWCI respondents of the study through therapeutic teaching methods with incidental integration of basic academic components of learning. A matrix that summarizes how the manual answered the specific needs assessed in the study is presented in Table 10.

### TABLE 10
MATRIX OF GENERAL INTERDISCIPLINARY TEAM NEEDS AND PSYCHOSOCIAL NEEDS OF CWCI WITHCORRESPONDING MANUAL ACTIVITY INTERVENTION

<table>
<thead>
<tr>
<th>ASSESSED NEEDS</th>
<th>INTENDED RESOLUTION</th>
<th>MANUAL ACTIVITY INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of knowledge of CWCI, parents, and teachers regarding the health condition and its educational implications.</td>
<td>To educate interdisciplinary members on chronic health conditions emphasizing educational its implications.</td>
<td>Book 1 Chapter 2 Part 1</td>
</tr>
<tr>
<td>Low income families with financial problems because of the health condition of the child.</td>
<td>To reproduce the manual for use of low income families with CWCI and those in community setting through public or private sponsorships.</td>
<td>The manual output is recommended to tap Non-Governmental Organizations (NGOs) like National Council for the Welfare of the Disabled in the Phils. and other agencies like WHO and / or UNICEF to sponsor reproduction intended for community-based respondents and / or low income families.</td>
</tr>
<tr>
<td>School disruption and absenteeism.</td>
<td>To distribute the manual to official agencies like hospitals, non-government organizations and schools for use in hospital and home-based education programs.</td>
<td>The manual serves as a teaching guide for parents, teachers and health professionals in the education of CWCI who are confined at home or hospitals to facilitate continuity of learning in an enjoyable manner.</td>
</tr>
<tr>
<td>Dearth in hospital and home-based teaching programs</td>
<td>To endorse the use of the manual for hospital bed-side teaching or home-based teaching material to proper agencies.</td>
<td>The manual output is recommended for distribution and use in hospitals catering to CWCI, barangay centers, and public elementary schools.</td>
</tr>
<tr>
<td>Nonconformity between the ideal and the perceived practices in the education of CWCI in areas pertaining to roles and norms/culture of parents, teachers, norms / culture of health professionals and level of involvement of each interdisciplinary member.</td>
<td>To educate interdisciplinary members on the expected or ideal roles and norms of parents, teachers and health professionals and their level of involvement in the education of CWCI.</td>
<td>Book 1 Chapter 2 Part 2</td>
</tr>
</tbody>
</table>
Chapter 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This descriptive and quasi-experimental study investigated the educational needs of children with chronic illness and the practices (roles and norms) of the members of the interdisciplinary team (e.g. parents, teachers, health professionals) involved with the children in facilitating their education. The study developed and validated a manual that can be used by the members of an interdisciplinary team to ensure not only the continuity of regular education in the early primary level but also to address the therapeutic and incidentally the cognitive needs of CWCI that affect their learning and development, thus enhancing the quality of their lives. It specifically sought to answer the following questions:

CONCERNING EDUCATIONAL NEEDS

1. What are the characteristics of CWCI in terms of the following aspects:
   b. Demographic profile
   c. Health condition
   d. Learning or education
   e. Psychosocial state
      i. Intrapersonal characteristics
         1. Anxiety manifestation
         2. Self-esteem
      ii. Interpersonal characteristics
         1. Relationship with parents
         2. Relationship with teachers and classmates
         3. Relationship with health professionals
   f. Other support system
      i. Family support system
      ii. Health and Educational support system

2. What are the special educational needs of CWCI based on the characteristics mentioned in specific objective number one?

CONCERNING INTERDISCIPLINARY COLLABORATION

3. What does the literature say regarding the ideal practices of the members of the interdisciplinary team in the education of CWCI specifically on the following:
   i. Roles undertaken as member of the team
   ii. Norms in terms of:
      1. Prioritized responsibility
      2. Communication to other members of the team
      3. Level of involvement in educating the child

4. What are the perceived practices of the members of the interdisciplinary team specifically on items stated in specific objective no.3?

5. Is there an agreement between the perceived practices of each member of the interdisciplinary team handling the CWCI

6. Is there conformity between the ideal and perceived practices of the of the interdisciplinary team respondents?

CONCERNING MANUAL VALIDATION
7. What are the pre and post-test scores of CWCI and parent respondents’ control and experimental groups regarding the psychosocial characteristics of the child specifically:
   i. Intrapersonal characteristics
      1. Anxiety manifestation
      2. Self-esteem
   ii. Interpersonal characteristics
      1. Relationship with parents
      2. Relationship with teachers and classmates
      3. Relationship with health professionals

8. Is there a significant difference between the pre-test and post-test scores of CWCI and parent respondents and between control and experimental groups regarding the psychosocial characteristics of the child stipulated in specific objective no.7 after manual implementation?

9. Can the educational needs of CWCI be met by a manual intended for interdisciplinary use?

The hospitals which served as research locale of the study were: a.) East Avenue Medical Center (EAMC) in East Avenue, Quezon City, b.) Fe Del Mundo Hospital (FDH) formerly Children’s Medical Center in Banawe, Quezon City, c.) National Children’s Hospital (NCH) in E. Rodriguez, Quezon City, d.) Philippine Children’s Medical Center (PCMC) in Quezon Avenue, Quezon City, e.) Philippine General Hospital (PGH) in Taft Avenue, Manila, and lastly f.) Philippine Orthopedic Center (POC) in Banawe, Quezon City. Purposive sampling was used and the CWCI population was subjected into a set of screening criteria to be qualified. Overall, the study comprised 84 CWCI, 84 parent respondents, 14 teachers, and 28 health professionals as respondents.

Four researcher-designed, pilot-tested and expert validated questionnaires were used as instruments in the study, one for each respondent. The study was divided into three phases namely: a.) Phase 1 - Preliminary data gathering phase, where CWCI needs assessment and analysis of interdisciplinary collaboration practices were done; b.) Phase 2 – Interdisciplinary Therapeutic Teaching Manual development and expert validation phase, and lastly c.) Phase 3 – Post-testing and validation of the developed manual based on post-test psychosocial characteristic scores of the CWCI respondents. Descriptive-correlational statistics were used to treat and analyze the data.

MAJOR FINDINGS:

The study yielded the following major findings:

DEMOGRAPHICS OF CWCI

1. Male and female CWCI were nearly equally represented as respondents of the study with boys slightly greater than girls in number with more than half belonging to the 7 to 9 age groups. Nearly three-fourths of them had siblings and most were the eldest or second children in the family. Almost three-fourths were Roman Catholics.

2. More than half of the CWCI respondents had parents who were married and nearly half of them had parents accompanying them at home.

HEALTH CHARACTERISTICS

3. CWCI respondents had clinical diagnoses categorized as: a.) Cancer; b.) Musculoskeletal disease, c.) Blood diseases, d.) Kidney disease, e.) Tumor, and f.) Other special types. More than half of them were diagnosed of Cancer mostly Leukemia in type, followed by other unspecified forms of Cancer, Lymphoma, Polymosisis and Pott’s disease.
4. More than half of the CWCI respondents had their illness for one year and had had other co-existing illnesses, the most common was Pneumonia. Nearly three-fourths had a history of hospitalization, mostly 1-2 times and staying in the hospital for 4 to 6 days.

5. Nearly three-fourths of the CWCI respondents were undergoing chemotherapy treatment program. More than half of them were aware of their diagnosis which most commonly was Leukemia.

6. Most of the CWCI respondents showed no reaction or were sad upon knowing their condition. Majority of them, together with their parents believed that the illness would immediately resolve by itself.

7. Doctors were the common source of information among all respondents except for teachers who learned about the child’s condition from the parents of the CWCI. All of the respondents, except the health professionals, admitted that they knew only little about the health condition.

8. Majority of the CWCI respondents showed moderate weakness. Common signs and symptoms experienced included, but were not limited to the following: a.) tires easily, b.) loss of appetite, c.) body/joint pains, d.) weakness and e.) fever. When in school, symptoms were sometimes experienced during activities.

**LEARNING CHARACTERISTICS**

9. More than half of the CWCI respondents attended public school, had history of school disruption, and had currently stopped schooling already. Most of them stopped at the level of grade 2, grade 1 and nursery because of their physical condition and as per doctor’s advice.

10. Absenteeism from school was a common occurrence. Majority of the CWCI respondents were absent 1 to 2 times per week mostly because of their illness. They were required to stay home and rest and because of doctor’s appointments.

11. Almost all of the health professional respondents believed that the health condition of the CWCI pose limitation in the education of CWCI and lead to school disruption which was coherent with the teacher respondents’ claim that CWCI significantly experience school problems evidenced by frequent absenteeism and inability to participate in class.

12. Common school problems justifying difficulties included, but were not limited to the following: a.) physical weakness, b.) symptomatic episodes, c.) frequent absences, d.) exposure restrictions and e.) effects of medication. English, Math and Science were the most common subject areas of difficulty in school. Focusing, computation and reading were the most common specific learning difficulties that were encountered. Other most common related school experiences given the health condition included, but were not limited to the following: a.) laziness in studying, b.) low grades, c.) forgetfulness of lessons, d.) difficulty understanding lessons, e.) difficulty focusing, f.) writing difficulty, g.) teasing by peers and h.) being avoided by people.

13. Despite the health condition, majority of the CWCI, parent and teacher respondents still believed that school activities did not stress the CWCI since boredom could be suppressed as the child did not notice time and demonstrate enjoyment with the activities. Majority of the CWCI and parent respondents preferred their last attended school and their homes to continue their education.

14. Common restrictions and/or reminders given to CWCI when in school include, but were not limited to the following: a.) regular visit with the doctor for check-up, b.) drinking of prescribed
medications, c.) having enough sleep, d.) not engaging in stressful activities and e.) eating nutritious foods. The last two were the most commonly violated.

**PSYCHOSOCIAL CHARACTERISTICS**

15. Majority of the CWCI established closer relationship with God given the health condition as they were convinced that God would help them get well.

16. CWCI respondents oftentimes experienced poor intrapersonal relations as evidenced by high anxiety, low self-esteem and poor interpersonal relationship with family, teachers and classmates and health professionals revealed by the psychosocial assessment tool with 4-point scale of measurement for answers. The results of the latter, however, were inconsistent with findings about CWCI interpersonal relations with the family using direct questions answerable by dichotomous scale. Results of the questions with dichotomous level of measurement were suggestive of good interpersonal relations of the CWCI of this study and their family members while those items with 4-point level of measurement scale implies poor interpersonal relationship as evidenced by OFTEN occurrence of negative interpersonal behavior.

17. High anxiety among CWCI was most commonly evidenced by, but was not limited to the following: a.) often fearful of many things, b.) oftentimes sad, and c.) easily and often gets angry.

18. Low self-esteem among CWCI was most commonly shown by, but was not limited to the following: a.) often did not feel relaxed when left alone, b.) oftentimes did not know what they wanted and were not open to expressing it to other people, and c.) often could initiate doing tasks.

19. Majority of the CWCI respondents established closer relationship with parents and siblings given the health condition when asked directly using dichotomous (yes or no) answer. Most common reasons/evidences presented were, but not limited to the following: a.) parents became more affectionate with the child, b.) the child was pitied, c.) parents always attended to the child’s needs, d.) siblings wanted to be with the CWCI always, e.) siblings innately loved and are were of each other, and f.) siblings did not quarrel with each other given the health condition.

20. Poor interrelationship of CWCI with family members, however, using researcher-made psychosocial assessment tool with 4-point scale of measurement for answers was most commonly evidenced by, but was not limited to the following: a.) refusal to play with siblings, b.) CWCI became demanding, and c.) refusal to go out with the family for recreation.

21. Majority of the CWCI respondents became distant with friends given the health condition commonly because they were being avoided and because peers were scared they might catch the disease.

22. Poor interrelationship of CWCI with classmates and teachers were most commonly demonstrated by, but were not limited to the following: a.) refusal to play with other children, b.) feeling of not being helped by teachers, and c.) CWCI did not express themselves to teacher.

23. Poor interrelationship of CWCI with health professionals was most commonly evidenced by, but was not limited to the following: a.) refusal to stay in the hospital, b.) fearful of health professionals, and c.) CWCI did not express their sentiments or feelings to the health professional.

24. Common unwanted experiences of CWCI when hospitalized included, but were not limited to the following: a.) injections, b.) drinking too many medications, c.) inability to play with friends. d.)
requirement of lengthy stay at the hospital, and e.) talking to health professionals. Literature has shown that medical procedures CWCI undergo are frightening or painful. Hospital stays can also be frightening and lonely and because of young children's limited ability to understand their illnesses, they sometimes believe that they are being punished thus making them withdrawn or aloof with health professionals.

SUPPORT SYSTEMS OF CWCI

25. More than half of the CWCI family respondents of the study earned an income lower than PhP 5,000 monthly with fathers as primary source of financial support. Three-fourths of them experienced great increase in family expenditures with more than half experiencing increased debts given the CWCI health condition. Common difficulties encountered were, but not limited to the following: a.) buying prescribed medications, b.) hospital and other expenses, and c.) rushing in to hospitals when the CWCI is symptomatic.

26. Majority of the families of the CWCI respondents had not accepted if not slightly accepted the health condition of the child. More than half of the parent respondents established closer relationships given the health condition as they help each other face the problems aspire to make the child happy, and unite in their desire for the child to recover. It was noted that majority of CWCI siblings, were more thoughtful and caring with the CWCI although some were jealous over the attention given to the CWCI.

27. Mothers of CWCI were the major source of personal and home educational support among CWCI. Majority of the CWCI family respondents responded immediately to the child’s symptomatic episodes by immediately bringing the CWCI to nearby doctors or hospitals, mostly through the help of other family members and by loans.

28. All of the teacher respondents responded to symptomatic episodes in school by giving the CWCI rest and by calling for help. All of them gave special considerations through take home assignments, excused absences and longer examination time, nonparticipation of the CWCI in strenuous activities, and special sessions/activities for missed topics. Peer support was evidenced by frequent checking of the CWCI condition and money donations from classmates and friends.

29. Majority of the health and teacher respondents suggested art activities as substitute for learning of the CWCI. Both respondents also advocated tutorial programs, part-time special education placement, and home-based schooling if possible as educational services to support the CWCI.

30. Almost all CWCI respondents did not have special teachers when hospitalized. All of the respondents believed that special teachers are needed to attend to CWCI learning when confined in the hospital or required to stay at home. Common reasons given included, but were not limited to the following: a.) to continue studies, b.) to decrease boredom, c.) the desire to learn, d.) to have visitors and e.) the desire to have other teachers.

31. A significant majority of the respondents were agreeable to have parents as special / substitute teachers whenever the child was hospitalized or homebound. Likewise, significant majority of the respondents, except for the CWCI, were also amenable to have health professionals as special / substitute teachers when at the hospital. Fear was the most common factor why CWCI refused to have health professionals as teachers.

32. More than half of the health professionals expressed willingness to serve as special / substitute teachers at the hospital for CWCI. Most of them preferred less than an hour of teaching the CWCI, but together with the teacher respondents, they recommended the development of guides and
instructions on what and how to teach, formal training/seminars/teaching units, and teaching modules to equip them.

SPECIAL EDUCATION NEEDS OF CWCI

33. Major findings showed the need to educate families and teachers of CWCI regarding the health condition and provisions of the child as well as the need to develop special education programs that will address the absenteeism, cognitive and psychosocial needs of CWCI.

34. Results also showed the need to expand support systems to CWCI families especially those in the poverty level by expanding and advertising networks or agencies, public and private that can reach out to less privileged families with chronically ill children so as to improve their quality of life.

PRACTICES (ROLES AND NORMS) IN THE EDUCATION OF CWCI

35. Major findings showed that independently, each of the respondents agreed with the stipulated ideal roles and norms of parents, roles of teachers and norms of health professionals and strongly agreed to the norms of teachers and roles of health professionals in the education of CWCI.

36. Significant difference, however, existed in the perceptions of parents, teachers and health professionals as to the practices (roles and norms) of each member of the interdisciplinary team in the education of CWCI when compared. Significant differences were evident in their view of the parental roles and norms, teacher roles and norms, and health professional norms. Although, their concordance was apparent on their view of health professional roles and level of involvement of each interdisciplinary team member.

37. Although, there was agreement when results were treated independently, it was revealed that there is nonconformity between the ideal and the perceived practices (roles and norms) of each member of the interdisciplinary team in the education of CWCI when statistically treated except for the area concerning the roles of health professionals. The perception of the parents, teachers and health professionals regarding the practices (roles and norms) of each member of the interdisciplinary team in the education of CWCI did not conform with the ideal practice as stated in the literatures except only on the part which concerns the roles of health professionals where there is similarity.

POST-TESTING PSYCHOSOCIAL CHARACTERISTICS

38. For the control group, an overall mean difference of 0.04 was evident for the CWCI respondents with 0.01 mean differences for the parent respondents.

39. For the experimental group, an overall mean difference of 0.27 was evident for the CWCI respondents with 0.41 mean differences for the parent respondents.

40. Test of significant difference for the CWCI respondents showed that for the experimental group, there is significant difference in the pre-test and the post-test psychosocial scores in three areas namely: a.) anxiety manifestation, b.) self-esteem, and c.) relationship with health professionals. No significant difference for the control group transpired. This implies the effect of the interdisciplinary therapeutic manual intervention utilized by the experimental group of the study.
41. Test of significant difference for the parent respondents showed that there is significant difference in the pre-test and the post-test psychosocial scores in all of the five areas namely: a.) anxiety manifestation, b.) self-esteem, c.) relationship with family members, d.) relationship with teachers and classmates, and d.) relationship with health professionals. No significant difference for the control group transpired except for the area concerning relationship with health professionals.

42. Overall test of significant difference between the control group versus the experimental group revealed that for the parent respondents, there is significant difference in all psychosocial areas, and for CWCI respondents, there is significant difference in two areas namely: a.) anxiety manifestation, and b.) relationship with health professionals where the post-test mean of the experimental group is higher than the control group. This implies the effect of the interdisciplinary therapeutic manual intervention utilized by the experimental group of the study.

MANUAL VALIDATION

43. Overall, tests of significant difference during the post-testing phase revealed significant change in the psychosocial characteristics of CWCI after using the interdisciplinary therapeutic teaching manual which renders the manual effective in addressing the psychosocial needs of CWCI.
CONCLUSIONS:

Children with chronic illness are faced with multifaceted challenges brought about by their health condition and other related socioeconomic factors. They are faced with health, cognitive and psychosocial issues that affect the quality of their lives including their family.

Health and psychosocial issues intertwine to produce problems concerning school attendance, learning and cognition as well as intrapersonal and interpersonal relations of CWCI. Depressed health and emotional being of the CWCI contribute to daily activity limitations, including those in school that result eventually in pressing further psychosocial issues with the child including his/her family.

CWCI, their parents, teachers and health professionals consider education and learning of CWCI as a positive impetus for the well-being of CWCI. The positive effects of learning activities in decreasing if not eliminating boredom and forgetting pain has been considered especially for hospitalized children and those who are required to stay at home. Specially noted are those therapeutic teaching activities that improve the psychosocial characteristics of CWCI like arts therapy, play therapy, music therapy and drama / role playing.

As the needs of the CWCI fall in the realms of medical and educational practice, the need to establish good collaboration among health and educational professionals is vital. Strategies should involve methods that lead to the common goal of improving the CWCI quality of life. Special education utilizing educational, lay and often universal but scientific therapeutic teaching approaches like art, play, music and etc. can serve as the common point to share and explore in terms of providing improved and extended services.

Considering such premise, this study developed and tested the validity of an interdisciplinary therapeutic teaching manual that can be shared by all members of the interdisciplinary team from parents, teachers to health professionals in order to deliver special education services to CWCI primarily geared towards improving their psychosocial characteristics with incidental cognitive and psychomotor benefits.
RECOMMENDATIONS:

Based on the results of the study, the following recommendations are given:

ON HEALTH ISSUES AND SUPPORT SYSTEMS OF CWCI

1. Support groups for parents and children themselves should be organized among hospitals (especially tertiary level hospitals) and cancer institutes to address CWCI personally and related family concerns and help channel available resources to tap so as to address CWCI specific needs.

2. To facilitate dissemination of ample, appropriate and accurate information concerning chronic illnesses among children and their effects to the child’s life as well as impact on families, hospitals especially those specializing in pediatric care should develop protocols for information dissemination that reaches out to almost all persons involved with the child including peers and teachers in school.

3. Schools with CWCI enrollees especially those in regular school programs should develop indigenous or adapt foreign-based strategies that requires comprehensive health documentations with ample health precautions, treatment provisions and learning sequela in preparation to inclusion of CWCI so as to effectively address their needs (e.g. academic, psychosocial, physical, etc.) competently.

4. Relative to the third recommendation, a centralized knowledge awareness program should be developed with efforts coming from top level health managements (e.g. Department of Health, specialized pediatric tertiary hospitals) in support of the goal of World Health Organization to develop free and relevant health education materials to disseminate accurate information regarding health and provisions for children with chronic conditions which must reach down to the lowest level of the community.

ON EDUCATIONAL AND PSYCHOSOCIAL ISSUES OF CWCI

5. In consideration of unavoidable absenteeism and other related learning problems among CWCI, and considering that majority of these children are potentially present in public schools, educational materials and teacher training guides that cater to the academic needs of CWCI in all levels be developed for utilization and implementation of regular and special teachers handling CWCI in their classrooms. A centralized instructional materials development through the Department of Education will make these materials accessible and beneficial to schools in far flung areas of the community.

6. Realizing the lack of hospital and home-based special education programs and teachers, tertiary hospitals especially those specializing in pediatric care should establish hospital-based education programs offering bedside or special class teaching to CWCI. Such programs should also consider developing standard therapeutic teaching materials (with special emphasis on those that enrich self-esteem and eliminate anxiety), that teachers can use in delivering the activities. Hospitals should open their doors to volunteer special education teachers who are willing to implement the program. Zealous health professionals should also be given a chance to engage in such extension of services.

7. Other than the therapeutic teaching materials, hospital-based special education programs should also consider continuity of learning through the development of teaching guides that can be used by parents, caregivers, relatives and teachers of CWCI as home-based teaching modules to promote education for homebound children.

ON INTERDISCIPLINARY COLLABORATION

8. Through the leadership of top-level managements, a move to practice routine case conferences in hospitals, special pediatric facilities and educational institutions should be promoted. Such case conferences should involve the parents of CWCI, the doctor and other related health services
professionals the child requires, the regular and/or special education teacher of the CWCI, other professionals (e.g. psychologists, social workers, etc.) who may have dealings with the child, and the child himself when necessary so as to effectively plan, implement and continually evaluate multifaceted programs and strategies that improve the child’s quality of life.

9. To promote interdisciplinary collaboration through clarity and understanding of specific team member roles and norms in the care and education of CWCI, the Department of Education and Department of Health and other related organizations should identify at-risk children and families and be given informative materials. These can be in form of leaflets, brochures, etc. and must contain: a.) what each of the interdisciplinary team members can do, b.) the professionals the family can tap, c.) how each member of the team can get connected to each other in service and d.) how to tap related networks or agencies for support. To promote massive dissemination, informative resource materials should also be released through all hospitals, schools and barangays.

ON THE FUTURE OF THE DEVELOPED MANUAL

10. Since proven to address the psychosocial needs of CWCI with incidental cognitive and psychomotor needs, it is recommended that the validated interdisciplinary therapeutic teaching manual be published and disseminated to all tertiary level hospitals prioritizing those that render specialized pediatric services and all families of CWCI through non-governmental organizations to promote the positive effects of therapeutic teaching among children with chronic illness.

TO ADDRESS THE LIMITATIONS OF THIS STUDY AND FUTURE RESEARCHES

11. Since the study was limited to assessing and addressing the educational needs of CWCI belonging to the age group between 3 to 9 years old with history of schooling, it is recommended that a similar study be conducted for CWCI belonging to higher age groups and/or for those who do not have any history of schooling at all.

12. It is recommended that the developed and validated interdisciplinary manual produced in this study be tested for effectiveness to other potential subjects who were not included as respondents in this study but may also benefit from it. These include, but are not limited to the following: a.) CWCI older than 9 years of age but with academic delays that can fit with the activities of the manual, b.) CWCI who may be 3 to 9 years old but without any history of schooling, c.) other CWCI identified in the community who are homebound without connections to hospitals, d.) other exceptional children with psychosocial problems, and e.) regular children who are identified to have psychosocial problems.

13. To address other needs of CWCI other than the psychosocial (e.g. health needs, strictly cognitive needs, support system needs, family needs), a similar needs-assessment study can be conducted with the end-goal of developing relevant programs.

14. A similar study concerning the educational needs of CWCI identified in the community can be done. Likewise, the validated manual of this study can also be tested for effectiveness with community-based CWCI.

“I WILL CONTINUE O MY GOD TO DO ALL MY ACTIONS FOR THE LOVE OF YOU”
Bias, Cause, Impact, and the Will to do better
Welcome, Welcome, Welcome, Welcome!

I am:

- Allen Majors, UniServ Director
  - Illinois Education Association
  - Champaign, Illinois
Bias abounds in our society and affect us all. This session will examine various biases, explore their impact, and leave you with a course of action.
Introduction (Getting to know you!)

- First and last name
- Where you call home
- Your vocation
- Why you chose this session
Bias

What is bias?
What does bias look like?
Who is the object of bias?
What are some groups that bias impacts?
What are some common biases?
On the newsprint provided you are to write any biases, stereotypes, or prejudgments that you have heard or otherwise think that others may hold regarding the various titles provided.

*Keep in mind that these are not to be viewed as biases that you hold but that you perceive are “out there”.*
From where does bias arise and how is it perpetuated?
In your small group, relate an incident of when you were the object of bias or when you were biased toward someone else.

Tell one or two things about you that you want others to know that are outside the bias(es) others might have toward you.
What do I do to contribute to bias in my workplace or organization?
What is the impact of bias?
What happens when there is bias?
What can be done to change bias that we, others, and groups hold or even embrace?
In Summary:

Bias robs human beings of their individuality, relegates them to someone else’s pre-conceived ideas about them, and deprives them of available opportunities.
What will you do?

Record your plan on a piece of paper and take it with you.
My Plan

(A.K.A., “Things are going to change and the change will start with me!”)

1.
Title - Social Media as a Means of Engaging Students Within the Classroom

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Social Media as a Means of Engaging Students Within the Classroom
Dr. Tim Newman, Jennifer Pinsky-Newman

The Internet has become an integral part of society. According to the Pew Internet and American Life Project (2008), 63% of all Americans currently have high-speed Internet access at home and the figure is expected to grow to 90% by the year 2012. Statistics further indicate that more Americans are using the Internet to watch videos, visit social networking sites, blog and share photos (Universal McCann Wave 4, June 2009). Many are finding it difficult to ignore social media since over 122 million people now visit Facebook each month and Twitter grew 1551% last year (Compete.com, June 2009).

From a business perspective, it is not prudent to ignore the fact that millions of people are using these networks and tools. Not surprisingly, companies of all sizes are using social media as part of their public relations campaigns. In fact, 54% of Fortune 100 companies utilize Twitter for news updates, customer service, marketing, promotion and even employee recruitment (Mashable, August 2009). Wouldn’t it be prudent for educators to use the same networks and tools to engage students and prepare them for the future?

This presentation focuses on the many types of platforms, applications, tools and strategies associated with the constantly emerging world of social media. We will discuss how to encourage students to engage in an educated and systematic manner, how to maximize the benefits of social media without damaging one’s reputation, how to be responsible about the information broadcast over the Internet via online communities and networks and how to constructively spend time online to get internships, jobs and positive exposure. Students need to understand the world of social media, the positive and negative consequences associated with online information and the concept of personal branding and maintaining a positive online presence. We will include specific examples of how educators may embed social media into existing courses, demonstrate techniques and specific assignments designed to provide hands-on experience and share some of the best practices associated with teaching and using social media within the traditional classroom environment.
CORRELATES OF THE PERFORMANCE IN THE LICENSURE EXAMINATION FOR TEACHERS (LET) OF THE EDUCATION GRADUATES OF DE LA SALLE UNIVERSITY-DASMARIÑAS: BASES FOR IMPROVED ADMINISTRATIVE POLICIES

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ABSTRACT
In the pursuit of quality education, one has to consider the roles that the teachers play. Nava (1994) looked up to the teachers as the most influential persons in the student’s life next to his parents. The would-be-teachers need to have an education and a training that would prepare them for the demanding and complex profession of teaching. Their pre-service education should equip them with the pedagogical knowledge and skills needed in the profession, After all, the teachers who facilitate the teaching-learning process come to the classroom with their personal and training background. They are the products of the curriculum, the human and physical resources of the institution where they graduated from (Nava, 1994). Republic Act No. 7836, The Philippine Teachers Professionalization Act of 1994, states that: “The State recognizes the vital role of teachers in nation building and development through a responsible and literate citizenry. Towards this end, the State shall ensure and promote quality education by proper supervision and regulation of the licensure examination and professionalization of the practice of the teaching profession.” The Act further provides that a valid certificate of registration and a valid professional license from the Professional Regulation Commission are required before any person is allowed to practice as a professional teacher in the Philippines, except as otherwise allowed under this Act.

The Teacher Education Institutions (TEIs), therefore, are challenged to produce graduates who can pass the Licensure Examination for Teachers (LET). DLSU-Dasmariñas, being a TEI, envisions to be a leading institution nationally and globally by producing graduates who perform well in government examination. Hence, this study determined the correlates of the performance in the LET of the Education graduates of De La Salle University-Dasmariñas from 1998 to 2006 as bases for improved administrative policies.

The Spearman Rank Correlation Coefficient was used to determine significant relationship between Licensure Examination for Teachers (LET) and High School Grade Point Average (GPA), performance in General Education subjects, Professional Education subjects and Major subjects. Results show that the LET takers with lower performance in High School, lower performance in General Education subjects, Professional Education subjects and Major subjects usually performed low in the LET and those who performed higher performed well in the Licensure Examination for Teachers. After the stepwise multiple regression analysis, results of
the data show that the best predictors of the LET performance were the grades in the **general education courses and the major courses**. This means that although the high school GPA and the performance in the professional education courses were considered as predictors in the LET, the LET takers who performed well in the general education courses and their major courses are more likely to perform well in the LET.

As the best predictors in LET performance, the performance in the education courses and the performance in the major courses should be strictly monitored and the retention policy of the college should be improved in consideration of these areas. The students’ potential for passing the licensure examination for teachers should be mainly based on the performance in these areas.

**Keywords:** teacher education, licensure examination, administrative policies

**Introduction**

Human beings have certain basic rights that have to be exercised to maximize their potentials. These basic rights include the right to food, clothing, shelter, and education. The first three basic rights ensure individuals that physical needs are met. The right to education allows them to develop knowledge, improve ability, and enhance productivity to meet personal wants and those of one’s family (Ramos, 1995).

To ensure that the individual’s right to education is met, the 1987 Constitution of the Philippines explicitly declares that “the State shall protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make such education accessible to all.” In the promotion of quality education, the role of the teacher is emphasized. The teacher is considered as “the key to the effectiveness of the teaching-learning process” (RA 7784). Stressing the significant role of the teacher, Rod Paige, former secretary of US Department of Education, states that “a high quality teacher is the single most significant factor on how well students achieve” (U.S. Department of Education, 2002). Corollary to this, Hunter (2005) maintains that “the quality of the teacher has a direct impact on student achievement, regardless of the grade level and subject matter.” Further, Walsh (2001) emphasizes that “an effective teacher and, therefore a highly qualified teacher, is a critical determinant of how students learn.”

To guarantee that the teacher can truly become effective and qualified, aspirants need to undergo a four-year training in a teacher education institution (TEI), taking either Bachelor of Elementary Education (BEE) or Bachelor of Secondary Education (BSE) degree. This pre-service education should equip aspirants with the “pedagogical knowledge and skills needed in the profession” (CMO No. 11, s. 1999). This pre-service training should also “ensure that the future teachers of the system are adequately prepared for teaching in the school system of the future” (Gonzales, 2000). After graduation, one needs to take the requisite government examination to be qualified to teach. This examination is known as the Licensure Examination for Teachers (LET) which was created by virtue of Republic Act 7836 or the Philippine Teachers Professionalization Act of 1994. This is promulgated towards (a) the promotion, development and professionalization of teachers and the teaching profession, and (b) the supervision and regulation of the licensure examination for teachers. This Act further provides that a valid certificate of registration and a valid professional license from the Professional Regulation Commission (PRC) are required before any person is allowed to practice as a professional teacher in the Philippines.
Because of this, TEIs are now challenged to ensure that their graduates pass the LET. As former Commissioner Hermogenes Pobre (as cited in Legaspi, 2000) of the PRC states, “the LET is administered to determine the fullness of applicants for admission to the practice of teaching.” If applicants fail to pass the LET, it means that they are not qualified to teach. To further emphasize the importance of passing the LET as a teacher certification measure, Miles and Staple (2002) declare that “student achievement increases when they have certified teachers as instructors.”

De La Salle University-Dasmariñas is one of the teacher education institutions in Region IV-A. Its teacher education programs started in 1977 when the University was still known as General Emilio Aguinaldo College-Cavite. When the De La Salle Brothers took over in 1987, it continued offering its BEE and BSE programs. Teachers in nearby private and public elementary and secondary schools are usually graduates of the University. However, the passing of years saw the changes in the quality of graduates the College of Education (COE) produced. Records of LET results show that there are a number of COE graduates who continuously fail the LET inspite of two or three attempts. This somehow pulls down the passing percentage of the University and paints a not-so-good image of COE. The Professional Education Department of COE which is in charge of training prospective teachers is in a dilemma on how to solve this pressing problem. In order to sustain the quality of education provided by the College, it must maintain a high passing rate in the LET. This is one of the key indicators of how a TEI is judged. At this juncture, the researchers felt the need to undertake a study on the predictors of LET so that COE can revisit its administrative policies to ensure its high passing percentage in the licensure examination.

Conceptual Framework

This study is anchored on the Long-Term Higher Education Development Plan (1996-2005) of the Commission on Higher Education (CHED) which requires higher learning institutions to “increase its percentage passing level from 20 to at least 85 percent in the licensure examination.” This is a test of the quality and excellence offered by these institutions.

This is also based on Taylor, et al.’s (as cited in Ukpabi, 2008) assertion that “success in licensure examinations can be predicted by standard indicators of scholastic aptitude or a student's record of academic achievements when in school.”

In this connection, the researchers identified certain variables that can be correlated with the LET performance of the graduates of COE. Since the LET is taken after graduation, factors such as the graduates’ high school grade point average and their performance in their general education, professional education, and major courses were studied to determine if they can predict the LET performance. After the correlation was done, an improvement of the policies on student admission and retention, as well as policies on instructional procedures, need to be formulated to ensure the continuous high passing percentage of COE graduates in the LET.
The framework below is used in this study:

<table>
<thead>
<tr>
<th>High School Grade Point Average</th>
<th>Performance in the Licensure Examination for Teachers</th>
<th>Improved COE Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance in General Education Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance in Professional Education Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance in Major Courses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Statement of the Problem**

This study determined the predictors of the performance in the Licensure Examination for Teachers (LET) of the Education graduates of De La Salle University-Dasmariñas from 1998 to 2006 as bases for improved administrative policies.

Specifically, the following questions were answered:

1. What is the profile of the Education graduates from 1998 to 2006 in terms of:
   1.1. high school grade point average (HS GPA);
   1.2. performance in the general education courses (GEC GPA);
   1.3. performance in the professional education courses (PEC GPA); and
   1.4. performance in major courses (MC GPA)?
2. What is the performance of the Education graduates from 1998 to 2006 in the Licensure Examination for Teachers (LET)?
3. Is there a significant relationship between:
   3.1. the LET performance of these Education graduates and their high school GPA;
   3.2. the LET performance of these Education graduates and their performance in the general education courses;
   3.3. the LET performance of these Education graduates and their performance in the professional education courses; and
   3.4. the LET performance of these Education graduates and their performance in the major courses?
4. What are the best predictors of the performance in the Licensure Examination for Teachers?
5. What changes in the COE administrative policies can be proposed?

This study only focused on the LET performance of the Education graduates of COE, DLSU-D from 1998-2006 since COE has been provided by the PRC of the individual rating of its graduates on the specified years.

Correlated with the LET performance are the graduates’ high school grade point average and their GPA in the general education courses, professional education, courses and major courses. These data were taken from the Registrar’s Office and the Information Technology Center of DLSU-D. The college entrance examination results are not included in the factors correlated with
LET performance because of the unavailability of these data. The Institutional Testing and Evaluation Office (ITEO) revealed that these data were only kept for two years, after which, these were discarded.

The proposal on the improvement of the administrative policies of the COE is done after the analysis of the correlation between the said variables.

**Research Method**

This study applied the descriptive method of research. This study is specifically a correlational study which is designed to estimate the extent to which different variables are related to one another in the population of interest (Padua and Santos, 1998). Specifically, the LET performance of the Education graduates is correlated with their high school GPA and their performance in the general education courses, professional education courses, and major courses.

The subjects of the study are the 517 Education graduates of the College of Education of De La Salle University-Dasmariñas from 1998 to 2006. There are 205 BEE graduates and 312 BSE graduates. These data are taken from the records of the Alumni Relations and Placement Office and the University Registrar’s Office. The distribution of the graduates is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>BEE</th>
<th>BSE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>28</td>
<td>9</td>
<td>37</td>
</tr>
<tr>
<td>1999</td>
<td>10</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>2000</td>
<td>19</td>
<td>22</td>
<td>41</td>
</tr>
<tr>
<td>2001</td>
<td>9</td>
<td>43</td>
<td>52</td>
</tr>
<tr>
<td>2002</td>
<td>28</td>
<td>34</td>
<td>62</td>
</tr>
<tr>
<td>2003</td>
<td>23</td>
<td>49</td>
<td>72</td>
</tr>
<tr>
<td>2004</td>
<td>27</td>
<td>39</td>
<td>66</td>
</tr>
<tr>
<td>2005</td>
<td>33</td>
<td>47</td>
<td>80</td>
</tr>
<tr>
<td>2006</td>
<td>28</td>
<td>56</td>
<td>84</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>205</strong></td>
<td><strong>312</strong></td>
<td><strong>517</strong></td>
</tr>
</tbody>
</table>

This study employed **documentary analysis technique** where the following documents were used:

**COE DLSU-D LET Performance from 1998 to 2006.** This contains the individual rating of the Education graduates in three areas: general education, professional education, and major courses. This is provided by PRC to a TEI whose graduates took the licensure examination.

**High school Form 137.** This contains the high school grades of the Education graduates and is kept in the Registrar’s Office of DLSU-D.

**Transcript of records.** This contains the performance in the general education courses, performance in the professional education courses, and performance in major courses of the Education graduates which is kept in the Registrar’s Office of DLSU-D. On-line data on students’ performance in the three areas were also provided by the ITC personnel.
Summary, Conclusions, and Recommendations

The study yielded the following results:
1. The profile of the Education graduates from 1998 to 2006 in terms of high school grade point average (HS GPA) is as follows: The mean grade in high school of the students who took BEE is 83.86 and the mean grade in high school of the students who took BSE is 84.35. The mean grade for both BSE and BEE is 84.11.
In terms of performance in general education courses, the mean grade in general education courses of the students who took BEE is 2.16 and the mean grade in general education courses of the students who took BSE is 2.40. The mean grade for both the BSE and the BEE is 2.28 with a standard deviation of 0.516.
In terms of performance in professional education courses, the mean grade in professional education courses of the students who took BEE is 2.59 and the mean grade in professional education courses of the students who took BSE is 2.69. The mean grade for both BSE and BEE is 2.64 with a standard deviation of 0.476.
In terms of performance in major courses, the mean grade in major courses of the students who took BEE is 2.56 and the mean grade in major courses of the students who took BSE is 2.35. The mean grade for both BSE and BEE is 2.44 with a standard deviation of 0.580.
2. The profile of the Education graduates from 1998 to 2006 in terms of their performance in the Licensure Examination for Teachers (LET) is as follows: the mean performance of all BEE graduates from 1998 to 2006 is 73.47 with a standard deviation of 7.637 and the mean performance of all BSE graduates from 1998 to 2006 is 72.69 with a standard deviation of 7.310. Both the scores in the LET of BEE and BSE graduates yield a mean of 73.06 with a standard deviation of 7.466.
3. In terms of high school GPA, the computed Spearman rank correlation coefficient is 0.313 with a p-value (significance) of 0.000 which is significant at 5 percent level. Therefore, the null hypothesis of no significant relationship between high school GPA and the performance in LET is rejected. In terms of performance in general education courses, the computed Spearman rank correlation coefficient is 0.482 with a p-value (significance) of 0.000 which is significant at 5 percent level. Therefore, the null hypothesis of no significant relationship between the performance of the graduates in their general education courses and in the LET is rejected. In terms of performance in professional education courses, the computed Spearman rank correlation coefficient is 0.406 with a p-value (significance) of 0.000 which is significant at 5 percent level. Therefore, the null hypothesis of no significant relationship between the graduates’ performance in professional education courses and in the LET is rejected. In terms of performance in major courses, the computed Spearman rank correlation coefficient is 0.366 with a p-value (significance) of 0.000 which is significant at 5 percent level. Therefore, the null hypothesis of no significant relationship between the graduates’ performance in major courses and in the LET is rejected.
4. The best predictors of the LET performance are the performance in the general education courses and the major courses with the computed multiple r of 0.507 and adjusted r-square of 0.251.
5. The following changes in the COE administrative policies are hereby proposed:

A. On Student Admission and Retention
1. The high school GPA of prospective Education students should be at least 85 because this grade is generally accepted as an indication of an average academic achievement or ability. Also CMO # 11, s. 1999, the previous CHED memorandum pertaining to the policies and standards for teacher education programs, specifies that “teacher education candidates should have obtained a high school GPA of at least 85.” Since the findings of the study point to the fact that high school GPA can predict LET performance, there is a need to specify the GPA requirement so as to assure the passing of the Education graduates in the LET. The higher the high school GPA, the better is the possibility that the Education graduates can pass and get high scores in the LET.

Careful attention should also be given to the applicants’ grades in English, Science, Math, Social Sciences, and Filipino because these subjects are the same general education courses that the students take in college. As proven in the study, the performance in these subjects is one of the best predictors of LET performance. Likewise, these five subjects are the general education components of the LET.

2. If students have high school GPA lower than 85, they may be accepted conditionally based on their scores in the standardized entrance examination given by the University which measures their knowledge in Math, English, and Science which form part of the general education courses, and abstract reasoning, which is an important skill in test taking. They should get a stanine of 5 or higher.

An interview with these prospective students should also be done to measure their readiness to answer questions and their fluency in English, which is the medium of instruction in most of the subjects in college and the language that is used in most subjects in the LET.

3. Education students should maintain a GPA of 2.50 which is equivalent to 80.00 or higher. Close attention should also be given to the performance of these students in their general education courses and their major courses since these two are considered to be the best predictors of LET performance.

4. If students fail to maintain a semestral GPA of 2.50, they should be placed in probation for a semester with the condition that they would be able to get a higher GPA. Class advisers should closely monitor and follow up the academic activities of these students to ensure that they would be able to improve performance.

5. A semestral qualifying examination may also be instituted covering the subjects taken for the year, classified according to the components of the LET. The students should be able to get a minimum grade of 75 so as not to be placed on probation. A student who is placed on probation because of a low score in the qualifying examination should be able to get a passing rate in the next qualifying examination.

**B. On Instructional Procedures**

1. Close coordination should be done with the servicing departments who are providing teachers handling general education and major courses. Orientation meeting should be held at the beginning of each semester where topics such as motivational activities, active teaching strategies, learning styles/multiple intelligences, and alternative assessment procedures are to be discussed. These topics would ensure that the Education students would get the best from their general education and major courses, thereby allowing them to perform better in these areas which would redound later to an improved LET performance. Another meeting may be done after the preliminary examination so that the COE administrators and the servicing departments can cooperatively evaluate the initial performance of the Education students. Plans and programs
to address the difficulties these students face may be formulated like remedial classes, buddy system, peer tutoring, and the like.

2. Teachers handling professional education courses should try better and more active strategies and techniques in teaching so that their students would perform better in these subjects. Deep analysis of the students’ strengths and weaknesses may also be done through alternative assessments so as to bring out the best in these students and help them eliminate their weaknesses. Although the performance in the professional education courses is not the best predictor of LET performance, it should be noted that the knowledge and skills they learn from these subjects will help them adapt better to their teaching career. Also, professional education courses form 40% of the components of LET. A good performance in these courses would ensure a good performance in the LET.

Teachers handling the professional education courses should also emphasize the production or development of a performance-based professional portfolio which may demonstrate their readiness for initial licensure (Thibodeau, 2000). This would accentuate to the students at the very start of their teacher preparation the importance of maintaining a record of their good performance which they can later on use as part of their credentials for job application.

3. All the faculty members teaching Education students should use the multiple choice type of test which is used in the licensure examination. Variation in the difficulty of the items should be maintained, ranging from easy items to those that require situational analysis and application of learned principles and concepts. This would ensure the students’ familiarity in the type of test used in the licensure examination, thereby enabling them to get a higher score.

Conclusions

The following are the conclusions made in this study:

1. Education students belong to the average level in terms of performance in high school. The mean grade in general education courses shows that the students who took BSE and BEE show average performance in general education courses. The mean grade in professional education courses shows that the students who took BSE and BEE show average performance in professional education courses. The mean grade in major courses shows that the students who took BSE and BEE show average performance in major courses.

2. The ratings of the graduates in LET are low with a number of them getting a failing mark.

3. There is a significant relationship between the performance in LET and high school GPA, performance in general education courses, professional education courses, and major courses.

4. The best predictors of LET are the performances in general education courses and major courses.

5. Policies on admission and retention of students, as well as instructional procedures, may be changed based on the results of the study.

Recommendations

The following recommendations are hereby offered:

1. The proposed changes in the COE administrative policies should be strictly implemented as soon as possible to ensure that the quality of students taking Education and the teachers handling the Education students are raised. This will ensure a good passing percentage in the LET which would give honor to the College and the University.
2. Another study on the predictors of LET performance may be done considering other variables not included in this study.

References:
1987 Constitution of the Philippines
Commission on Higher Education Memorandum No. 11, s. 1999. Revised policies and standards for teacher education.
Republic Act 7784. An act to strengthen teacher education in the Philippines by establishing centers of excellence, creating a teacher education council for the purposes, appropriating funds thereof and for other purposes.
1. Title of the submission.

Evidence-Based Critical Analysis.... Teaching Future Health Care Administrators to Make Effective Decisions

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6. Abstract.
Critical thinking and evidence-based education prepares future health care administrators to apply much needed analytical skills and evidence to solve every day management problems encountered in their work settings. Two critical thinking educational techniques are combined to empower health care management students to learn to effective and efficient means of resolving problems and conflicts. The traditional evidence-based medicine approach ¹ is combined with Delfini’s Ask, Aquire, Appraise method² to propose a new method of educating health care management students in critical thinking and problem-solving. This method is being researched in Southern Illinois University Carbondale’s Health Care Management Program during the 2010-2011 academic year.


What It Is They Do:

Understanding Disciplinary Literacy

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What It Is They Do: Understanding Disciplinary Literacy

Background to the Study

Late one afternoon, following a long day of research presentations at a Las Vegas conference, a group of teacher educators took a drive out to Hoover Dam. Walking across the dam, the four colleagues paused at various points to marvel at the historical, architectural, and technological significance of the immense structure. Amy, a mathematician, marveled at the size of the 726 foot high edifice, commenting on the statistics displayed on the dam’s informational exhibits, mentally visualizing the 3.25 million cubic yards of concrete. Reading the information about construction workers who died in the during the construction, she wondered about the probability of casualty. Holly, whose academic interests are in culture and society, was drawn to the Art Deco architecture and the rich historical connections of the site. Her questions centered around the people who created the marvel beneath their feet. Who was the “everyday joe” who worked on this, she wondered. Becky, a science educator, spent most of her time studying the star chart embedded in the terrazzo floor of the monument, puzzled by how this celestial map connected to the dam. Pat, whose academic interests are in literacy and technology, asked a steady stream of questions ranging from, “Why do they call it Lake Mead?” to “Why is the water level so low?” She eagerly anticipated returning to the hotel where she could “Google” Hoover Dam and begin to answer her questions. As they drove away from the dam, the four colleagues marveled at how diverse their interests and questions had been. It was both obvious and fascinating how disciplinary interests had shaped this casual tourist experience into disparate, yet connected, learning opportunities for each of the educators.

The conversations that emerged from that trip to Hoover Dam were the beginnings of an ongoing exploration into how disciplinary viewpoints, unique to specific content areas, shape
and define the particular literacy practices enacted within each discipline. Finding out what "tools" our disciplinary colleagues across the academic fields use for acquiring knowledge—and even knowing what they would identify as necessary knowledge for teachers and teacher educators to know—was the aim of this project. We began to work with disciplinary experts to address the question of what it means to be literate in the fields of mathematics and geography, beginning our inquiry with experts who have a connection to the schools or colleges of education at their universities.

**Purpose of the Study**

Content area literacy has a long history rooted in the paradigm of applying cognitive strategies to content specific texts (Moje, 2008). Developing from Gray’s (1925) work with study skills at the beginning of 20th century and continuing through Harold Herber’s (1970s) work, the idea of teaching cognitive strategies for making sense of text dominates content area literacy textbooks. Recently, however, theory in content area literacy has begun to focus on adolescent literacy, including issues of culture, social interaction, technology, and diversity. Researchers and theorists have encouraged those involved with content area literacy instruction to adopt a disciplinary approach, which is a more complex view of literacy instruction that addresses the literacy demands specific to content areas and is based in the belief that deep knowledge of a discipline is best acquired by engaging in the literate habits valued and used by experts in that discipline (McConachie, Petrosky, & Resnick, 2009; Moje, 2008; Lee & Spratley, 2010). Through reading, writing, and thinking in ways common to the discipline, students deepen their knowledge and understanding of disciplinary content. This paradigmatic shift presents enormous challenges to those of us engaged in the preparation of teachers. What seems evident is that in order to engage in a disciplinary approach to content area literacy, we must first
know about the literacies and texts of particular subject areas. Although a few researchers have begun to describe and delineate the literacy practices of different disciplines (Donahue, 2003; Draper, 2008; Shanahan & Shanahan, 2008), the work is just beginning. The questions guiding our inquiry were: What does it mean to be literate in particular disciplines and how do we begin to shift to disciplinary literacy?

**Perspective/Theoretical Framework**

Draper, Smith, Hall, & Siebert (2005) described the disjuncture between content area instruction and literacy instruction as a “dualism,” and asserted that teachers must explicitly instruct students about how the texts in their disciplines are created and used. Draper’s (2002) work with content area colleagues yielded the understanding that some content area strategies suggested by literacy educators were contradictory to the needs of some disciplines and encouraged teachers to engage in literacy instruction that did not support learning of the discipline. Other research, however, has shown that some generic strategies have the potential for supporting readers in comprehending many different types of texts (Heller & Greenleaf, 2007; Moje, 2008). The current challenge for teacher educators is to identify which strategies have merit and which should be discarded as well as to develop our own knowledge of the roles texts and literacy play in the disciplinary subject areas of middle and secondary schools.

**Methods**

**Participants.** The participants of this study included the authors and their Arts and Sciences colleagues from two comprehensive universities. All had terminal degrees in their fields and taught both graduates and undergraduates in their respective departments. Our collaboration with these colleagues is presented here as examples of the kind of work that is
needed to develop the field of disciplinary literacy, and our work with them was framed within
the context of informing teacher preparation.

**Data collection and analysis.** Data were collected from multiple sources: interviews; textbooks developed for content area literacy courses in teacher preparation; informal discussions with teacher candidates; major academic journals and disciplinary websites, and; our lived experiences as content/disciplinary literacy instructors in teacher preparation programs. One of the authors teaches at the university in the Southwest, the other at the university in the Midwest. Both teach in middle grade education programs for candidates interested in teaching in grades 4-9, but have taught content area literacy for students in secondary programs.

Interviews were conducted in the home departments of the mathematicians and the geographer. Consisting of 10 questions, the protocol addressed the concept of literacy in the discipline and what it means to be literate. Interviews were transcribed, analyzed through open coding, and then categorized into themes, which included “major understandings of the field,” “literacy in the discipline,” and “practice of the discipline.” These major categories contain subcategories that include discussions of the texts used in the discipline, the types of strategies used to become literate in the discipline, and the types of questions addressed within the discipline.

Twelve current textbooks were selected for content analysis. The types of knowledge within the texts were divided into two major categories, “pedagogical” and “content,” which attended to “how to teach” and “what to teach” respectively. In addition, we constructed a list of the disciplines addressed within each text as well as the major themes such as addressing the standards, the concept of multiple literacies, and the types of strategies suggested.
Other types of data collected for this project included our own experiences in the university classroom with teacher candidates. As content area literacy instructors, we offer courses that address literacy across the curriculum at the undergraduate and graduate level. One of us is located at a university in a state with a reading mandate that includes a content literacy course. At the graduate level, our courses are electives, and thus, students rarely express concern about the reason for taking the course. At the undergraduate level, however, students often challenge us with questions such as “why do we have to learn about reading” if they are going to teach math, science, or social studies, art, music, or physical education. Other challenges come in the form of skepticism related to the textbook or the types of learning we believe our candidates could pursue with students in their 4-12 classrooms. Finally, we consulted disciplinary sources (e.g. websites and journals of professional organizations) for greater understanding of the disciplinary field and to verify the thinking and advice of our disciplinary colleagues.

Results/Findings

Through our work with our colleagues in mathematics and geography, we came to recognize that the discourses of our disparate fields created challenges and opportunities for further knowledge and bridge building between us. Our discussions, when juxtaposed with our experiences as content area literacy educators and the textbooks we frequently used, showed the disparities between the common knowledge of our colleagues and our experiences as instructors in secondary content area literacy courses. Often, we struggled to communicate so all participants could understand the other parties’ intents. What we garnered from our efforts with our colleagues included the distinct definitions and major questions of their fields, the
differentiation of what is considered “literacy” and literacy tools used in their areas of study, and, the particular literacy practices they enact within their disciplines.

Interviews with disciplinary experts in mathematics revealed three important strands important to mathematical thinking: patterns, models, and proofs. Literacy in mathematics requires individuals to possess number sense, the ability to understand and interpret graphs, and the ability to connect numerical representations with their graphic counterparts. In addition to these elements of fundamental literacy, mathematical literacy demands individuals to possess the logical abilities to think through and validate arguments and create proofs. Mathematical texts include databases, computer simulations, computer-based models, academic articles, lectures, and theories. Disciplinary experts in mathematics felt that mathematical language has a unique structure and syntax that is very precise. Often students in secondary schools are exposed only to mathematical textbooks, not to mathematical language. Useful literacy tools for math would include learning this precise language and grammar through reading and writing mathematical texts. Logic puzzles and simulations would be useful in promoting the kinds of logical thinking required by mathematics. Talk and discussion are critical to the development of mathematical thinking. Thus, talk in math circles, where students can make concrete what they are forming in their heads, and thinking aloud, where the formulation of their thinking takes place, are two of the most powerful literacy strategies teachers can use in mathematics classrooms.

According to the geography expert interviewed, the field of geography is actually a complex array of subdisciplines spanning the physical and social sciences. The field can be broadly described as the study of space and place. While the general public connects geography to maps, maps are actually the result of geographical study and a way of representing geographic knowledge. While having some mental sense of the world is important, that is only the beginning
of geographic literacy. The goal of geographic education should be to create cultural
consciousness and awareness. Geographic literacy requires the ability to think in terms of spatial
and temporal patterns and the ability to examine the perspectives of others. Texts in geography
include images created through remote sensing and Geographic Information Systems (GIS).
These technologies produce data displays in the forms of maps, models, and databases. Note
taking and note making are the primary literacy tools K-12 students would use for identifying
intertextual patterns as well as for the collection and organization of information in order to
make those intertextual connections. I(nquiry) Charts (Hoffman, 1992), are a form of graphic
organizer that would be useful in the collection and analysis of information from geographic
sources. Visual literacy is another crucial tool in a geographer’s world. Learning to read satellite
images and aero-photography, as well as primary photographs of locations and cultures, is
important. Grids and questioning strategies like those provided by Ogle, Klem, and McBride
(2007) prompt students to examine the purpose, source, point of view, and impact of primary
source documents and images and can lead to the kind metaphorical thinking necessary for
developing geographic content knowledge.

Implications for Reading Education

This project represents the beginnings of our efforts to identify discipline-specific
knowledge and understandings that will allow us to move beyond generalist notions of content
area literacy in which comprehension of content area text is believed to occur simply by applying
generic reading strategies and tools. We did not, however, begin with the assumption that the
strategies and tools, developed and taught through a long tradition of content area teacher
preparation, are without value. Instead, we began the quest for a paradigm of content literacy
instruction that is relevant and useful to preservice and inservice teachers as they prepare twenty-
first century students for careers and higher education. Through our work with disciplinary 
experts in the disparate fields of math and geography, we sought to identify the specific kinds of 
knowledge needed to comprehend texts and construct knowledge in those fields. While we 
sought to understand our disciplinary colleagues’ ways of reading and thinking, we also 
presented them with cognitive tools and strategies commonly taught in content area literacy 
courses, with the goal of identifying those that would be most useful and relevant to novices in 
these disciplines. Through our data analysis, three themes emerged. These themes present clear 
implications for teacher preparation and development in the field of disciplinary literacy.

First, our disciplinary experts were firmly convinced that the teaching and learning that 
occur in K-12 content area classrooms and what is published in the traditional textbooks for the 
disciplines bear little resemblance to what actually occurs in the day-to-day work conducted in 
the field. Our experiences in middle and secondary classrooms confirm that, to a large degree, 
what occurs in schools is the transmission of knowledge through lectures and talk about the 
discipline, rather than the actual “doing” of the disciplines of math and geography. All 
participants, literacy experts and content experts alike, agreed that literacy instruction in content 
area classrooms should aim to build an understanding of how knowledge is constructed within 
the discipline, rather than transmitting knowledge about the discipline (Moje, 2008).

A second theme emerged in the area of preservice teachers and how the content experts 
believed literacy educators could better prepare teacher candidates for educating future 
mathematicians and geographers. Our experts agreed that, frequently, the university students 
who aspire to teach in these fields view themselves as only teachers of the field, not content 
experts. The understanding that we drew from these initial explorations into disciplinary literacy 
was that, to be literate in a discipline, means not just accumulating knowledge about the
discipline, but also understanding the discipline’s important theoretical ideas. It means being able to understand what questions are important to the discipline and how to seek answers to those questions. It also means being able to read and write successfully within that discipline. Teachers in these fields must be literate in these ways themselves in order to apprentice their students in the ways of the discipline.

The last theme we constructed from the data was the importance of the interdisciplinary collaborations themselves. All of us began to realize the value of exploring the topic of disciplinary literacy and the potential these explorations hold for improving the opportunities adolescents may have for constructing knowledge of content and practice in the content areas. As literacy experts, we were surprised by the commonalities we found where we least expected them. Our content experts recognized and embraced some of the current knowledge base of content literacy as appropriate for supporting students as they learn to “do” the disciplines. Through this project we began to see that content literacy curriculum, rather than being irrelevant, could actually move teachers closer to “doing” rather than simply reporting or talking about the discipline they teach.

References


Girls vs. Boys in Mathematics:  
Test Scores Provide One Interpretation  
Girls' Narratives Suggest a Different Story  

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Abstract
This study seeks to provide a data based critique of the claims of gender equity in mathematics. Specifically, this paper is an analysis of the personal well-remembered events (WREs) told and recorded by women who are in the first course of their preservice teaching professional sequence. Importantly, these are women who are on the professional track to teach mathematics. Using a narrative based methodology, the writings provide another angle of the intricate pieces of equity (i.e. test results say both genders are just as capable, stories of females say otherwise). These themes center around the safe zones, struggles, embarrassment, competition, and self-fulfilling prophecies. From these stories, we see subtle illustrations of existing gender inequities in mathematics.

Purpose
The purpose of this study is to examine the equity issue in mathematics from perspectives not traditionally included in equity claims. This study offers a close up view of personal experiences that preservice candidates have encountered in their own journey as students of mathematics, especially as they learn to teach. This transition time is important to study, as preservice candidates make the switch from student to teacher. It is vital to understand how critical these stories are, as new female teachers take on the important role of mathematics teachers. What these narratives do is capture the impact of
personal experiences in mathematics to a developing professional identity through the personal well-remembered events (WREs) which require telling, analyzing, and drawing implications.

The different themes that arise in this issue of mathematics equity were examined. These themes include the safe zones in mathematics, the struggles that occur in mathematics, the feelings of embarrassment, the competition, and the self-fulfilling prophecies. These data-derived themes will be expanded and discussed in greater detail in the larger paper.

**Theoretical Framework**

Huebner ‘s (2009) study, *Encouraging Girls to Pursue Math and Science*, notes that the mathematics achievement gap between boys and girls has all but disappeared. Huebner’s research reveals that the differences in mathematics achievement between boys and girls are insignificant. Boaler’s (2008) study, *What’s Math Got to Do With It?* supports this view by claiming national statistics in mathematics show that presently, girls do very well in mathematics, achieving at equal or higher levels than boys. Huebner (2009) makes the statement that there is great optimism for girls in mathematics.

Some data suggests the equity issue in mathematics between boys and girls is solved. However, Boaler’s (2008) study reveals another important component in the equity issue in mathematics between boys and girls. Boaler’s (2008) work reminds us that we cannot underestimate the power of stereotypes that still exist suggesting that boys are stronger in mathematics than girls. These stereotypes occur in family, school, and society (Tobias, 1993). Teachers often overestimate boys’ potential in mathematics whereas they underestimate it in girls (Goodell and Parker, 2001). Gavin and Reis (2003)
argue that girls often believe they are not expected to excel in mathematics. This notion comes from some parents, teachers, and peers. This leads to a detrimental affect on girls in mathematics classes.

Huebner, (2009), Boaler, (2008), Meehan, (2007), and Tobias (1993) agree that girls’ often view themselves as having inferior mathematical abilities when compared to boys. Huebner’s (2009) longitudinal study found that from an early age, girls rate their mathematical ability lower than boys, despite there being no actual difference in achievement. This is significant, as students with more confidence in their mathematics ability are more likely to take classes that lead to careers in this field. Meehan’s (2007) work reveals that some girls still carry a script in their head that says not only are they not good in math, they shouldn’t like it as well. This results in some girls believing that math is too hard and boring and that math is a highly intellectual field to which they do not have access. It is important, therefore, to understand more fully the issue of gender inequity in mathematics and the variables that revolve around it.

**Data Sources**

The present paper is a report of findings from the first year of a five-year research initiative at a large Research I University in the Southwestern United States. The sample for the present study is 60 students enrolled in three sections of an introductory teacher education course. The students in the study were all female with both elementary and secondary teaching majors represented. The majority were students who were traditional undergraduates in their early twenties, with the rest being older female students returning to school for teacher preparation and/or degree completion.
Methods

This study involves a long-term qualitative analysis of approximately 60 narrative stories prepared by a diverse group of elementary and secondary preservice teacher education students. These students were enrolled in a course entitled “Classroom Processes and Instruction.” In these narratives, termed “well-remembered events, the preservice candidates were asked to describe and analyze a particularly salient mathematics event from their own experiences as students in K-12. This genre of personal narrative was derived from Carter’s (1993, 1994) work on well-remembered events as windows into the understandings preservice teachers have of teaching. The task consists of a 2-3 page paper organized around the following parts (1) the selection of a particularly salient mathematics event from one’s past experiences in mathematics as a K-12 student; (2) a detailed description of the event; (3) an explanation of why the mathematics event was memorable; and (4) a statement of what impact this mathematics event might have on the writer’s understanding of what it means to be a teacher. Career studies imply that teachers can often recall in considerable detail specific incidents that have been especially critical in their development (Sikes, Measor, and Woods, 1985). This suggests that having preservice candidates focus on specific well-remembered events may be useful in understanding gender equity issues in mathematics that may still exist.

The analysis of these narratives involved an iterative and sustained qualitative analysis designed to identify the basic story structures (characters, sequence, plot, pattern of action) embedded in the texts. Attention was then turned to the detailed documentation of themes in the mathematics stories (e.g. safe zones, struggles,
embarrassment, competition, and self-fulfilling prophecies) and the meanings the preservice candidates assign to these themes.

**Results**

The preliminary results of this analysis strongly suggest that in regards to mathematics, female preservice teachers did not feel like capable or confident mathematics students. When asked to recall an experience that occurred sometime during their K-12 schooling years in mathematics, the experience or the “well-remembered event” was overwhelmingly a negative one. The recalled experiences centered around themes of operating in a safe zone in mathematics (i.e. not taking chances or be willing to take chances), struggles to understand mathematical content, feelings of embarrassment, dealing with continuous competition from others (especially boys), and dealing with self-fulfilling prophecies of being unable to be successful in mathematics. The analysis at this point is in the first stages of development. A more in-depth and detailed evaluation is currently in process.

A significant number of the participants in the study wrote their well-remembered events in a manner in which the salient event came immediately to mind. The memories tended to be accompanied by strong feelings of pain, embarrassment, and/or anger. The stories seemed to be written as if they had happened only yesterday. The typical structure of the struggles to understand the mathematics content being taught or feelings of embarrassment involved incidents in which the teacher made it public that the writer was not successful in that moment of time in mathematics.

Other incidents chosen by the writers focused on the boys in the class competing to get the answers to the mathematics problems posed by the teacher the fastest as well as
competing to complete the most correct problems as quickly as possible. This also resulted in the boys receiving praise and kudos from the teacher.

Participants also wrote about incidents where they felt like there were not viewed as strong mathematics students by others (teachers, parents, other students) and therefore would never be good in mathematics. These stories focused on negative experiences in mathematics heaped on their past weak histories in mathematics.

Some participants’ stories focused on positive experiences in mathematics and attributed these experiences to having a strong mathematics teacher who believed in them or encouraged them to excel in mathematics. This encouragement was supported by extra help from the teacher, a firm belief by the teacher that the student was indeed capable of being a strong mathematics student, or a push to enroll in a higher level mathematics course than the student had initially planned on taking. These stories were accompanied by feelings of great joy and accomplishment by the students.

**Scholarly Significance of the Study**

Boaler (2008) and Huebner (2009) agree that the mathematics achievement gap between boys and girls has just about disappeared. However, the preliminary findings of this study call into question the notion that the gender equity issue in mathematics is solved. In the midst of current claims of gender equity in mathematics, this study comes along with data obtained through narrative methodology that suggest these claims should not be taken totally at face value. There is great optimism for girls in mathematics (Huebner, 2009). However, we need to pay attention to the personal themes that come directly from women who are going to be teaching. These themes (safe zones, struggles, embarrassment, competition, and self-fulfilling prophecies) question the belief that
gender equity exists in mathematics. We must continue to explore methods which voice those young women still struggling to see themselves as capable in the area of mathematics.

Tobias (1993) points to sex-role stereotypes in families, schools, and societies as a major culprit in girls viewing themselves as being less capable in mathematics. Gavin and Reis (2003) and Meehan (2007) are in agreement with this statement and add that as a result, girls themselves may believe they are not expected to excel in mathematics. More work needs to be done in this area to ascertain the affect that sex-role stereotypes continue to have in the area of girls and mathematics. The results of this preliminary study suggest that these stereotypes still exist and may possibly be surfaced through alternate modes of inquiry.

Campbell (1992) and Hanson (1992) talk about the importance of teachers not passing on to girls any negative feelings that may have about mathematics as well as taking on the responsibility to encourage capable females to excel in this area. This is a crucial point based on the preliminary results of this study.
References


Moving Toward a Technology Enhanced Alternative Certification Program
for Secondary Special Educators

**Topic Area:** Distance Education

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Moving Toward a Technology Enhanced Alternative Certification Program (TEC) 
for Secondary Special Educators

This abstract describes a federally funded project that addresses the critical shortage of qualified teachers prepared to serve urban learners in secondary schools with mild/moderate disabilities. It addresses this shortage by providing a standards-based technology enhanced certification program that meets on-campus one day a week, every other week over a two-year period for on-the-job teachers. Students progress as a cohort in all of their coursework and receive financial and academic support to meet subject matter competencies in the CORE subjects they teach at the secondary level. School university personnel provide a comprehensive support system to enhance teacher retention through individualized advisement, online mentoring and collaboration, cohort participation, and on-the-job assistance. Cohorts of twelve students are recruited yearly and the project is in its fourth year of implementation. Objectives of the project include: (a) recruit a total of 48 secondary urban school interns in mild/moderate disabilities, (b) prepare highly qualified secondary special educators, and (c) enhance teacher retention through a support system that includes cohort participation, mentoring, and ongoing classroom assistance. Preliminary results from the first, second, third, and fourth cohort are described, as well as lessons learned working with faculty in moving traditional classes to a flexible online format.

Need for the Project

Personnel shortages in the field of special education are well documented with a chronic and severe shortage in every geographic region of the nation (National Clearinghouse for Professions in Special Education, 2003). Many school districts report
difficulty finding sufficient numbers of qualified teachers, particularly in urban areas (Graziano, 2005), and the shortages of special educators are increasing. Moreover, employment of special education teachers is expected to increase faster than the average for all occupations through 2014, given teacher attrition and retirement (U.S. Department of Labor, Occupational Outlook Handbook, 2006).

California employs more special education teachers than any other state and is one of four states with the highest percentage of special education teachers in the field who are not fully certified (24%) (U.S. Department of Education, 2003). The shortage of qualified special education teachers is consistently identified as the highest personnel needs in California. Personnel shortages are particularly acute in large urban and high-poverty areas where teachers are twice as likely (20% vs. 11%) as others to be hired with emergency certification and leave their jobs at much higher rates than those who are fully certified (Zumwalt & Craig, 2005). In Los Angeles County, serving half of the 500 schools considered high-poverty, one out of 5 teachers are underqualified. As noted by the Center for the Future of Teaching and Learning (Christopher et al., 2003), the highest poverty schools have so many unprepared teachers as to make schools dysfunctional.

While California State University, Northridge’s intern program has been very successful in contributing to the need for qualified special education teachers, there are gaps and weaknesses in services. First, with NCLB legislation, all teachers, including special educators, are required to demonstrate subject matter competence in each of the academic subject areas they teach. This project facilitates the preparation of subject matter competent secondary special educators through financial and academic support in secondary subject matter and pedagogical content knowledge.
Second, CSUN’s intern program is designed as a two-year program with interns earning a K-12 Education Specialist Preliminary Credential. However, given the demands of working full-time while attending school, many CSUN interns request an extension to their 2-year intern credential, completing the program in 2 ½ to 3 years. To promote efforts in completing the program on time, the program is designed to improve support and course accessibility. A cohort of secondary interns progress through the program together, completing a sequence of technology-enhanced coursework that minimizes campus visits while providing an online environment that promotes mentoring and collaboration.

Preliminary Results of the Program: Cohorts 1, 2 & 3

Recruitment of secondary interns in mild/moderate disabilities.

The project has admitted 37 of the 48 interns targeted for this program, 12 in year 1, 11 in year 2, 10 in year 3, and 4 in year 4. All participants teach secondary students with mild/moderate disabilities. About half of the interns recruited teach in the Los Angeles Unified District (46%); others teach in Santa Clarita/Antelope Valley School Districts (22%) or in non-public schools (32%). Of the 37 interns recruited, 35% are from diverse backgrounds; 19% are Hispanic, 8% African American, and 8% from other minority groups. Other demographic data indicates that the cohort is diverse in gender (43% male) and age. The majority are 35-44 (34%) or 25-34 (32%); 19% are 45 or older and 15% are under 24. Each cohort has surpassed the GPA admission requirement of 2.75, with the undergraduate GPA of most interns 3.0 or above. All have received a 2 or higher on the interview rating scale. Of the 37 interns recruited for the program, 8 have withdrawn. Most withdrawals took place in Cohort 1 where 50% (6 of the 12 interns) withdrew.
Cohort 2 has completed the program and only 1 of the 11 interns has withdrawn (91%).

Cohort 3, with 10 interns recruited, is halfway through the program and has 2 withdrawal. Cohort 4, with 4 interns recruited, is in its first semester of coursework.

Interns remaining in the program are progressing through the program as expected. The six graduates in Cohort 1, all met the subject matter requirement in an appropriate secondary core area (four in Language Arts, two in History). In Cohort II 6 out of 10 met subject matter requirement in a secondary area (two in Language Arts, three in History, one in Science).

**Prepare highly qualified secondary special educators.**

A major emphasis in this project is to facilitate the development of technology-enhanced courses. Professional development sessions are offered each semester to faculty and individual support is provided as needed. Over the course of the three years TEC faculty have met together eight times, and are increasingly using online components in their classroom. As a result, all TEC faculty have offered completely online or hybrid courses. Professional development sessions included faculty learning about various ways of structuring communication in the online environment and (synchronous chat rooms, break-out rooms in a web conferencing environment, and asynchronous threaded discussions) and sharing their teaching experiences in the technology enhanced courses. Another session included faculty learning about setting up a Second Life environment as an instructional tool and faculty shared ways in which they conduct assessment in the online environment. Most recently, sessions in the past year included a workshop on using Moodle, a new Learning Management System for the university, use of an electronic teaching portfolio, use of a Smart Board, and also use of
online modules developed through the IRIS Center. All TEC courses are implemented completely or partially online.

At the end of each semester in year 1, the first TEC Cohort completed a program evaluation that asked questions on program satisfaction and content related to the specific project emphasis and classroom and program support/supervision. Ratings were strong, ranging from 4.0 to 5.0 on a 5-point scale (1 = not helpful to 5 = very helpful) and included an overall program rating (4.75, first semester and 4.80, 2nd semester) and program content related to the specific project emphasis (teaching in diverse urban secondary schools, serving English learners, and developing inclusive practices, range from 4.0-4.80). All 16 TEC participants have met performance criteria; cohort 1 has completed four semesters as expected and earned a mean GPA in TEC courses of 3.79; cohort 2 has completed four semesters with a mean GPA of 3.46. All TEC participants have met required competencies on their teaching evaluations and portfolios.

**Enhance teacher retention.**

On the survey described above, ratings of TEC Cohort 1 were strong regarding classroom support and supervision (range 4.5-5.0); and program advisement and support by the cohort (4.67-5.0).

**Increased proficiency in the use of technology tools.**

On a survey administered at the beginning of the program and after the 1st year, cohorts use of technology tools improved over time. Results on a rating of 1-no experience to 5-proficient include: (a) level of technology skills: Pre 2.5, Midpt 3.7, (b) use of WebCT: Pre 2.7, Midpt 4, (c) access and download course content: Pre 3.1, Midpt 4, (d) use of
Running Head: TECHNOLOGY ENHANCED

webconferencing: Pre 1, Midpt 3.1, (e) blogging/threaded discussions: Pre 2.2, Midpt 3.2, (f) real-time chat: Pre 2.2, Midpt 3.5, and (g) online quizzes: Pre 2.2, Midpt 3.7.

Comments from cohorts about the program.

Strengths of the program noted by the cohorts include: lots of collaboration and use of technology, work with cohorts in different classes, flexibility and personal attention, scheduling advantages, improved proficiency with technology, accessibility to technology, collaboration with professors to improve technological skills, flexibility of cohort supervisor, and when professors are willing to collaborate and use the technology the classes are far more beneficial and comprehensive. Weaknesses of the program noted by the cohorts include: not all teachers are equally proficient in all aspects of technology and not a clearly defined pace of the required classes.
Using Reflective Writing to Reveal Students’ Self-Awareness of Learning in Mathematics

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Abstract: As part of an ongoing study concerning the use of writing in the mathematics classroom, this presentation focuses on students’ written reflections and self-awareness of their own learning. Specifically, undergraduate mathematics majors enrolled in a course on the historical development of mathematics are required to write an expository research paper on the historical development of a particular mathematical concept. A component of the writing assignment requires students to write a reflection on what they learned about mathematics based on their experiences with writing an expository paper. This type of assignment is not typically included in the majority of mathematics courses which tend to focus on teaching formalized mathematics, such as algorithmic procedures and proof writing. The process of writing encourages students to reflect on content and promotes cognitive growth. Furthermore, this type of reflective writing benefits both student and instructor. Students construct personal meaning through reflection and instructors gain insight into the cognitive connections students made during the writing process.
Title of Submission: **Pedagogical Transitions: Reflections from a Conscripted “Quick Response Team”**

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**Introduction**

It was coming up to the fifth season of the Inclusive Practice seminars in the teacher preparation program at the University of Calgary when the infrastructure supporting the course collapsed, leaving only the two of us, out of about twenty instructors, to teach over 350 students in this component of their final semester. Since its inception, one of the hallmarks of the Master of Teaching Bachelor of Education program has been its small class size. With the advent of severe budget cuts, along with a major overhaul of administration, however, two of the key components of the program – the field experience seminars in the first year and this Inclusive Practice seminar – were relegated in 2009-2010 to a large class lecture approach. This reflection, then, is the story of the transition of a core component of our teacher education program as we shifted from an inquiry dialogic pedagogy in small groups of 20 to two sections for the 350+ students in a large lecture format. Because we were instructors of this component since its beginning, our task was the dismantling of what had been a highly successful course in its original conceptualization and reconstituting it into an essentially whole new course.

We will begin this paper with a brief introduction of our professional backgrounds. Following this, we will provide an overview of the current teacher preparation program and a description of the Inclusive Practice course including our history with its beginning development. Subsequently, we will share the story of our lived experience as a part of the course from its inception, and our experience during the tumultuous transition to a large lecture format. The latter includes excerpts of our journal reflections and past and present student feedback. We conclude with what we learned and with how we managed to find meaning and develop pedagogical relationships in the face of our loss of “the way things were.”

_Nancy_

My background includes nursing, public health nursing, social work, and educational psychology. Teaching at the university level has been involved across these
disciplines. The last twenty two years teaching in the Faculty of Education at the University of Calgary has afforded me opportunities to teach in Early Childhood Education, Teacher Preparation, and Counselling Psychology. Responding to children and families with special psychological and educational needs has been integral to these different aspects of teaching and learning and to my private counselling practice. I have studied avidly in the fields of human development across the life-span, relationship processes, and mind/body/spirit integration, including ways to apply my learning to teaching and counselling.

Bev

Prior to arriving at the University of Calgary as a doctoral student and instructor, I worked for seventeen years with the public education system in Calgary, first with preschool children, then Division I and II students (grades one to six). My educational background includes a Bachelor of Arts degree in psychology, a Bachelor of Education degree focusing on children with exceptionalities, and an Early Childhood Diploma. My doctoral research focused primarily on ecological mindedness and my current interest lies within the realm of neuroscience. For the past six years I have been an instructor in the Division of Teacher Preparation at the University of Calgary and have recently begun a position in the Faculty of Health and Community Studies at Mount Royal University in Calgary.

Overview of the Master of Teaching Program

The Master of Teaching (MT) program was initially developed in 1998 with a pilot program of 100 students as a way to make a transition from a four year Bachelor of Education program to a two year “after degree” program. Following the first year, the program eventually admitted about 450 students a year in order to fulfill a mandate to graduate 400 teachers. In this program, students interested in Secondary Education enter the program with a specialization in one or more subject areas – English/humanities, French, Math, Fine Arts (Art, Drama, Music), Social Studies, Physical Education, Science (Biology, Chemistry, Physics), while students choosing Elementary Education, including Early Childhood Education, are admitted with either a specialization or a more generalist academic preparation. A French program also accommodates a cohort of students. Recently, a middle school cohort and a rural school cohort have been added to students’ options.

The program’s philosophy is one of emphasizing that theory and practice are always intertwined; it is one of holding a belief about the teacher as: knowledgeable, thoughtful and deeply caring about the responsibilities of this vocation. To become a teacher requires strong preparation in subject matter knowledge, development of pedagogical skills, and acquiring the ability to make good judgements in practice. (B.Ed. Master of Teaching Program, 2009-2010, p. 2)

To the end of the latter – practical wisdom – developing a reflective practice is promoted in all components of the program; in the small group format this is regularly reinforced through dialogic reflections and sharing personal experiences.
In order to fulfill the intent of the philosophy, the program has been organized around three key themes of teaching and learning: “inquiry-based, field-oriented, and learner-focused” (B.Ed. Master of Teaching Program, 2009-2010, p. 2, bold in original). Ideas behind these themes include the following:

To become learner-focused means that it is critical to develop understanding of the life-worlds of students...(and) that it is essential to begin to explore one’s self as a learner. Practical wisdom is also dependent on strong forms of inquiry. Learning to teach is not just accumulating received knowledge, but is instead formed through inquiry – learning activities in the program are inquiry-based. To be field oriented means that learning about teaching happens in real educational situations. (B.Ed. Master of Teaching Program, 2009-2010, p. 2, bold in original)

Three types of courses make up the bulk of the program and address these themes: field experiences with seminars (homogenous groupings), case tutorials (homogenous as well as heterogeneous groupings with both elementary and secondary foci), and professional seminars (heterogeneous groupings). Additionally, large lectures once a week in three of the semesters have introduced “big ideas” and/or information that have been designed to stimulate conversations in the other three main components. In the final semester, students are also provided with an optional course that captures their special interests.

Collaboration among students and instructors is a hallmark of the program in all four semesters. To support this approach, the form of assessment of students’ work utilized is a narrative on, an in-depth description of their assignments and class participation, which includes suggestions for ways to strengthen their inquiries. Through this approach to appraisal, competition among the student body is negligent. Adjusting to a credit/no-credit system creates disequilibrium at the beginning; later in the program this system is embraced by most. Besides moving away for competition, the rationale for this practice is that collaboration mirrors the reality of the teaching world.

Central to the program is the understanding that identity – the ‘who’ of our teaching selves – is predicated on beliefs and values, along with personal awareness of our history, our assumptions, our understandings of others, and the meaning of our life experiences. Focus on identity, then, is a part of all components of the program, and is particularly emphasized in the professional seminars in the first and final semesters. With inquiry as the pedagogical approach to learning and teaching, case tutorials introduce this process through a case study approach for examining the key issues of teaching, learning, and curriculum. Field opportunities enrich this inquiry by providing students with lived experiences in the worlds of schooling. “Big questions” have guided all learning and teaching in this program; this of course includes questions of diversity with all its faces – differences in learning and physical abilities, in ethnicity, in family background, in sexual orientation, in religion, in educational background. As a result of this diversity, conversations and avenues for inquiry in all components of the program are rich with a myriad of world views and understandings. It is this variety of lenses for viewing learning and teaching that has fostered the ongoing expansion and deepening of students’ – and instructors’ – consciousness through the years.

At the heart of inquiry is the primary pedagogical relationship, which includes teacher, student, and curriculum – a living relationship, one that is always changing; for example, our students can become our teachers at any given moment, if we are open to learning from them....We call this relationship primary because we make...
this claim: *The quality of knowing and learning is dependent upon the quality of this relationship.* Developing trustworthy knowledge and authentic learning means developing trustworthy, authentic relationships between teachers, students and curriculum. (B.Ed. Master of Teaching Program, 2009-2010, p. 7, italics in original)

It was this pedagogical relationship that was fractured in the Inclusive Practice component of the program when we were required to abandon our small group seminars and move to the large lecture format.

*Inclusive Practice*

From the beginning of the Master of Teaching program, issues relative to inclusive practices in education were generally integrated in all courses, albeit quite haphazardly, primarily dependent on student and instructor interest. For example, one way exceptionalities were addressed was in the first professional seminar course when a large number of students engaged in an independent inquiry on a topic of choice focused on diversity of physical, emotional, intellectual and social abilities and explored ways of including all children in their classrooms. Another was through a case inquiry on diversity in the first case tutorial course. Because content and processes addressing diversity were inconsistent across the program however, and because the government body overseeing curriculum had mandated that teacher preparation programs have a specific course on inclusive education, in 2005 Dr. Joan Jeary, a professor with an extensive background in the field, was assigned the task of creating a course which would be especially designed to address issues of exceptionalities within an expansive view of diversity. This inclusive view is one of “recognizing that learning differences occur on a continuum and so should the instructional response” (B.Ed. Master of Teaching Program, 2010, p. 1).

Whatever the needs of the student inclusive classrooms require teachers to be able to work collaboratively with others in assessing the learning of students and then to plan and respond instructionally, in a way that addresses the unique and individual needs of the student. (B.Ed Master of Teaching Program, 2010, p. 2)

With the understanding that students enter classrooms with a wide variety of life experiences, and with a range of strengths and abilities, teachers need “to create a safe and supportive learning community in which all students belong and have equal status as members” (B.Ed. Master of Teaching Program, 2010, p. 2). Keeping this in mind, one of the key tasks of a course on inclusive practices was deemed to be the provision of a safe learning community for pre-service teachers to inquire about exceptionalities, explore beliefs and values, and reflect on how their understanding and attitudes might impact on their pedagogical relationships with diverse learners. Following the model of the MT program in general, the course was thereby conceived by the overall program planning committee as a case seminar – one that would allow for small groups of 20 or less to inquire deeply into issues surrounding inclusive classrooms and the complexities of students’ exceptional needs.

Given this general direction, a small group of faculty selected as seminar instructors joined Joan to collaborate on the development of a course. We were two of these collaborators and, with our fellow colleagues, met frequently through the summer
and fall of 2005 to develop the course to be launched in the winter semester of 2006. In congruence with the inclusive theme, our planning group under Joan’s tutelage quickly created a synergistic planning body.

Our planning began with brainstorming ideas around what we considered essential content areas. Common to other case tutorials in our program are Casebooks; these books contain a number of cases designed to provoke in-depth and wide-ranging inquiry on key curricular themes. For Inclusive Practice, we focused on the following core topics: overview to exceptionality; risk, vulnerability, and resilience; creating safe, supportive, and inclusive learning environments; high incidence learning disabilities; low incidence disabilities; inclusive classrooms for gifted and talented learners; curriculum considerations; and collaboration: partnerships for inclusive practice. Through the various cases, students were exposed to specific emotional, physical, intellectual, and behavioural differences influencing students’ learning and development.

Once we had settled on these main areas, each of our group of about eight collaborators went to work, either creating case narratives, finding quotes and preambles to introduce each one, developing guiding questions for inquiry to follow each case, and/or researching articles to include to initiate students’ inquiries. Narratives were either stories mirroring collaborators’ experiences or short published stories that highlighted significant issues.

Through the first four years of Inclusive Practice, cases were explored by leadership groups of four or five taking responsibility for designing and facilitating sessions to engage participants in active inquiry. As stated to the students on our course outline (each instructor developed his/her own course outline, so there were variations):

This might include experiential activities, “paper and pencil” reflective activities, small group discussions on questions, film clips, etc. While you may present key points as a part of your role, this is not to be a “STAND and DELIVER” opportunity. Rather, it is a chance for you to engage colleagues in an active inquiry process. (Course Outline, 2009, p. 4)

The focus, in other words, was “on exploring issues and ideas, for ‘living with the questions,’ and becoming increasingly aware of the multiple perspectives that can promote a deeper understanding of the complexities involved in inclusive practices” (Course Outline, p. 2). Such facilitation required students to do in-depth research relative to the case at hand; for example, interviewing teachers, doing library research, reviewing media, etc. Following the student-led inquiries, instructor or guest presentations, films, or additional class activities also provided inspiration for our dialogues.

Assignments for the seminars varied among instructors; we chose to have students write responses to the cases, an initial one to capture their “on-the-spot” thoughts, feelings, beliefs about the case narrative, drawing from their life experiences and posing questions raised by the story. Responses following inquiries were housed in case inquiry book, along with articles or newspaper clippings relative to the cases. In the last couple of years, as a way to honour students’ learning differences, this book was conceived as a “Sketch Book” for representing their learning via mind maps, poetry, prose, music titles, artwork, or journal writing as alternatives to academic writing. In the fourth year, we also developed a film assignment; in this reflection students were asked to discuss their learning about the exceptionality featured in the film and any changes in understanding
that occurred as a result of their viewing. Among frequently selected films were “I Am Sam” and “Rain Man.”

While we tried to maintain the essence of this course as it was initially developed when we began planning for the new lecture format for 2010, the heart of our work was deeply wounded when we had to eliminate student-led inquiries and small group dialogues. These dialogues constituted a great loss for us, as we, like Bache (2008) know that dialogue “evokes contact with that ‘something greater’ that lives in the midst of people, that connects them with each other and with the topic, ‘something that comes into being only when people gather in groups’” (p. 120).

The story of our lived experience follows. In this we portray both the joys and challenges involved in the birth and growth of a course and the subsequent myriad dilemmas we faced through the transition from a seminar to a lecture format.

Lived Experience

Hope is that thing with feathers that perches in the soul and sings the tune without the words and never stops...at all.

- Emily Dickinson

In the Beginning: Creation, Initial Implementation, and Hope in its First Inception

As we reflected upon the gifts and the diversity of conflicting voices, we came to identify a certain form of ‘energy’ which we eventually framed as hope. Within this we recognised a pulsating flow of energy that arose from within the individual, rippling outward and connecting our group in a common purpose. This sustained, infused, and informed all of our discussions and guided us throughout the planning, writing, editing, and course seminar participation. This energy had its origins within the strong leadership of Joan Jeary. She was able to engender a sense of purpose that centred not only on the work but was founded on relational principles. Her remarkable ability to blend playful humour with the seriousness of the work was exemplified during our first meeting in which she began with an “icebreaker” starting with her own hilarious experience of how she met her life partner. The stories that followed and flowed from the rest of the group contributed to an initial development of trust. This became a fertile ground and a future wellspring for the honest, open communication necessary for the inevitable intensity that would be called forth when such work grow from agreeing to disagree. We quickly learned that the disagreements in our collaboration efforts were not a deterrent but added to the richness and excitement involved in developing a course from the ground up. With the entertaining of a variety of ideas, perspectives, and experiences, conflicting values and beliefs became typical attendants to our conversations. Meetings were not the only avenue for thought and discussion; numerous phone calls, conversations, and independent research continued to carry our thinking forward beyond and between group connections. This typified our full investment in this venture and our enthusiasm about having been invited to participate. The type of leadership demonstrated by Joan Jeary and the life force of the group that was liberated as a result were wholly congruent with the intent of the teacher preparation program and the kind of leadership we hoped to live in our
upcoming Inclusive Practice seminars. Our own learning community evolved into a prototype of that which we envisaged nurturing in our classes. This again parallels the intent of the Master of Teaching program – the hope throughout was centred on students taking responsibility and ownership for their learning and for the very process of understanding not only with their minds but their hearts as well. The leadership we aspired to inspire within our student teachers as they led inquiries was that which we hoped would appear within their own classrooms.

Because this was a personal journey for each of us, we will separately share our unique experiences of our beginnings as instructors of the course. What follows in this section are our individual reflections along with a summary of student feedback.

**Nancy**

After having arrived home from the 5th International Education Conference in Hawaii at 2 a.m., I was not only jet-lagged but seriously sleep deprived as I launched the first class of Inclusive Practice in the winter of 2006. Perhaps the lack of slumber numbed my beginning anxiety somewhat about actually implementing what had only been a plan before this January morning, but I do recall a whole host of complex thoughts and emotions as I entered the crowded, cluttered classroom I’d been assigned: shakiness as I gazed at 20 sets of eyes expectantly examining me; excitement with embarking on the learning journey; uncertainty about my competence; and overall feelings of fragility as a teacher. At this point in time I had been teaching university students for almost thirty years, but because of the depth of my investment in this particular course and a sense of ownership of the curriculum, I felt more vulnerable than I had since I first stepped into a classroom.

Students generally enter fourth semester with a great deal of resentment/regret about having to return to the student role after finishing their three month practicum and these particular students were no exception. I began by welcoming their voices rather than jumping into the curriculum. They kept their complaints about returning to the student role to a low roar, and after venting for some time, engaged in the work at hand. Because of this beginning diatribe from the class, I was determined to be responsive to the group will about how to proceed with our inquiries. They voted unanimously to do individual inquiries on the topics and engage in collaborative group work only when they came into the class. This effectively shot down my plan to form leadership groups for the cases, but building classroom communities is always at the top of my list, and this year my welcoming of student voices to that end overshadowed any agenda I had. I left the first day feeling elated that the students had openly entered into dialogue and filled with trepidation about whether or not my hopes for in-depth inquiries through the semester would be fulfilled.

By the time we returned to class – there was a week’s hiatus because of a career fair – my fears were allayed when the students arrived wholly prepared from their independent research. The ensuing dialogues were profound. From week to week, however, the level of interaction varied considerably, and while the students agreed to take leadership of discussions in the class, this often didn’t manifest and I ultimately was mostly responsible for facilitating the inquiries and coming up with ideas to catalyze discussions. What did continue through the semester was the introduction of significant
research that students uncovered between classes. I wrote notes like “serious class about serious topics today,” “not much energy in dialogues,” “disgruntled by fourth semester work today,” “more dialogue on cases and enthusiastic about role plays,” “great class today!” “super involved in professor’s talk on gifted students,” “film well-received today,” “last class today was great; they thanked me for my flexibility.” The pattern of highs and lows seemed to vary according to how much I organized and led the inquiries; I left the class grateful that they had learned so much from the class experiences and their assignments and that they had appreciated the flexibility, but undecided about whether I would let the next class “off the hook” about leading inquiries. Something was definitely missing for me without exposure to the valuable input from the kind of inventiveness students brought to their leadership of case explorations that I had grown so used to in other tutorials.

Students’ feedback on narrative evaluations of the class did not reflect that for them anything was missing! I found it fascinating to read that they had loved the independent research, the far-ranging dialogues, the flexibility in being able to take their inquiries in whatever direction best met their learning needs, and that they found their overall learning in case exceptionally meaningful. They clearly communicated that they felt free because of the “no-group” format. Most important in the students’ feedback was that the Casebook of readings we had developed was especially facilitative of their learning. Through this experience, students noted that they felt like professionals rather than students. For this particular class, full collaboration worked. While it was a couple of months before I received these evaluations, the comments clearly buoyed my hopes about instructing the course again when I returned from my sabbatical leave. However, through my retrospective analysis, I realized I would need to further reflect on my future teaching approach. What I knew, without a doubt, was that the nature of the relationships that I had forged with the students and the kind of collaboration they had developed with each other were uppermost in their positive appraisal of their overall learning experience.

*Bev*

Although my experience is not recorded in the same way as Nancy’s (I kept no journals or written comments), there are moments in time that are indelibly etched in my mind and ineradicably imprinted in my body. As I retrace the nervous tightening in my stomach, the joyful bounce in my footstep, the distinct lingering images of students – their voices, their experiences, their writing – I experience an upwelling of associated feelings. In broadly describing my experience, then, I draw from recollections resurfacing as sensory memories, snippets of seminar conversations, and revisits to my detailed weekly plans and ‘notes to self,’ all of which were imbued with a combination of thoughts and feelings: anticipation, passion, trust, hope – hope, of course, being the most prominent. Above all, I hoped that the students would engage and connect deeply with the topics, dilemmas, issues, that they would respond with the same enthusiasm I felt, both as a former teacher/colleague and presently as their university instructor, that they would be happy to sit together for one last semester, to pause, explore ideas, reflect, and deeply listen to one another’s experiences. Admittedly, I am at risk and must bear the burden of memory rearranging itself into something more palatable or in some cases, more dramatic – for exaggeration inclined towards the gloomy is sometimes as much,
perhaps more, compelling than conjuring a healthy, healing dose of happy beginnings and happy endings – but the words that follow are my closest recollections of what I would describe as my truth.

Much of what Nancy outlined above in terms of vulnerability, uncertainty, hope, and trepidation speaks to my experience as well. I was part of the team who developed the course, I was not yet very far removed from my own school teaching experience, and I maintained vivid images of the children looking back at me from their desks with what I interpret(ed) as the same mixture of hope, excitement, and fear that I commenced and completed my days, entering and exiting a classroom. As an instructor of university students, I bore the responsibility of setting in motion meaningful, provocative, and ‘real’ experiences, and, never having taught fourth semester students before, I was entering uncharted territory in more ways than one. Although it does not exist in written form, I have a clear memory of my first experience, my first class, my first time teaching Inclusive Practice. I remember the classroom, how crowded it seemed, how daunting was the task before me, and how relieved I was to see two former students amongst the group. As they, with their varied backgrounds and experience, sat [undoubtedly] wondering, so did I: what were their expectations, what were they feeling, and how would I, how could I, possibly guide this mixed group of early childhood, elementary, and secondary preservice teachers towards deepening their understandings of exceptionalities? How was I to engage them in the stickiness of the language of exceptionalities when I was still wrangling with the difficulties around the ‘typical’ language of the teaching profession – classroom management, authority, learning ‘style’, and perhaps the worst of all – “normality”? Finding ‘common ground’ within uncharted territory is a daunting task indeed. I did know unequivocally, however, that no matter what the age level, no matter what the subject area, no matter how many or how few people may be part of the group, the single most important thing to set in motion is a sense of being part of a team. We may not always agree with one another, we may not develop lasting friendships, and we may not come from the same knowledge basis, but we could – and needed to – understand that we were all in this together.

Unlike Nancy, I did not provide any choices regarding the structure and format of the course. It really had not occurred to me to do so. I created a sign-up list for weekly group-led inquiry sessions, they chose topics of interest from the Casebook, and fortunately, it “worked.” It worked, in fact, far better than I could have anticipated. They shared their stories and their experiences, they discussed, they grappled with dilemmas – some from personal experiences as children and youth, some from current events – and that is where I came to understand where true meaning rests. They needed to develop ‘knowledge’ around the various forms of exceptionalities, to be certain. There is a legitimate and unquestionable anxiety that circulates within this tentative space of knowing/not knowing; in a few short months they would be facing the realities and ‘practicalities’ of teaching. I fully understood their perspective, I had enough experience – “real”, “practical”, and “imaginative” – to know that while knowledge does provide one with some sense of security, however tentative, preliminary, and in many cases, outright false that might be – knowledge is only one small part of a much more complex equation: enter the students, the children and youth, along with their families, their history, their hopes and expectations, and the “real” takes on a different hue. Reality is not knowledge; reality is the everyday comings and goings, the unpredictable, the provisional, and this is
where understanding finds its home. However, at this point in time, it could only be their interpretations and imaginings of what those realities might entail and what we needed to front our time together on was trust. Trust in the process, trust in one another, trust in me.

It became readily evident that students in their 4th semester of the Master of Teaching Program were ‘done.’ They carried – and often articulated – an air of having had ‘enough practical’ experience in the classroom, enough university courses, and certainly enough reflecting on their experiences. Amidst this low rumbling discourse/discord, however, there were many who were not only prepared but were actually looking forward to one final semester before stampeding ahead into their much anticipated teaching careers.

Once the class warmed up to one another, once trust was developed, once those critical experiences were shared, heard, and respected, once they participated in their own and their peers’ group led seminars, we did become a team, just as I had experienced with children and other post secondary students. Not everyone would walk away best friends, not everyone would maintain contact with one another, not everyone agreed on everything, but for that brief moment in time, those 13-odd weeks together sharing, wondering, worrying, speculating, developing confidence, an exquisite aura came to rest upon us. That this was, in the end, a success was confirmed by the course evaluations. There is no denying that not everyone got everything they needed (or perhaps what they thought they needed) but the overall tone was positive and promising. It was more than enough to continue.

Middles: Hope as a Course of Action

Throughout the first two years of the Inclusive Practice course, ongoing meetings and professional development workshops were held for collegial conversations and sharing. All instructors were invited to these and while not all instructors were available for all meeting times, the cross-fertilisation of instructors’ varied experiences with their classes informed, enriched, and aided in the further evolution of the course. During this period, Joan Jeary continued to provide leadership and insights into the various issues and dilemmas associated with both course content and pedagogical relationships.

Feeling buoyed with energy and enthusiasm, we discussed with Joan the possibility of preparing a conference talk because we felt that the dynamic interplay amongst and between colleagues and students could provide a rich ground for others. This culminated in a presentation by the three of us at the Canadian Society for Studies in Education in Saskatoon, Saskatchewan, 2007. Due to a somewhat unexpected change in Joan’s teaching assignment, she moved out of her role in the Department of Teacher Preparation, leaving a gap in the coordination and ongoing development of the course. At this point, we voluntarily filled the gap and subsequently shared the responsibility of course coordination. Based on feedback from students and colleagues, we made the decision to revise and edit some of the course reading package.

Nancy’s Experience

By the time I began teaching in the third year of the course in what was my second time of being one of the instructors, I had spent a great deal of time reviewing my
first experience and listening to the other instructors about what they had learned; by and large, organizing the course around case leadership groups for inquiries earned a “thumbs up” from everyone. I decided to return to this “tried and true” way of facilitating case tutorials. While there was no resistance to joining leadership groups in this class once we had experienced some initial group building activities, I later faced a major, never before experienced, barrier to our collaboratively organizing a democratic learning community: three students who filled the air-waves with cynicism in spite of the clear guiding principles for our conversations we had devised. This hogging of air-time with negativity was a “thorn” throughout the semester, and neither the students in leadership roles in the inquiries nor I was able to temper the antagonistic input that erupted, seemingly unprovoked, from time to time. My efforts at including their voices in an instructive way inevitably fell flat. Fortunately, there were good things too: inquiries were extremely well-developed so I knew I had chosen wisely by re-introducing leadership groups. Students over the years have consistently introduced novel ways of addressing cases. This means that by the conclusion of a course, we have all been exposed to seven or eight new lesson plans with numerous kinds of exercises and resources that we can draw from for future teaching. This was what I had been missing in the first go around with the course. Another plus with the course related to joining forces with Bev and her students for parts of three classes through the semester: two for the viewing of informative and provocative films and two for guests with specialized information on identifying exceptionalities. On these occasions, discussions became very active due to the introduction of new voices. Only occasionally through the run of the course did I write in my journal at the end of the day, “great class!” and it was at those times that it was evident our relational principles were being enacted.

Evaluations at the end of this semester reflected students’ understanding that the class dynamics often impacted our large group dialogues in a negative manner. In site of this, they also noted enjoying the way small group interactions generated meaningful discourse and a feeling of collaboration. Additionally, they appreciated the opportunity to take a personal approach to the inquiries and to explore topics which sparked their interest. While the few students who held on tenaciously to their critical appraisals of both the content and process of the course and the teacher preparation program as a whole coloured my own evaluation of the course, because the vast majority of students demonstrated through their work in-depth changes in their knowledge, skills, and attitudes, I finished the season with a sense that overall we had done our best.

Entering the same classroom as the previous year when the 2009 session began, I couldn’t help but feel uneasiness as I surveyed the faces in the room. How would these students re-enter the world of their studies after their semester of teaching. Appraisal of student mood in the fourth semester is always a critical first task; I have learned this from teaching many courses in this semester over the years. This season, aside from a couple of disengaged students, who in dialogue with me acknowledged their belief that inclusive practices in education were irrelevant to their disciplines of art and music, the rest of the class members were wholly immersed in their learning. By the second week students were eagerly sharing poignant stories from their life and teaching experiences. Week after week my journal entries spoke of fruitful inquiry sessions. I felt that for the most part the cloud from last year had lifted; both large and small group discussions and exercises were lively. I learned a great deal from the student led inquiries and from
reviewing their responses to cases and collections of resources housed in their sketchbooks.

Highlights of the students’ learning mentioned in course evaluations were the Sketch Books and a film interpretation assignment – both new this year. Representing their learning in the sketch book unleashed their creativity, and interpreting the film of their choice provided a novel opportunity for applying their learning. Most significantly, they also reported valuing the safe space created in our class for open sharing. In contrast to the class of 2008, this group expressed thoughts and feelings unabashedly as they listened to each others’ narratives and engaged in inquiry. The camaraderie engendered through these dialogues and via our activities led to a meaningful learning community. On the downside, students were well aware of the pall that sometimes entered the room when the few students “disappeared” mentally from our arena. Enough energy was generated by the majority, fortunately, to override the silence of these few.

In all three of the years I instructed a section of our seminar course, there was no doubt in my mind that the small groups, collaborative relationships, and personal relationships with one another and me as the instructor were the keys to fostering rich learning experiences, especially in terms of shifts in awareness and attitudes. Every year, one of the themes that stood out on evaluations was the importance to the students of the prompt and detailed feedback I provided them on all of their work, definitely one of the many plusses about our commitment to small class size in the program.

Bev’s Experience

Once again, my experience mirrors Nancy’s. Instructor collegiality, collaboration, and commitment alleviated the agonies, heightened the hurrahs, and deepened our dedication to the students, the Inclusive Practice course, and the Master of Teaching program. Although not directly uttered, it was clear that the students were finding a similar sort of sustenance through collaborating with one another. While I – or rather we – escaped the extreme voices that shook and sometimes overtook Nancy’s 2008 experience, I do not fool myself into believing that there were not those who were bound by an invisible shroud of restlessness. They were not overtly rude, they did not refuse to participate, they did not skip class, yet there was an almost palpable sense that some, perhaps many, were more focused on the future than the present – than ‘being’ present – they were struggling with settling into this one final pause before becoming salaried professionals. While this restlessness was expressed vociferously, distinctly, and succinctly in Nancy’s class, it was not in mine; however, it was present, just as it had been in our very first experience with the course. My preemptive ‘pep talks’ consisted of reminding them that teaching is a long, long time, that they do not need to be in a hurry, that the children and youth will wait for them, and perhaps my favourite piece of didactic ‘wisdom’, that never again would they be in this position – teachers collaborate, teachers attend all manner of professional development activities, teachers develop relationships with students, families, colleagues, paraprofessionals, therapists, psychologists, etc. – but never would an event like this come again. This would be their final coming-together, their final moment to gather and share ideas, experiences, and questions within this form and format ever again.
I learned a great deal about fourth semester students and how to negotiate the tricky terrain of ‘doneness’, I understood, I felt their anticipation, their fears, their hopes, their slide between feeling absolutely confident to absolutely lacking in confidence, I came to know their respective learning trajectories, I witnessed eyes moistened from laughter, eyes moistened by sadness in hearing of others’ experiences, when viewing films, video clips, or upon hearing true life stories. Sometimes we sat in silence, sometimes we were unable to hear one another above the cacophony of voices volleying for air time, but I am, as is Nancy, absolutely convinced that it was – and is – relationship, fostered by and encased within the safety and trust that can be developed that makes or breaks a course, a semester, a significant moment in time. This depends in large degree on the way it is set in motion by instructors. There is great potential for intimacy within small groups, but someone needs to guide this responsibly and appropriately. The importance of this was iterated, reiterated, affirmed, and reaffirmed within course evaluations. Despite their obvious eager anticipation to move forward into their teaching careers, comment after comment reflected and underscored their gratitude for one another and their awareness that a seminar affords a unique and valuable opportunity to expand not only one’s knowledge but one’s understanding.

Although my experience teaching the course grew year by year, the experience was itself always new. It could not, of course, be otherwise. Founded on collaboration and support, the joys and the dilemmas, the hopes and the dreams that students brought with them had distinct similarities but each new class, each new group had its own distinct vitality, energy, and way of being. It could not, of course, be otherwise.

Endings: Hope Springs Eternal

As mentioned in the introduction, we were placed in charge of dismantling what had been a unique component of our program; we were “the quick response team.” Initially it was very difficult to become wholehearted in our planning when we were destroying that which we had created over the previous four years, especially since we knew this would be a ‘one-shot-deal.’ one of us would be leaving the university after the course was over, and the other was going on sabbatical leave. However, armed with our previous experience, lesson plans, the course reading package, connections with experts in various fields of inclusive practice, and a wealth of supplemental resources including online documentaries, we forged ahead. Two months before the course was to begin, we reviewed all of these materials and began organising a series of lectures and a course outline. With over 350 students, we knew that we had to devise original assessment methods. In a credit/non credit program, this proved very challenging; however, we arrived at what we thought would be reasonable expectations. Each of our meetings left us feeling energised as we surprisingly came up with exciting ideas. Our excitement was also due to the fact that we wholly enjoyed our working partnership. This aspect was not surprising since we had always enjoyed our collaboration, but what did take us by surprise was our enthusiasm about the course we were developing since we were and continue to be committed to the inquiry approach to learning and teaching which involves a relational pedagogy. The question remained for us, “How were we to maintain the integrity of the Master of Teaching program and be open to relating meaningfully to these students despite the barriers that loomed ahead?” We were, nevertheless, hopeful and
determined that we could construct a relevant curriculum which would embrace meaningful student engagement.

Our vision of a worthwhile curriculum included a variety of learning opportunities and forms of appraisal. As in previous renditions of the course, our Coursebook of readings formed the core of the curriculum and we designed learning experiences pertinent to the topics encased within; blank pages for student note taking were included. Students were placed in online discussion groups (Blackboard) of ten, and from these, representatives from one group per week presented summaries of their responses to the week’s topic. A brief research paper on a specific learning difference was also posted on their Blackboard site so that each student would have access to a concise summary of practical information and ideas for the classroom relative to ten different exceptionalities. We also set aside time for “open mike” commentaries wherein students were invited to share reflections following class exercises. Lectures were supplemented with in class exercises, films, video clips, and presentations by professional guests from the community. Students submitted a mid semester self assessment outlining their perceptions of their learning to this point and at the end of the term, they wrote a final self assessment and a short film interpretation in which the protagonist portrayed a person living with an exceptionality.

At the end of the process, we were very excited about our role in developing and participating in something different.

Expectations and the Unexpected

What follows in this section is a summary of some of our post course thoughts, reactions, and responses. We will begin with a few words from each of us as we reflect on our initial thoughts and feelings as we headed towards the winter semester of 2010.

Nancy

I resisted teaching this lecture course which was instituted as a sacrificial lamb of the budget cuts. At first, Bev was assigned to teach one of two sections. She kept pester me to teach the second section. I resisted, resisted, and resisted but I kept getting ideas about how Bev could do the course. One fall morning in particular, I was on a roll with ideas, until finally in the shower a flash came to me that we should team-teach the course. I called Bev even before saying anything to my husband and told her “the decision” (I think it was the universe’s decision!). Bev was delighted and said she had suggested this before. Either I don’t remember this or it was part of my denial. But ultimately, it made sense because we would be on the same page whereas another instructor might approach the course from a perspective of pathology and we were adamant that Inclusive Practice needed to be founded on a strength based and inclusive philosophy. From the point of saying “yes” I began to be energized.

Bev

Although I was offered the ‘choice’ to teach this course as a lecture series, in reality, it was not a choice. Trying to remain optimistic (which I have since reframed as
blithe naïveté), I attempted to imagine how this course might look and what it might entail. Being immersed in teaching four courses at the time of these initial discussions around the transformation of Inclusive Practice, I had little time to think seriously about a new one. Fortunately, I had a solid friend and colleague who phoned me on a regular basis with one new idea after another. The energy and synergy that erupted as a result of these quick conversations gradually developed its own ‘life force’ and outside of and beyond my constant “pestering” Nancy, a partnership began to take shape.

Excerpts from the Trenches

After the many hours of planning – which invariably included raucous laughter – we headed to our first session buoyed with optimism and eager anticipation. The ten minute walk through the corridors seemed to take only moments, and when we encountered the Dean on our travels, we confidently exclaimed to him that the course was going to be fantastic!

Enter auditorium with 200 students looking down at us…

We looked up at them with innocence, hope, and a great deal of nervousness. The latter escalated when the technicians did not arrive with the media necessary for the day. To make matters worse, we noticed that the room was only slightly warmer than our Calgary winter temperature. Finally the technicians arrived but we were 20 minutes late beginning. Much of the remainder was a blur as we ran through the expectations for the course and showed a film portraying the lived experiences of students with diagnosed learning differences. The film was well received, we were able to follow our lesson plan, and we felt great. Then Bev spoke to a former student who offered some feedback, essentially stating that students were not going to be happy sitting for three hours on hard plastic chairs, they were not going to participate, and they were not going to continue coming to the class. Our bubble of innocence had burst: we left the lecture theatre deflated, exhausted, and disappointed on both our behalf and on behalf of the students. The walk that took moments to arrive at the lecture theatre lasted an eternity as we dragged our way back to the Education Tower.

The following day, a welling sense of defeat was intensified. During a hunt for a lost piece of work, Nancy heard a voice murmuring to her from behind the recycle bin as she was hunched over rifling through the papers. “So it’s come to this, has it?” joked a colleague. Laughingly, she replied, “Do you know what Bev and I are doing?” He quickly affirmed that he was indeed aware, having been informed by students in his own class and that they were not happy because they knew they were not going to receive the meaningful feedback that had become a defining feature of the Master of Teaching Program. Nancy’s laughter came to an abrupt halt.

New decision: We will provide written feedback on their assignments

Initially, we had thought we would only monitor whether or not students had completed their work because we could not comprehend how we would be able to
provide feedback. Since we knew that they were at the end of their BEd degree, we assumed they would be eager and willing to undertake the work for the sake of deepening their own learning. As this turned out not to be the case, we set about brainstorming some ideas about how we might manage marking assignments for this course. Fortunately, we had not articulated our original plan to the students.

Gradually we released our unrealistically high hopes that all students would see the potential for learning in this new format in the same way that we had come to imagine it. The student’s feedback/prophecy on the first day of class began to unfold. Attendance dropped, students walked out part way through classes, laptops became a barrier rather than a support for learning, it was evident that cellphone text messaging was occurring, and only a portion of the students seemed fully invested in the course. Very few students engaged in large group discussions, which could in some part be attributed to intimidation: a number came forward and confided in us their fears around sharing in such a large forum. We could understand their hesitance and were grateful to hear that this was the primary reason for their seeming lack of engagement but we (and they!) missed the depth of conversations we had grown accustomed to during our seminars.

As instructors, we eventually began to wholly enjoy our sessions. This was partly due to the daily support we received from numerous students through their validating participation and feedback; partly due to the fact that former instructors of the course were parachuted in to help with assessing assignments; partly due to the enthusiasm of the guest speakers who shared stories of their lived experience in the field; and partly because we knew the students were hearing a consistent message from us and our speakers: get to know children and youth as whole beings and address their differences from a strengths-based perspective.

After class debriefs: All that and a bag of chips

Our joy in the teaching of this course increased exponentially once we began a ritual of heading for the cafeteria after the class where we shared many things: our interpretations, anxieties, hopes for next time, gratitude for rolling with the highs and lows together, new learnings, and what became a weekly bag of chips. Inevitably, we defaulted to humour – the healing balm for what we perceived were less than resounding successes. Significantly, what turned out to be some of our best successes were the unplanned, unpredictable, and serendipitous events (e.g., a guest would have to change a date and this would ultimately work out better in our sequence).

Also at this time we shared what we heard from various students about what they were thinking about the class. Since both of us had a number of students in this class that we knew from other classes, we had a few informants with feedback. Occasionally we heard superlative comments; one former student exclaimed after class one day that she loved this class. Sometimes we would hear that students were saying that the previous week’s class was good, and other times we would hear that students were posting ‘reflections’ on Blackboard because they were forced to, not because they were interested or invested in the discussions. In one case, a student came forward and directly informed us that the assignments we designed were meaningless and paternalistic. Another student, a single male custodial parent, let us know he was quite disturbed that all the poverty stories of that day were about women. This was a somewhat jarring moment but at the
same time it sharpened our awareness of our own blinders about issues of inclusivity. Another jolt was felt when a couple emails arrived from students who took us to task for not sufficiently preparing them for videos of a “sensitive” nature (specifically, death and anorexia). We had never experienced this in our previous seminar classes and we were completely caught off guard. This was a graphic reminder that in these large classes, we did not know these students.

This discussion would not be complete without some mention of our numerous encounters with technological glitches. Most prominent in our minds is the day we fought a defining battle with technology. A classic case of two warring forces unfolded before our very eyes. Despite the best efforts of our onsite technology trouble shooter running up and down the stairs from the projection room to the console below, pushing buttons, making phone calls, dashing out of the room, we finally admitted defeat. Technology won and we ended the class. Before we were able to exit the room, however, a few people stayed to chat, one of whom informed Bev that this class was just not working. To save the day, three other students, wholly positive about the class, invited us to join them for tea. This helped to counterbalance the ongoing battle with technology and student negativity.

What really lifted our spirits in a more sustaining way was learning what and how the students were learning – and that they were, in fact, learning. Reading the first self-assessments at mid-term helped us to let go of much of our angst about the course, and reviewing students’ final work and their course evaluations validated our efforts in making this a valuable learning experience in the final term of teacher preparation – all of our work had not been in vain.

_Student Voices: We wish we had seminars AND we did learn a great deal!_

A major theme from this written feedback captured the overwhelming sentiment that students missed the seminar format they had enjoyed in all previous courses when they had felt free to inquire together and share personal stories from their experiences. In spite of this loss, all but a handful wrote about how much the course had aided them in changing attitudes and gaining confidence by having really understood an inclusive way of approaching their teaching, along with having a “tool-kit” of ideas for practices to take into the classroom. Especially significant, most expressed a knowing that they would never look at children again solely in terms of behaviours.

This latter was articulated as their biggest change; they were now committed to looking beyond students’ behaviours to focus on understanding what messages they were conveying through their words and actions, and to becoming curious about what children have experienced and are experiencing in their classrooms and in their lives. In other words, their focus was becoming more holistic, especially in terms of students’ emotional well-being. In this regard, there was a deepened awareness of the need for a safe, caring climate for student learning.

Another huge shift for many was one of expanding their understanding of what inclusion means, including now seeing inclusion as an ethical, moral social justice issue. In this regard, the course was eye-opening. In several papers, students shared stories of truly transformative experiences vis-à-vis the course, and over and over, students reported “seeing differently.” What seemed to precipitate changes in perspective were
inspirational stories of guest speakers and serious engagement in the Blackboard discussions. In terms of the latter, unlike hearing different opinions in face-to-face dialogues, reading multiple viewpoints seemed to strike more chords for them, allowing them to examine novel ways of looking at issues and considering them in leisure. Because these students, by the nature of their vocation, are very sensitive about hurting the feelings of classmates they come to know well in the seminars, they are often hesitant to express their ideas fully in the classroom or have their own emotional reactions when colleagues differ with them. Some reported that the anonymity of Blackboard helped them to keep their own thoughts and feelings in abeyance long enough to ponder another’s ideas. Their own views became less fixed as they opened themselves to the influence of diverse perspectives.

A number of students wrote that the course was re-igniting their spark, their passion for teaching. Particularly significant for them as they moved toward embarking on their careers was an awakening to the reality that “they are not alone;” they now “knew” that help would be there, from collaborations with colleagues and from vast stores of resources. They truly appreciated the concrete, practical information provided through the Casebook readings, our lectures, guests, the media, and their peers. In short, they believed their understanding of inclusive practices had been deepened, broadened, and validated, helping them feel prepared to confidently enter their own classrooms in the fall.

Comments on the students’ mid-term assessments were clearly echoed on their final assessments and the evaluation. On some points, there was special emphasis; for example, there were superlative comments by most about how much they valued the Casebook of readings, a book many intended to keep with them as an important resource. This was supported by the fact that only 18 students failed to retrieve their book. Reiterated on the evaluations were references to their changing attitudes, their increased confidence, and their delight in having received “tons of information!” While this was heartening, it was repeated over and over in many different ways on the final evaluation that these students had deep regrets about what they believed they missed by having this course in a lecture format. Given our limitations in this format, we had tried in many ways to emulate learning experiences from our past renditions of the course and one of these ways was with our assignments. The ones rated most highly were the independent inquiry into learning differences, the self assessments (reflections), and the film interpretation.

We were both surprised and moved by the way students put their hearts and souls into this final film project, seemingly delighting in the chance to apply their theoretical learning to the story of a protagonist living with an exceptionality. Popular selections for film interpretation included familiar titles of the previous year - “I Am Sam” and “Rain Man” – as well as “Good Will Hunting,” “Finding Forrester,” and “Mean Girls.” We had featured guests present on gifted/talented students and on bullying, which accounted for the interest in the latter three. Students’ interest in inquiring further into learning differences led to choosing “Forrest Gump” and “What’s Eating Gilbert Grape.” Among the most inspiring papers were those about films calling us to see into children’s hearts to understand their unique gifts within their perceived differences: “Simon Birch,” “Like Stars on Earth,” and “How to Train your Dragon.”
Final Reflections and Griefwork

*What I hear I forget*
*When I see I remember*
*When I do, I understand*

- Ancient Chinese Saying

In the transformative learning literature, it is understood that learning is “an active process. Learning is not simply an outcome, but occurs as individuals engage in experiences that cause them to change what or how they do or think, and/or develop dispositions that might lead them toward changes in their doing and thinking” (Merriam & Caffarella, 1999 cited in Bagleria, 2008, p. 590).

We have our reports from almost all of our students about their learning process and outcomes, particularly in terms of their changing attitudes and understanding about inclusion, and we also have our own experience of having dialogued with students in an ad hoc way before and after class, along with engaging with them in bits and pieces in class. Additionally, we have our observations from reviewing Blackboard entries. Much of our awareness about student experience and learning outcomes, however, was at arm’s length, unlike previous years where we were deeply immersed in the learning with students, moment to moment. When we listened to students’ comments, read their papers, and reviewed the online discussions, we were glad to know they were indeed gaining insights and understandings. What we missed, however, were the kind of relationships in which we inquired together. Outcomes appear not to have suffered, at least not for those who were fully engaged. For those who attended minimally, who did not complete the evaluation, and for those who verbally said that this was “not working,” we have no idea of outcome. Perhaps this was little different than in other years where students found their own unique ways to distance themselves from learning. What we do know, is that the process in this new format was less than satisfying for us, and only as fulfilling as it was for five key reasons: one was that we were grateful that we both knew a fair number of these students from other classes (and these were the students who participated wholeheartedly); another was that we did learn that there were meaningful experiences happening for the students; another was our own enjoyment in learning from the students who shared their experiences and from experts in the field; another important one was that we had help from our teaching assistants who faithfully reviewed Blackboard; and finally, we truly valued our relationship with each other as we lived through this “heroine’s journey;” we learned the true meaning of partnership.

The following reflections bring this last theme to life:

*Email Conversations*

Bev:

*Have you integrated the whole “lecture experience?”* For me it still seems to be settling...Every once in a while a thought unexpectedly erupts: students talking, students walking, trudging the link between buildings, student faces, student comments, moments of pure hilarity, dragging 200 books back and forth, back and forth, back and forth...Yeah. What a thing, eh? I feel entirely privileged that I got to do that with you.
Nancy:
My sentiments exactly! The only thing I might add is that I’m no longer dreaming these images nightly. I feel like I lived and breathed this course and now I’m just catching my breath. I chuckle whenever I reread in my journal our repartee on one of those “hauling the carts of Coursebooks days” as they spilled all over the Social Science building hallway:
Nancy: “Whose idea was this?”
Bev: “Yours!” (Hysterical laughter and a long pause until we got to the office) ”Well it was a good idea because they were engaged with them. If we hadn’t had the assignment for them to keep ongoing notes in it, they wouldn’t have been.”
Nancy: “How true! In all the years we’ve done this course, this is the year that this book has not only been read, but has been the focus of their inquiry. Living this course was a surreal moment in time, one that will forever be emblazoned in my memory as an exhilarating highlight of my teaching career!

On this journey, both of us knew we were doing all we could, walking each week into the unknown and learning from each new hurdle encountered, trying to bring to the students the best of what we had done before minus the close relationships, relationships where we had learned what students were thinking and feeling vis-à-vis the curriculum and our connections. The truth is: that was the best of what we’d had and we couldn’t do that anymore. This was our grief work all semester. In our hearts and minds, we know that student-teacher relationships are key to learning, and we had to hope that the majority of the students with whom we did not have personal connections found this key through their own connections with one another in the class and on Blackboard, and that, because of their learning through this program, would discover it with their own future students.

Contradictions

Amongst the “surprises” we experienced along the way were a number of contradictions. A few of these are sketched out below.

Inclusion/Exclusion

>Welcome to our Inclusive Practice lecture – and just to clarify, your experience of ‘inclusive practice’ will not be fully inclusive.”

More than once we uttered – or heard from students – some variation of the above. The irony was lost on no one. There is no fault to be laid; this is a statement of fact: a course encased within a lecture theatre has an inherently hierarchical, top-down (literally and figuratively), expert-novice aura surrounding and shrouding even the best intentions. Even so, inclusion is more than intent; it requires action or rather enaction: an invitation must be advanced and a response subsequently elicited. A lecture arrives with particular parameters and restrictions. In the case of our Inclusive Practice lecture series, these erupted as contradictions. Hovering above our attempts to breathe life into a
potentially static endeavour was an inaudible, invisible yet ever present form of exclusion softly echoing throughout the lecture theatre. Because it is our belief that it is the students and instructors together who make the teaching, all voices were invited into conversations. At the same time, however, their voices were silenced: silenced by the numerous impositions and limitations that suppressed the dynamism and organicity of true inclusion: the size of the class, the size of the room, the configuration of the desks (all facing forward, toward the “experts”). The parameters that held us together also pulled us apart. We were determined that everyone would have an opportunity for expression, but comfort level was another matter.

Comfort/Discomfort

“Please sit back in your moulded plastic chairs for the next three hours and be prepared to participate in meaningful conversations with the people around you. You might also want to keep your jacket on.”

We worked very hard at creating a “comfortable” classroom atmosphere wherein everyone felt safe to share their experiences, their wonderings, their dilemmas: this was the very essence of our beliefs around teaching and learning. Given the conditions, however, physical and psychological comfort seemed to be on a frequent collision course with the freedom for expression and freedom to learn. At the front of the lecture theatre were fire doors; on the other side of the fire doors was the outdoors. Cold air seeped through the cracks and even on what we considered warm days, the classroom was infused with a chill. This chill was also palpable when we issued our guidelines about conversations.

Quiet/Disquiet; Hearing/Not Hearing

“Please continue this conversation with the people around you, bearing in mind that this is a very large room and in order to hear one another, you will need to speak quietly. We will also be asking for a summary of your discussion so speak up: there are approximately two hundred students listening to what you have to say. Please also remember that every week, two or three of you will be presenting a summary of your Blackboard discussions to the large group. And don’t be shy.”

While not everyone in the class was too shy to speak when it came to sharing conversations with the large group, it is safe to say that most were too shy to speak up. What seemed to happen was the same few students, week after week, plucked up enough courage to formulate a response. Once in awhile, this created a ripple effect. Other students entered the discussion, and we, as instructors, were able to expand on the topic at hand, which circled back to spark a new thread of discussion.

One of the difficulties of sustaining this large group sharing had to do with our “travelling microphone.” On the one hand it was very helpful in amplifying voices, but on the other hand, if students at opposite ends of the lecture wanted to respond to one another, it was awkward making our way across the theatre with microphone in hand. Additionally, on a number of occasions, the battery in the microphone – one of our most relied upon tools – died; the very thing that made it possible to speak, to hear, to listen, that which allowed silence to be broken, became the silencer.
Too Much Time/Not Enough Time

“Three hours! How can we possibly fill three hours? On the other hand, how can we provide enough time to hear from each discussion group about each dilemma? And how are we going to ever provide meaningful feedback?”

The issue of time arose repeatedly in all its manifestations: three long months to teach the course, three long hours of teaching twice a week, three long months to prepare for the course, and what seemed like three long miles to walk between buildings. This was contradicted by the seemingly brief moment that we would have to work with these students and through the course, knowing that in a matter of weeks after the end of the term they would be facing classrooms and would need to understand and apply their knowledge to create inclusivity. Many decisions about what would be most meaningful to their current learning experience and their future teaching practice consumed our time before, between, during, and after our classes. An important turning point in our own learning as instructors occurred when it became completely evident that many students were not returning to class after the break. We realised we had to let go of some of our ‘best laid plans’ as well as the idea that we needed to provide three full hours of content and classroom experience. We had to learn to live with the contradiction between the need to fill the three hours they were paying for and the obvious restlessness and disengagement if we tried to stretch the class out for the whole time.

One of our greatest obstacles in terms of time lay in our knowledge of the importance of providing worthwhile feedback but we also knew how much time it would take to read and subsequently write meaningful comments on 350+ reflective self assessments. This was brought somewhat into balance by two elements: the first involved one of our teaching assistants who volunteered to assume responsibility for one third of the papers and the second came in the form of expressions of gratitude from the students.

Learning

While we never let go of our belief that small classes equal quality because of the centrality of the pedagogical relationship in learning, we did ascend our own steep learning curve through the semester in recognizing there were some up-sides to a large lecture format: we were able to convey to over 350 students the underlying strengths-based paradigm of the inclusive practice curriculum; the content of the curriculum that was addressed and emphasized was consistent (impossible in 20 sections); because there were so many voices in the large class format, unformed opinions were questioned freely by peers; and finally, all students heard the same reframing messages about students and their behaviours from guests committed to enhancing children’s lives: “exceptional does not mean abnormal,” “students are ‘stuck’ rather than ‘bad’ or ‘stupid,’” “behaviour is communication.” Especially heart-warming for us was knowing that, without the lectures, not all students would have had the opportunity to become inspired by the heroic story of Marc Ross, a doctoral student who, at age 17, had become quadriplegic due to a diving accident. His journey through the remainder of high school and subsequent university education involved many compassionate teachers, true models for inclusive practice teachers.
It was class experiences like this throughout the course that meant that even through our moments of most existential doubt in the value of our work, we never lost hope. Every day, as we left the coffee shop, it was “pick ourselves up, dust ourselves off, and start all over again…” On the inside cover of one of the early handbooks for our program there is a quote by Silver Birch to guide our students in their vocation: “We always say at the end of your earthly term, if you have helped one soul to find itself, then your existence has been worthwhile.” It is our sincere hope that we helped at least one soul.

REFERENCES


The Development of a Teacher Observation Instrument for PBL Classroom Instruction

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Abstract

Teaching is a complex activity that requires making ongoing multiple decisions and sporadic, responsive actions all while performing preplanned prescribed tasks. Evidence of certain aspects of teaching can be best assessed with a well-designed observation instrument. This instrument was designed to assess the enactment of the essential elements of implementing a Science, Technology, Engineering, and Mathematics (STEM) Project-Based Learning (PBL) activity in classrooms. The steps leading up to the instrument development and follow-up suggestions are offered to those who are engaging in STEM professional development including districts, schools, academies, service centers, and university partners.
The Development of a Teacher Observation Instrument for PBL Classroom Instruction

A renewed federal and state focus on Science, Technology, Engineering, and Mathematics (STEM) education has resulted in the prolific growth of programs and professional developments (PDs) focused on STEM. However, little research investigating the effectiveness of these programs and professional developments have been conducted. While many agree that STEM education is important because it affects the field of education, it also affects the United States’ competiveness in global markets across various fields, including economics (Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2007; Marshall, 2010; Pfeiffer, Overstreet, & Park, 2010). A heightened awareness of STEM education in the general public has occurred due to media reports of what is called the STEM pipeline problem, which is a decrease in the number of students pursuing careers in STEM fields (Sanders, 2009).

The No Child Left Behind Act (2001) has addressed the growing concern over the STEM pipeline problem by advocating for greater attention to science and mathematics education. K-12 STEM education provides a foundation for STEM careers but can also funnel students into post-secondary STEM majors (National Governors Association [NGA], 2008). In fact, STEM education in all schools and post-secondary institutions should be involved and play an important role in helping schools build infrastructure and improving articulation between K-12 schools and universities (NGA).

In a recent study, Bhattacharjee (2009) found that a lack of incentive for pursuing STEM careers was the cause for decreasing numbers seeking STEM degrees,
contradicting the previously held notion that it was due to inadequate K-12 STEM preparation. Even though the number of high-school STEM education credits students earned increased steadily from 1990 to 2005, just taking more courses was not the solution. Given a statistically significant increase in the number of STEM courses high school students completed, there was a decline in the number of students graduating college with STEM related degrees (Laird, Alt, & Wu, 2009).

Because increasing the number of STEM courses taken in high school has been shown to be insufficient, improvement in the quality and integration of STEM education should be the focus of national attention. Marshall (2010) advocated for improvement in the quality of the STEM courses. An effective STEM curriculum should nurture students’ problem solving and inventive thinking. Additionally, it should focus learning on creative exploration, projects, problem solving, and innovation, not fact memorization that predominates practice in many schools (Marshall). When a school’s curriculum is focused on research and inquiry-based learning projects in STEM classrooms, those projects foster complete student understanding by encouraging students to make connections between the content taught in various classes (Pfeiffer et al., 2010).

Therefore, incremental improvements might be gained by guiding teachers to better implementation of STEM education because a better understanding of STEM will lead more students to STEM careers.

**Importance of STEM Professional Development**

Professional development (PD) is considered essential for educators to keep up with current reforms. Teachers cannot just be shown a new idea or practice but need experimentation and a culture of learning to fully implement a new practice or idea
(Franke, Carpenter, Levi, & Fennema, 2001). Professional development was shown to be effective over the course of three years when interspersed with classroom observations that tracked the targeted instructional behaviors (VanTassel-Baska et al., 2008). Therefore, a prolonged and sustained professional development model should include estimates of assimilation of new ideas introduced through professional development into classroom teaching practices.

Sustained PD can be accomplished through the development of professional learning communities. One common way is the idea of lesson study, which permits teachers to refine their lessons to infuse quality (Stigler & Hiebert, 1999). However, this process has not been enculturated into American teaching due to many identified policy and organizational constraints (Lewis, 2002). Professional learning communities (PLC) have been shown to achieve similar results and to be self-sustaining and resilient. The model resembles lesson study in that collaborative groups of teachers work together to refine a skill or lesson learned through PD (Buysse, Sparkman, & Wesley, 2003). The primary mission of the PLC is to provide teachers with the time to fully engage in a professional task and to reflect and plan the implementation (Krause, Culbertson, Oehrtman, & Carlson, 2008). The PLC can support the STEM field, boost diversity of the STEM curriculum, and increase the level of implementation school-wide (Liddicoat, 2008). Research has shown that PLCs work to create a positive community of collaboration with common goals of advancing the STEM pipeline (Krause et al.). PLCs combined with classroom observations of teaching enactments can help to ensure full implementation of an innovation.
**Observation of Teachers**

In order to improve the quality of STEM education classes designed to encourage conceptual development (i.e. Project Based Learning [PBL]), teachers need feedback and support. “There is considerable evidence from different studies suggesting that how teachers behave in the classroom, the instructional approaches they employ, significantly affect the degree to which students learn” (Van Tassell-Baska, Quek & Feng, 2007, p. 85). Observations can be either peer or professional in nature, but the observer needs to provide feedback to the educator so he or she may evaluate and adjust their teaching to benefit the students (Patrick, 2009).

Without classroom observation check points, teachers’ assimilation of PD ideas can be assessed; however, feedback and continuous improvement may be compromised (VanTassell-Baska et al., 2008). Ineffective teachers can depress student achievement in mathematics by as much as 54% regardless of students’ abilities (Sanders & Rivers, 1996). Therefore, to ensure that translation of any PD into classroom practice, assessment must be present in some form during actual teaching activities. When carefully designed to align with the PD, classroom observation instruments can be an effective tool for providing feedback about assimilation of PD teaching strategies.

An effective way to evaluate teaching behaviors is with the use of a specifically designed observational instrument (Guskey, 2002; O’Malley et al., 2003; Simon & Boyer, 1969). The observation tool can yield a descriptive account of targeted performances. This can be achieved with a conceptual rubric that contains a numeric range of descriptors for each predetermined objective. Observational data can also be structured with a frequency-counting system, or coding system (Taylor-Powell & Steele,
This observational tool can serve to monitor the progress toward increasing a desirable trait or diminishing an undesirable behavior based on some theoretical framework. The information gained through the observation tool can also be used for teacher reflection and to customize subsequent professional development.

Effective observations require a certain amount of training and often can still have a degree of subjectivity, however, the information gathered through observations has a high degree of face validity (Volpe, DiPerna, Hintze, & Shapiro, 2005). This is not to say that no validity threats are present. For example, the following threats have been identified within behavioral observations: (a) poorly defined behavior categories, (b) low inter-observer reliability, (c) observee reactivity, (d) situational specificity of target behaviors, (e) inappropriate code selection, and (f) observer bias. These threats can be minimized with observer training and instrument validity testing (Merrell, 1999).

Using external observers to describe and evaluate teaching practices can provide a teacher with a better sense of their classroom instruction (Hlebowitsh, 2005). A team of observers should be well trained to identify factors that are fundamentally important to a school’s academic success. In addition, the observers should understand how the school’s goals and initiatives, past and current PDs, and the content covered in courses are aligned. Evaluators may use an observation tool that can be designed in as many ways as there are teaching methods (Dinkelman, 2003; Felder & Silverman, 1988), however, clearly defined goals should be made explicit and communicated with the teachers prior to any observations.

Teacher observation instruments can provide the classroom educator with a wealth of supportive feedback. But without on-going, connected, professional
development effective change may not occur (Van Tassel-Baska et al., 2007). A study of teacher evaluation practices found that few teachers had substantial change in their teaching effectiveness after an evaluation process without follow-up professional development (Kimball, 2002).

**Follow-up Professional Development**

After the observation process, an iterative planning and implementation phase should be undertaken for designing future professional development. The observations should be aggregated across teachers (analysis) with attention to commonalities in both strengths and weaknesses. Information should then be provided back to the teachers during conferences (discussions) and the information should be used as a basis for planning subsequent PDs (needs assessment).

**Analyses:** While an individual observation can be the basis for individual feedback and estimating a single teacher’s growth toward some school or district identified target set of skills, it should not function as a basis for determining school or district wide professional development. Personal PD needs can be addressed through the PLC. However, the power of aggregated observation analyses is in their usefulness in designing and developing future PD on a broad scale. Aggregated information based on observations provides the opportunities to build on systemic strengths while addressing systemic weaknesses. This also provides a structure for the PLCs to sustain the innovation and to provide gradual assimilation of the new PD. A carefully prepared analysis allows all stakeholders to examine the information and to build ownership of the pedagogical behaviors and to recognize the need for change in some of those pedagogical choices (Corcoran, 1995).
Discussion: It is important to encourage discussion of the aggregated analyses among stakeholders because without this discussion teachers would not have a clear understanding of their degree of assimilation of new ideas or how their lesson may appear to students (Franke et al., 2008). One important aspect of the discussion phase is in differentiating between systemic and idiosyncratic strengths and weaknesses or teacher reflection on their teacher (Franke et al.). Without these discussions, teachers would not know which topics their colleagues could help them with or what would best be done in large-scale sustained PD. Idiosyncratic weaknesses and strengths can be paired and addressed through peer interaction within the PLC. Systemic weaknesses can form the basis for subsequent PD needs.

Needs Assessment: Once teachers and administrators reach a shared understanding they can begin to prioritize which needs should be addressed first and how to best plan for future PD. Follow-up PD for the selected needs should be addressed by the original PD provider, the district/school should develop a scope and sequence, and in concert with the PD provider, allocate (5 or more days) PD days in which all teachers should be available to attend (Corcoran, 1995).

Theoretical Framework

Based on the previously presented ideas, a carefully designed observation instrument is essential to inform on-going and sustained PD. In fact, many researchers have identified issues with traditional PD (Desimone, Porter etc.) and the missing link in both the literature and in practice is the use of classroom observations and an instrument to guide that observation. The manuscript describes the development of one such instrument and its situation in a model sustained PD program.
STEM PBL Classroom Observation Instrument

Found in the appendix is a copy of a classroom observation instrument that has been created by a team of professors and graduate students from A STEM Center at a large southwestern public university. This instrument was specifically created to evaluate observable teaching and learning objectives when teachers use PBLs in their classrooms. Teachers who were evaluated with this instrument participated in sustained PD (10 full days) focusing on PBL. The PD has focused on each of the measured objectives. Both the observers and the teachers were trained on the design components and purposes of the instrument.

The instrument contains twenty-seven items organized by six objectives. The objectives include: (a) PBL structure, (b) PBL Facilitation, (c) Student Participation, (d) Resources, (e) Assessment, and (f) Classroom Learning Environment. The number of indicators under each objective varies. Each item can be evaluated on a scale ranging from 1 (no evidence) to 5 (strong evidence). The observer must justify every score assigned to each item. Occasionally, an item will not apply to what is taught during a particular observation. This may happen if the observer is only present for part of a PBL, however, well-documented lesson plans can provide insights and further details. The observer may still choose to indicate that a particular behavior was not applicable or not observed during the class period.

Use of Instrument and Aggregating Observation Data

It is important for observers and those observed to understand that this scale is not intended to be used as a grading tool, but rather to indicate progress toward an ideal. Therefore, while it may be tempting to use the scale as a ratio, caution should be used. A
low score on the instrument is an indicator of need for continued PD either on a systemic level or by peers in a PLC but should never be used as part of any teacher’s formal evaluation process. For the scale to function well the observers should be well trained, have a solid understanding of what ideal is, what it means to not see a particular item on the scale, and dependably be able to rate particular events similarly with peer observers. Inter-rater reliability is only achieved by multiple observers observing the same teaching event and then discussing their ratings and their justifications.

In the identification of systemic issues it is important to aggregate across observations and observers, campus boundaries, and subject areas; within each of the six objectives. The data can be aggregated using mode in cases when either low inter-rater reliability is present or when instrument training was not provided. However, in the presence of adequate inter-rater reliability and substantial training the scale can be used to compute means and standard deviations. In either case, larger numbers indicate greater progress toward the ideal goal and lower numbers indicate greater opportunity for systemic PD.

**Summary**

An observation instrument, designed to assess the enactment of the essential elements of implementing a STEM PBL activity in classrooms, has been presented. Included in the discussions are:

- The steps leading up to the instrument development, and
- follow-up suggestions for those who are engaging in STEM professional development including districts, schools, academies, service centers, and university partners.
It is hoped that this instrument will be useful in assessing the effect of the ongoing decisions; sporadic, responsive actions; as well as the preplanned prescribed tasks associated with teaching. Such evidence of teaching is well correlated with improved student learning (Darling-Hammond, Wei, Andree, Richardson, & Orphonos, 2009).
References


Appendix

Project Based Learning Observation Record

Teacher______________________________     Date/Time __________________

Subject area __________________________    School ____________________

PBL Title

____________________________________________________________

PBL Description _____________________________________________________
_________________________________________________________________

To what extent was the following present? Please mark the box that best displays your response on a scale of 5 to 1. 5= to a great extent, 1 = no evidence.

(5) (4) (3) (2) (1)

Justification __________________________________________________ ___

I. PBL Structure

1. The PBL has a well defined outcome.
2. The PBL contains rigorous subject area content.
3. The PBL lends itself to multiple, creative and unique tasks in which students can demonstrate a continuum of knowledge and understanding.
4. The PBL covers subject/grade level TEKS.
5. The tasks or the overall PBL will likely to lead to higher order thinking.
6. The PBL is not a stand-alone lesson.
7. The PBL is interdisciplinary.
8. The students worked in organized small groups.

II. PBL Facilitation

9. The teacher clearly stated goals and tasks.
10. The teacher facilitated the students to remain on-task.
11. The teacher asked effective open-ended questions.
12. The teacher worked with members of all small groups.
13. The teacher achieved objectives they identified.

III. Student Participation

14. The students were actively engaged.
15. The students could explain tasks and solution strategies.
16. The students could explain the goal(s).
IV. Resources
    17. The appropriate resources were used.
    18. The resources were readily available and in working order.
    19. The students were proficient in using the resources (i.e. calculators, test books, computers).
    20. The materials were familiar to the students.

V. Assessment
    21. The assessment(s) was/were continuous and varied.
    22. The evidence of holistic assessments existed (e.g. rubrics for participation/engagement, early stages of the PBL, or group work).
    23. The students could explain the expectations.
    24. The students understood what they needed to do and how it was evaluated on the rubric.

VI. Classroom Learning Environment
    25. The students were aware of teacher expectations and the purpose for learning content and methods.
    26. The teacher identified and engaged students around their prior knowledge.
    27. The teacher identified and engaged the students around their cultural contexts?

Other comments or observations

___________________________________________________________________________

___________________________________________________________________________

Observer         Date
Abstract:
The term ‘tone-deaf’ is commonly applied to poor pitch singing (Pfordresher & Brown, 2007). Research into tone deafness suggests that while only around 4% of the population actually have the condition congenital amusia, around 17% of Western adults consider themselves to be tone deaf (Wise, Sloboda & Peretz, 2007). The acquisition of musical competence is related to many personal, social, and environmental factors. Music educators have noted that this phenomenon of ‘tone-deafness’ often co-exists in Western societies with the concept of being ‘unmusical’ (Small, 1998). Ethnomusicologists maintain that everyone has the potential to be musical (Blacking, 1973; Campbell, 1998) yet often this potential is trained out of them (Small, 1998) due to the tendency in Western society to categorize a small group of individuals as ‘musical’ while the majority are declared ‘unmusical’ (Blacking, 1973; Kingsbury, 1988). Research amongst early childhood teachers in New Zealand has drawn attention to the high level of low self-belief in many teachers’ musicality and that a number self-identify as ‘tone-deaf’ (Willberg, 2001; Bodkin, 2003). Lack of confidence in singing, in particular, has been shown to have a prevailing influence on an overall negative musical self-perception (Bodkin, 1999).

This paper reports on a research project involving early childhood teachers in the Otago and Southland regions who self-identify as tone deaf. The study utilises two interventions: musical coaching (based around singing) and positive feedback derived from methods of Positive Psychology (Duckworth, Steen, & Seligman, 2005). This paper presents the preliminary findings of the research.
Dancing With the Students
Keeping up with the beat of classroom standards

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Paper Session
Abstract

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ABSTRACT

Dancing With the Students: Keeping up with the beat of classroom standards

Dancing is an art form used as expression or social interaction in a spiritual or performance setting. We can dance with people, for people, or about people. We dance when we are happy, sad, or trying to excuse ourselves from a sticky situation. Friedrich Nietzsche once said dancing is a major component of education. It does not matter if it is with our words, ideas, feet, or preferred writing utensil. The art of the dance can be performed best when one not only understands the technique, but also improvises when the song changes.

Today’s college student has a changing face and cannot properly be defined under one complete category. A diverse student population brings all ages and backgrounds into the classroom environment. Those students encounter a vast increase in technological innovations as well as conflicting schedules, obligations, and an apathetic job market. Research has shown the changing face of today’s student to be more self centered and rude than in years past. There is a feeling of entitlement. Narcissistic students are now becoming classroom distractions unable to focus and spending less time studying outside of class.

In a follow up study to a 2009 qualitative survey of faculty members regarding classroom standards, a quantitative survey of students from three different Midwestern universities was given during the spring and fall semesters of 2010. Respondents were asked their opinions on standards, the value of education, and course evaluations. Student responses indicated education has varying degrees of importance, diversity is
not of relevant importance, and course evaluations are flawed to the point that many felt they were a way of getting even with the instructor.

Today’s field of education has become a dance. Unfortunately there is no step by step diagram to practice and follow. The best dance partners are confident and expressive. They develop chemistry and compatibility through proper use of communication. They are creative in trying new things and patient, even when their partner steps on their toes.
The Cultural and Linguistic Divide:
Japanese EFL Learners’ Conversation Practice with Native Speaker

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Introduction

“What’s your favorite movie?”

“Armageddon.”

Armageddon. Japan welcomed the 1998 blockbuster out of Hollywood with success in box office sales and a high rate of DVD rentals, even more than 10 years after its release. The action-romance movie was an especially popular answer as a favorite with college students, yet does a space-age thriller about a potential end of the world story-line warrant a “favorite” film? In this characteristic conversation between a native speaking English teacher (NS) and a Japanese student of English (NNS), the would attempt to solicit detail, by asking, “why?” To which a student would respond, “I like Bruce Willis.” As a result, the conversation would soon fall flat, commencing the cultural divide between the American teacher and the Japanese student. Certainly
the students are capable of deeper analysis, and can contribute to a conversation by introducing a more critically acclaimed, art-house, or at least a controversial or literary based movie. On the other hand, was the student giving “Armageddon” as an answer because it is easy to for a Japanese learner of English to pronounce? Was the student simply confident that the instructor would be familiar with a Bruce Willis movie, and thus the conversation would flow?

The above “conversation” is a common non-linguistic misunderstanding that leads the NS to conclude that the students might be shallow. It was not until a handful of years ago that one of the teachers who experienced “Armageddon” as a common response was introduced to a more thought provoking answer.

“What’s your favorite movie?”

“Hula Girl.”

“What’s it about?” The student stalled.

However, the student’s hesitation was not unwelcome. Rather, it invited class participation to help the classmate introduce the complex story line of the Japanese award-winning movie, the protagonist’s struggle, familiar conflicts, as well as the once doomed fate of a mining village set in the time when Japan’s energy resource was changing from coal to oil. The NNS were active, working together to explain the movie to the NS instructor, who was interested in the story line, the students’ linguistic efforts to describe a movie in English, and finally, the choice of a non-action, non-Hollywood title as a “favorite” movie.

The background of the miscommunication in the above scenario turned out to be a cultural misunderstanding. Through this English Conversation Practice study, which highlights EFL students’ reactions to their personal speaking performance with a NS, the researchers would learn that many misunderstandings are due to cultural assumptions. In this case, the students most likely presumed that an American action
movie was a “safe” choice, familiar to the American teacher; whereas the NS found the introduction of the dramatic Japanese film to lead to more stimulation, natural conversation, due to its complex cultural implications and student generated participation.

**English Conversation Practice**

Learners of English in a limited EFL (= English as a foreign language) environment akin to Japan tend to lack the necessary opportunities to exercise their English skills with native speakers. For such EFL learners, face-to-face English conversation practice with a native instructor should provide a valuable chance to articulate their thoughts within the natural context of English. With native-speaking (NS) and non-native speakers of English (NNS) interactions, learners of English can attain helpful support from experts in the field of language education in improving their linguistic proficiency.

Previous research has demonstrated a strong link between interaction and second language (L2) acquisition (Ellis 2008; Philp and Tognini 2009; Mackey and Goo 2007). We adhere to Philip and Tognini’s definition of interaction as, “the use of language for communicative purposes, with a primary focus on meaning rather than accuracy” (p. 246). In this study, we created a conversation practice situation in which Japanese university EFL students are provided with ample opportunities to interact in English with a native English-speaking teacher. Interaction is beneficial to L2 learners in facilitating learning because it provides L2 input, and also learners have the chance to speak the language (L2 output). Both input and output are key components in attaining L2 proficiency.

When a teacher is engaged in an interactive situation with students, the teacher takes on a crucial role in either facilitating or interfering with communication in
English. Walsh (2002) suggests that several verbal behaviors on the teacher’s side increase L2 learners’ participation in interaction, such as provision of wait time for response, instructive scaffolding by suggesting key words to use, and repeating a portion of the learner’s utterance. The conversation practice session for this study was set with the objective of providing the opportunity for the students to speak for communication in English, therefore, the teacher attempted to facilitate the student talk, using these techniques.

It should be noted that the interaction between a native speaker and a non-native speaker inevitably produces communication breakdown or miscommunication. Varonis and Gass (1985) demonstrated that the lack of shared worldviews, or cultural assumptions, combined with a linguistic deficit of NNS, may lead to miscommunication. There is ample research on how L2 learners misunderstand or miscommunicate L2 exchanges, especially through conversation analysis techniques. However, most of the studies are based solely on the researchers’ interpretations based on transcriptions of actual L2 utterances and do not examine non-native speakers’ perspectives of what caused the miscommunication. What the researchers discovered during this specific exercise centered on the cultural assumptions, as will be described later in more detail.

This study examined an English conversation practice session with two Japanese university students and a native-speaking teacher. Conducted in what the researchers set out to be a welcoming and non-threatening environment, the session aimed to give low-intermediate EFL learners a chance to converse in English for communication. We attempted to investigate the learners’ perspectives of what made the NNS-NS English conversation run smoothly for them and/or what obstacles they faced. The questions addressed were: What were the Japanese EFL learners’ reactions to the English conversation practice? And how did they perceive their own linguistic
This paper followed the calls from Firth and Wagner (1997) and van Lier (2000) to enhance social and contextual orientations to second language acquisition (SLA), by taking into account the emic view of the learners themselves. Firth and Wagner criticized SLA research that regards the foreign language speaker simply as a “deficient communicator struggling to overcome an underdeveloped L2 competence” (p. 295).

The data for this study came from the transcriptions and audio/video recordings of the session as well as the interviews of the two learners of English. What is unique about this study is that, in addition to the analysis of the transcriptions, we the researchers conducted post-hoc interviews with the aim of exploring the Japanese EFL learners’ perspectives based on their personal experiences. We checked and confirmed with the learners where miscommunication and incompetent use of the language seemed to occur, and will provide insight into how these “mistakes” were triggered by factors other than limited English proficiency.

Method

Participants and Setting

This study was conducted at a small university of approximately 1300 students with a concentration in undergraduate law, located in Saitama prefecture. The majority of the students are male (90-92%) and a significant amount (30%) are members of varsity sports clubs. Students’ English proficiency in general is classified as between beginner to low-intermediate levels.

The participants in this study include a native English-speaking teacher, Kathryn, and two Japanese students, Akira and Hiroshi (pseudonyms). Kathryn, the second author of this article, was an American full-time faculty member. She was a
French teacher in the United States, and came to Japan to teach English 16 years prior to this study. Kathryn earned a graduate degree in Japanese studies and thus was quite competent in Japanese, both in speaking and reading, but never spoke Japanese in front of students. Although she was capable of comprehending Japanese EFL students’ self-talk expressed in their native language, she persisted in interacting exclusively in English with the students. However, her knowledge of the students’ native utterances was advantageous in keeping a smooth flow of conversation when speaking with the low proficient students.

Although not a participant in this study, the positionality of the two researchers needs to be mentioned here. Kathryn and Minami, the first author of this article, have been colleagues for the past 9 years. Minami, a female Japanese, also teaches English full-time at the university. Although the two Japanese student volunteers were in the same elective English class that Minami taught for one semester, they did not know each other on a personal level. The English proficiency levels of the students were high beginner or low intermediate level. The two students were selected for this research project out of the “researchers’ convenience” (Hatch 2002, p. 99). They were moderately motivated, and of cooperative nature, commonly seen active about campus with other members of university athletic groups.

Akira was a third-year male student and member of the varsity soccer team, and took one of Minami’s English reading classes for two years, one compulsory English class, and the other, an elective English reading class. He was an avid fan of the American TV program series LOST, and especially liked reading English books based on its themes. He was now seeking employment upon graduation, while also working part-time in the evenings at an area convenience store.

The other student, Hiroshi, was a first-year male student. Even though he already had two compulsory English classes per week and had to take a full load of
required law and teacher training courses, he was taking an additional elective English class which one of the researchers taught. Hiroshi was relatively skilled in English reading, and had a greater working vocabulary in English than the majority of his classmates.

Neither of the Japanese students had experienced living in an English-speaking country or traveling outside of Japan, and their only contact with a native English speaker was with one of the two foreign instructors (one full-time, one part-time) at the university. They both took one class with a native English speaking teacher per week, in a classroom setting with 20-30 fellow students. The class was mostly devoted to oral English communication practice with other students, in pairs or in groups.

Because we chose the setting for this research project to be on the university campus where we, the researchers, are employed full-time, we did not face problems negotiating access. As for ethical concerns, the students were willing to cooperate, and openhandedly agreed to participate in the project for research purposes, on the condition that their names remain anonymous.

The English conversation session was conducted in the office of the American female English teacher, Kathryn. The students were present for approximately 40 minutes which included setting up and “warming up” to make them feel at ease, whereas the actual session took place for around 25 minutes of that time block. The setting of the English conversation session is shown below: Kathryn sat at the large table face-to-face across from the two Japanese university students, Akira and Hiroshi.
**English Conversation Practice Session**

The American teacher provided the students with a sheet of paper, containing a list of questions with some illustrations, modified from an ESL textbook. The two students and the teacher had the question sheet in front of them on the table. The questions used in the session mostly centered on likes and pastimes, for example: 1. What kind of sports do you like? Who are your favorite players? 2. What are your favorite TV programs? 3. What’s your favorite kind of music? Who’s your favorite singer? 4. What types of sports did you play or watch when you were a child? 5. What are some of your favorite hobbies? 6. What movies have you seen recently? Who’s your favorite movie actor? Actress? Why? 7. What kinds of ethnic foods have you eaten? Which have you liked?

The NS teacher, Kathryn, asked one question from the list to Hiroshi, then Hiroshi would ask the same question to Akira, and finally Akira would ask Kathryn. All the three participants asked the questions in turn and in a circle. Note that Hiroshi and Akira did not know each other well, and were two years apart at the university. Akira spoke in English directly to Hiroshi only once in the 25-minute session, saying that he also liked Hiroshi’s favorite movie, *The Last Samurai*. In response to Akira’s comment, Hiroshi smiled, acknowledging his reaction with a nod, but did not respond verbally.

Kathryn’s main objective was to provide the students with the opportunity to communicate in English. She explained that:

I selected short, conversational themes set up in an interview style questionnaire. I thought that this would put the students at ease since (1) the topics (although they had not seen the handout in advance) were familiar as they are often covered in every level of ESL classes, and (2) they had the "crutch" of holding a reference in front of them. Initially I didn't know if the students would know each other, so I wanted to create a comfortable setting in order to promote communication.
Kathryn did not give error correction and instead focused on what the two students were saying or trying to say. She encouraged the students by providing them with possible response choices whenever they seemed to get “stuck” during the session (McCormick & Donato 2000; Walsh 2002).

**Data Collection and Analysis**

Data were collected through the following four methods:

1. Video/audio recordings and transcriptions of the English conversation session
2. Email exchanges in the students’ L1, Japanese, between one of the researchers and the students
3. Semi-structured interviews of the two students, conducted in their L1
4. The American instructor’s written reaction after the session

During the English conversation practice, the other researcher did not stay in the office in the interest of avoiding observer’s effects, and out of consideration of the positionality as the students’ classroom teacher. Conversely, she set up video and audio recorders and excused herself from the room. The video was placed behind Kathryn, and the two students did not even glimpse at the camera during the session. Both of them reported later that the presence of the video did not interfere with their conversation session, nor did they feel nervous about being video recorded.

Following the interview session, the audio recording was first transcribed word by word. In addition, Email exchanges using cell phones were used to gain short reactions from the students immediately after the English conversation session. Also, we asked about their own impressions on their performance. Next, interviews were separately conducted with each of the two Japanese EFL learners, in Japanese, by one of the researchers, Minami. The aim of the interviews after the English conversation session was three-fold.
1) To ask the student’s reaction to the session. What was beneficial for him or not? What did he find difficult? What was his general impression?
2) To check my initial interpretation of what went wrong or what went well in the conversation. Did the student really (mis)understand when I thought he did? Is there any miscommunication between the native English teacher and the Japanese student?
3) What was good about the English conversation session? Is there anything that might have helped them to communicate better in English?

As the Japanese interviewer and the American instructor work for the same university, we agreed that the principle of the mini English conversation session would be to explore an angle that could contribute to the small group or individualized English support program at the university (using the English faculty’s office hours for advisement or tutorial sessions for students in need), as well as for the screening session to select students to participate in a two-week ESL and home stay program in Canada. We explained to the students that the English conversation practice session contained these objectives in addition to research purposes.

The kind of interview we conducted was a “formal” or “semistructured” interview (Hatch, p. 94). The interviewer had prepared the following list of questions, which was placed in front of her throughout the interview.

a) What is your previous experience speaking English? English conversation practice or experience speaking with native English speakers?
b) What did you find difficult or troublesome, in general or specifically?
c) What did you find beneficial or good about the learning experience?
d) Do you have any requests, if any, about the session?
e) If you could “prepare” for the session, what would you do?
f) Were there any misunderstandings or what was not clear to you during the conversation session?
g) Did you say anything that you did not intend to say? Or do you think you could have said differently?

Minami asked the first couple of questions in this order and the other questions were posed when and where she deemed appropriate. In fact, she asked several questions more than once. For questions f) and g), the interviewer watched the video.
recording of the session with the students individually, stopping to re-play where necessary in order to check the learner’s understanding or misunderstandings among the participants. Minami also had the session transcription on hand at the interview.

As Kvale and Brinkmann (2009) stated, “power asymmetry” (p.33) was evident in the interviews. The positionality of the interviewer for this study as one of their English teachers had some influence on the interview, although Minami did not participate in the English conversation in focus. For that reason, Kathryn did not take part in the interviews. For the first interview with Akira, Minami asked him directly about what she thought to be problematic, such as a miscommunication or a failure to respond to a question. This kind of probing could easily lead to giving “judgmental responses” (King & Horrocks, 2010, p.52). Therefore, at the second interview with Hiroshi, the researcher tried not to solicit direct questions when reviewing the video recording. Instead, she took an inductive approach and asked him to point out what he thought was not going well, and what he would have wanted to add or change during the session, within his capabilities.

The interviews revealed that some of our initial interpretations of miscommunication were not supported. We, the two researchers, interpreted the students’ inappropriate responses mostly as the manifestation of their limited English proficiency, but we discovered that the students had other reasons and justifications, which will be discussed later. We then went back to the transcriptions and watched the video recording, searching for indications, such as gestures and gazes, which could possibly demonstrate why the students were unable to respond fluently.

Although the focus of the present study was on the emic perspectives of the EFL learners and not on the NS teacher, Kathryn was asked to write a short reaction to the session, to get a general depiction of how the session went from the NS teacher’s point of view. Her response was quite positive.
Findings and Discussions

Flow of Conversation: On the Surface

On the surface, the English conversation practice went quite smoothly, without any embarrassing incidents, in which the participants got tongue-tied or felt unable to continue the flow of the conversation. The two Japanese students made minor mistakes, and had a short self-talk in their L1 while searching for the correct word, but were able to express themselves in English. Their English was mostly “broken” English, replying in words or short phrases. However, Kathryn helped them in the flow of conversation by providing possible answers when they seemed unable to respond quickly or when they appeared puzzled. The students responded well to Kathryn and even initiated a question. Finally, all of the participants sincerely appeared to enjoy the practice.

Immediately following the English conversation practice session, Kathryn provided the other researcher quite positively via a written response. Effective communication in English was achieved from the NS teacher’s perspective.

The sessions went better than I anticipated. I did not foresee problems, but I was pleased that there were no "frozen" gaps where a student stopped and was desperate, or showed desire for, a translation. The Japanese students were able to make use of the small group and hit on some Q&A that interested them, and perform well. I was pleasantly surprised about the session. The Japanese students did not seem to mind or notice the taping/filming. I wondered if they are just so programmed to being in different learning or testing environments, and generally disciplined in general and thus were able to ignore the AV "action." (Emphasis added by the researchers.)

Although the conversation practice mostly utilized the set questions, there were some moments in which it seemed to flow into natural, spontaneous conversation. In the following extract, Kathryn, the NS teacher (T), continued to ask Akira (A) additional “tag on” questions, as a follow-up to the set question, “What kind of food do you like?” Numbers in the parenthesis indicate minutes and seconds into the conversation practice session.
T: How about the school cafeteria? Do you like the ramen in school cafeteria?
A: School cafeteria’s ramen is not good.
T: Not good? So when you eat at the cafeteria, what do you eat?
A: In school cafeteria, I don't eat.
T: No? So what do you do for lunch? What do you eat for lunch?
A: My apartment.
T: OK, do you live close? Where do you…? Do you live close to the school? Far or near?
A: Near.
T: OK.
A: Hanasaki.
T: So you come to class and go home for lunch (A: Yes.) and you return to school?
A: Yes.
(17:35-18:14)

The two Japanese students asked the set questions on the handout in turn, and additional questions soliciting more detail were mostly posed by Kathryn, as shown in the above extract. However, there were a few student-generated questions as well. Specifically, Akira initiated a question after he asked the set question about ethnic food.

A: What kinds of ethnic food have you eaten?
T: OK, ethnic food. I like Thai, Indian, spicy, spicy foods, so Thai soups and Indian curries. <<Bell>>
A: Do you like Japanese food?
T: Yes, I like sushi, of course, and soba. And in the winter, I like nabe.
(19:23-20:07)

In the next extract, Akira responded to Kathryn’s answer.
A: Who are your favorite players, ah...basketball?
T: Basketball. I like LeBron James.
A: Ah, Ca..Cavaliers.
T: I’m from Ohio State. And the Cavaliers are in Cleveland, Ohio.
A: Ah.
T: So it's my home state. All right. Very good.
(2:53-3:18)

When Minami, the other researcher, asked the two Japanese EFL learners through emails about their reactions to the English practice session immediately
following, they were positive as well. The students also provided additional feedback regarding nervousness or clumsiness speaking in English. Akira wrote:

It was fun so I felt the session finished instantly. But **I really had trouble** because normally I don’t have chance to speak English. I was able to understand what the teacher said, but **I could not express myself well and talk smoothly.** Also, I read aloud the questions on the handout, so questions became **unnatural.** I responded in **words or phrases only,** so I want to be able to reply in complete sentences. I hope I can learn to speak everyday conversation naturally. (Translated from original Japanese.)

Hiroshi was more concerned with his inability to speak fluently and accurately. He wrote:

When trying to speak, **grammar points and phrases** that I know normally did not come to my mind so it was difficult. The environment and time length were just right and I did not see any major problems. (Translated from original Japanese.)

Hiroshi was aware that he was making basic grammatical mistakes. In one of the researchers’ classes, when he wrote in English, Hiroshi did not confuse “don’t” with “doesn’t” as in the following segment. Kathryn (T) asked if a childhood friend of Hiroshi (H) still played baseball now.

T: Does your friend still play baseball now?
H: My friend is...my friend is, **don’t** play baseball now.

Hiroshi corrected himself, replacing the “be” verb with “do” but made the subject-verb agreement error, which he normally did not miss in written English. This is an instance of what Corder (1967) called “mistakes,” as opposed to “errors” that arise as a result of lack of L2 competence. Another error that Hiroshi made more than once was the use of “I’m” where “my” was appropriate.

T: And who's your favorite...who are your favorite baseball players?
H: I'm favorite player…Ichiro.

(1:25 - 1:33)
T: OK. All right. That's interesting. Very good. Very good. So let’s see... what about... ehm... where are we... your favorite TV actor or actress?
H: I'm favorite actor is Watanabe Ken.
(5:33 - 5:53)

Except for the two instances cited above, Hiroshi used “my” correctly as in the following extract.

T: How about food? What kind of food do you like?
H: Ah... I... My favorite food is Hamburg.
(15:27 - 15:40)

Hiroshi watched the video recordings of the session later during the interview but did not notice that he was making such a mistake. He was probably thinking he correctly pronounced “my,” and not, “I’m.”

The two Japanese students spoke mostly in English, except for an automatic response in Japanese, “hai” in place of English, “yes” and in another instance during word searches. At the start of the English conversation practice session, Akira replied to Kathryn’s directions on how the session will be carried out by saying, “hai.”

T: So what we're going to do is to have a short, casual conversation. (A: Em...) So I will ask you a question and then please ask him the same question. And he'll ask me. So we'll have a conversation in circle.
A: Hai.
T: OK?
A: Yes.
(0:46 - 1:10)

Akira realized that he instantly responded in Japanese, and for the next question he said “yes.” In the next extract, Akira immediately noticed his mistake, and corrects himself on the spot. Akira’s laugh indicates his realization of the L1 use.

T: So did you say movies? What movie do you like that you’ve seen recently?
A: My favorite movie is... Grand Torino.
T: Oh, I saw Grand Torino. The movie about... Was that... er... Clint Eastwood?
A: Hai, yes (laugh).
T: And Grand Torino was his car that he liked so much. That was a good story.
(14:45 - 15:21)
L1 as well as L2 speakers utilize the verbal techniques to signal word searches in adult face-to-face interactions in order to gain time for self-repair and also to seek assistance from a conversational partner. The most frequently used format is the *wh*-questions such as, “*What is it?*” and, “*nandakke?*” (Hayashi 2003). Kathryn once said, “*where are we?*” as cited in one of the extracts above, and the two students used such Japanese expressions like, “*sodana*” and, “*nandakkena.*” In the next extract Hiroshi looked at his handout for the next question to ask.

T: So please ask.
H: *Dokodakke?* What...your favorite kind of music?
A: I like Japanese hip hop.
(8:02 - 8:17)

Akira also expressed in his L1 during word searches.

Z: OK. What season of *Lost* are you watching now?
A: Ah...Five, five.
Z: Season five, OK. And which character do you like?
A: Ah...(sodana)...Harry.
(5:12 - 5:33)

Akira explained to one of the researchers later at his interview that he somehow did not come up with the name of his favorite character “Sawyer” because he was nervous.

A: To be honest, my favorite character is Sawyer, but I was nervous and the name did not come to my mind, so the first name that popped up in my head…
M: Oh, so you were lucky, you weren’t asked why you liked the character.
A: Ha, ha, ha (laugh). Somehow, my mind went blank.
(Translated from original Japanese)

In general, the 25-minute English conversation practice session between the NS teacher and two Japanese EFL students went well. As discussed above, some noticeable incidents on the learners’ side were:

1. students’ mistakes (= performance errors)
2. student-initiated questions/responses
3. students’ use of L1 in automatic responses
4. students’ use of L1 during word searches
The students were able to correct their mistakes and L1 use in automatic responses during the 25-minute session. As the session continued, it is quite probable that the students were able to reduce their nervousness and therefore decrease their mistakes and L1 use. The amount of student-initiated questions is expected to increase as they become more comfortable in the session. The question remains whether students’ L1 use during word searches can be decreased, and whether it is something that can be avoided entirely.

In the next section, we will report the findings based on the interviews with the two students revealing their perspectives of why some interactions seemed not to go smoothly. The students indicated that their inability to express themselves in English sometimes resulted not from limited L2 proficiency, rather from other cultural and social concerns or attitudes that they held toward the native English-speaking teacher.

**Sources of Miscommunication: Below the Surface**

The conversation everyday topics were selected so that the students should be familiar with them (sports, foods, hobbies, and movies). These topics are typically considered “easy” as everyone is expected to have something to say regarding his own likes. Furthermore, they are quite commonly utilized in the English classroom. However, interviews with the students revealed that the Japanese students’ concern about the NS teacher’s potential unfamiliarity regarding their cultural references seemed to interfere with communication.

**NNS’ Concerns regarding NS’ Cultural Knowledge**

The two Japanese students were concerned about how much the American teacher knew about Japanese pop culture. In the following extract, Akira explicitly
expresses his apprehension by saying, “Maybe you don’t know.” He was hesitant to
tell what he thought Kathryn did not know. At the post interview, Akira said that, “This
question, gave me the most trouble (kono shitsumon ga ichiban komattandesuyone),”
because his favorite singers were somewhat obscure. He was also not sure if the other
student was familiar with his favorite hip hop groups, and thus was pleasantly
surprised to learn that Hiroshi knew of one of them.

T: So what’s your favorite hip hop group?
A: *Maybe you don’t know.* Eh...Group?
T: Or singer.
A: For example, Yoshida, Hanyu, Yass.
T: (To Hiroshi) Do you know those names?
H: I know Hanyu.
A: Ah.
T: OK.
(8:17 - 8:58)

Their reluctance can be considered quite natural in that the Japanese students did not
have much awareness of American cultural icons either. The knowledge gap pertaining
to each other’s cultures was evident in the next extract as well.

A: What’s your favorite kind of music?
T: Um, I like popular music. I also like...for example, some country music. And
do you know Kelly Clarkson or Carrie Underwood? Maybe not. Or Pink?
A: *I don’t know.*
T: No? They’re all American female artists. Let’s see, but I like many kinds of
music. All right. OK.
(8:58 - 9:24)

Although such gaps are unavoidable and thus they are something that both the NS and
the NNS need to tackle during the conversation, the two Japanese students sometimes
chose not to give “true and honest” responses due to such anxiety.

Both Akira and Hiroshi confessed in their interviews that they intentionally
chose Hollywood movies and actors when they were asked about their favorites. They
preferred responses that Kathryn might be familiar with, assuming that she was
unacquainted with Japanese movie titles. The particular question in the next segment was directed from Hiroshi to Akira:

H: What...Who's your favorite TV actor?
A: I like Tom Cruise. (T: Mmm...) (To Hiroshi) I like Last Samurai too.
(6:09 - 6:28)

Likewise, Hiroshi replied during the English conversation practice that the movie he most recently watched was Wanted. He said later that he loved Japanese movies but had not seen any American movies for quite a while. His hesitance is evident in the frequent use (twice) of L1 in the next extract: “Nandakkena (What was it)?” and “Nandaro (What is it)?”

T: So what movie have you seen recently?
H: Em..(nandakkena...) I...my best movie is Wanted.
T: Wanted. Is that...? Who is in that movie?
H: Angelina Jolie.
T: OK, I’ve heard of that. I heard it was very good... I didn’t see it.
H: Eh?
T: I did not see Wanted, but I heard that it was very good.
H: Yes.
T: What's the story?
H: Ah...(nandaro?)...spy.
T: A spy story?
H: Spy story. Ah... Spy, spy. (laugh)
T: All right, that’s great, good answer, so you like watching movies, that's great.
(13:36 - 14:29)

It is interesting to note that the difficulty that Hiroshi had in explaining the details of story did not necessarily come from his limited English proficiency or lack of English speaking fluency. The movie plot is in fact quite complicated and set in an extraordinary, unbelievable secret society of killers. Hiroshi searched for words and voiced the Japanese wh-question “nandaro,” probably in order to give himself extra time to think, finally coming up with the word “spy.” He tried to explain the details but gave up quickly with a laugh. This is an instance where an easy conversational topic can be extremely demanding. Both the NNSs and the NSs can get hit roadblocks, but
because the interlocutor here is a non-native English speaker, the failure to respond can easily be seen due to the lack of English proficiency (Firth & Wagner, 1996).

**Situational Factors that Interfered with the L2 Conversation Flow**

The instance mentioned above about the difficulty in explaining the move plot is caused by situational factors. “Situational factors” refers to factors related to the situation a speaker is in, excluding individual factors such as L2 proficiency/competence and language-related issues.

In the following extract, Akira’s body language is described in parentheses and in italics. He could not reply to the question immediately. He looked away, apparently in thought. Akira’s mouth dropped wide as if caught in a surprise when asked a specific question regarding his favorite player’s team:

H: What kind of sports, do you me... do you like?
A: I like soccer.
H: Who are your favorite players?
A: My favorite player is...Shunsuke Nakamura.
T: **What team does Nakamura play for?**
A: …*(Akira opens his mouth wide, grins, looks above thinking, and then looks down)*
T: What team? *(Akira looks up at T, with his right hand on his chin)*
T: Er..Japan? *(Akira nods)*
T: National team?
A: Yes.
T: Oh yes? OK. Very good. So please ask me.
(2:14 - 2:31)

As indicated by the changes in Akira’s gesturers, he did not respond for some seconds. Noticing that he was struggling to answer the question, Kathryn offered support and started to provide possible answer choices. Our initial interpretation of this segment was that Akira did not understand the question, probably because he did not have enough English listening ability.

However, in the interview with Akira, we found that he comprehended the
question correctly. Akira told the interviewer that the reason that he was having trouble answering was because Nakamura had just left his former team in Europe and was currently in transit while weighing his options before signing on to his next team. There was a great deal of speculation regarding where he was going to play next, whether in Japan or overseas, and his new team name had yet to be released. Instead of responding, “I don’t know,” Akira was trying to think of ways to explain the complicated circumstances to Kathryn, resulting in a delayed response. Nakamura was on the Japan national team but that was not what Akira wanted to say. He had wanted to name a different, specific team.

In the next segment, Hiroshi answered to the question, “How often do you eat hamburgers at Mos Burger?” by simply saying, “Often.” Our initial interpretation (and Kathryn’s instant reaction as well) was that he did not know how to express frequency, even with Kathryn’s other-repairs such as “everyday” and “twice a week.”

H: Ah... I... My favorite food is hamburg.
T: Hamburger? Really?
H: Yes.
T: So where is the best place to buy a hamburger?
H: Ah... Mos Burger.
T: Mos Burger, really? (laugh) And eh, what kind of burger?
H: Ah... (pause) Mos Burger.
T: Mos Burger? So just a regular burger?
H: Regular.
T: And how often do you eat hamburgers at Mos Burger?
H: Oh, yeah.
T: So how often? Everyday? Or twice a week?
H: Ah… Often.
T: Often…often. And can you cook?
(15:37 - 16:31)

At the interview, Hiroshi watched the video recording and said, “To reply to ‘How often’ with ‘Often’ is really strange, isn’t it? (How often ni often te kotaerunotte hen desuyone)” When he was asked this question, he realized that he had not been to the hamburger shop for quite some time. He was hesitant to tell Kathryn honestly
because his answer would appear to contradict his previous remarks about his favorite food and burger shop. In this segment, Hiroshi could have explained that he liked the fast food restaurant, Mos Burger, yet had not been there lately. Because he did not, he looked as if he did not comprehend such a basic question in English. Of course, his limited English proficiency was into play here, but that response gave Kathryn the impression that he was more incompetent in English than he actually may have been.

Due to the fact that the students in this study were considered to be at the beginner or low-intermediate level, it could be assumed that student performance error would be due to the linguistic deficit of the NNS, as previously mentioned. However, inappropriate cultural assumptions proved to be the stronger force guiding the participants’ hesitation to respond quickly or seemingly naturally. For example, when asked about their favorite food, a fundamental topic often introduced in the beginning stage of an English language program in Japanese schools, students can quickly answer, “pizza.” Yet when the NS attempts to expand, soliciting more details in the conversation with one of the students, “Oh, really? What kind of topping do you like?” To which the student appears to draw a blank. Throughout this study, the researchers learned that the NNS tended to believe that they should cater their answers to please the NS, in this case an American. Most likely, the student in the above scenario does not prefer pizza and thus was taken aback when casually asked to name a topping. The conversation stalled as the student failed to have the next “fib” prepared, and perhaps he was also distracted by his true answer, wondering if “ramen noodles” would have been a “correct” answer, that is, if the NS would have understood or appreciated his true answer.

What follows is another instance in which Hiroshi looked less capable in communicating in English than he in fact was.
H: Mm...I favorite music is Utada Hikaru.
T: So that’s...er...she is a female singer, right?
H: Female.
T: Pop singer?
H: Female pop singer.
T: Is she a solo singer, or is she in a group?
H: Solo.
T: OK. What is her most famous song?
H: Eh...nanda...?
T: Or popular song?
H: Eh...All love. (laugh)
T: OK. All right
T: I've heard of her name, but I don't know her music.
H: Ah... Unto… Pardon?
T: No, I’ve heard...I know her name.
H: Ah.
T: So I’ve heard of her name.
(7:05 – 7:59)

This was the only segment in which either student explicitly expressed his incomprehension (not by gestures, or by a puzzled look, for example), so it was particularly noticeable. The other student, Akira, interpreted Hiroshi’s actions: “Probably Hiroshi thought that Kathryn asked a different question (nanka shitsumon dato omottanjaikana?).” We did not ask Hiroshi intentionally but he himself pointed his clumsiness in the moment. Hiroshi said he thought he did not understand her so asked, “Pardon?” He was disappointed by her response because he realized he had understood her utterance in this case without a problem. Nothing new was in her “re-posing” the question for him. He even regretted having asked her because this interrupted the flow of conversation, adding that, “I shouldn’t have asked this (kikanakya yokatta) but, rather, I should have let the conversation continue its flow (hanashi tsuzukereba yokatta).”

Conclusion

The English conversation practice session that was arranged at a university in Saitama, Japan, involved one American female teacher and two male university
students. The students did not know each other well on a personal level, but with the aid of a handout listing questions concerning sports, foods, and movies, the three participants were able to ask and respond to questions in English in turn. As a result, they successfully generated a natural conversational flow. Although the students’ responses were predominantly in phrases or words rather than in complete sentences, they rarely hesitated due to the instructional scaffolding provided by the NS teacher. Students’ mistakes (performance errors), L1 use when searching for words, and L1 use in automatic responses, such as “hai” instead of “yes,” were observed. Fortunately, the frequency of these negative instances decreased as the student progressed in the session. Additionally, there were even examples of student-initiated questions detected in this relatively short 25-minute conversation session.

Further qualitative analysis of the English conversation practice session was conducted with the post-hoc interviews with the aim of gaining the emic perspectives of the two EFL learners. It was revealed that the researchers’ initial interpretation of the students’ inability to express themselves in English was not supported in some cases. For example, we tended to take the failure in communication as the manifestation of limited L2 proficiency. There were various instances in which the interactional talk between the NS and the NNS students were also affected by situational factors, as well as the NNS students’ concerns for the NS teacher’s understanding of Japanese cultural references. To cite a specific example, both of the Japanese students indicated that their favorite movie was an American Hollywood movie, assuming that the American teacher would not be familiar with popular Japanese movie titles. Their responses, based on their perceptions of the NS teacher’s cultural competence of their culture, sometimes made expanding the discussion more challenging. Therefore, some instances in which the students seemed unable to express themselves were not necessarily caused by their limited English proficiency. Being
low-intermediate EFL learners, with not much previous experience of speaking with NS, the students sometime looked more puzzled and unable to speak or understand English than they actually were. We also found that outwardly easy topics such as explaining a movie plot can be extremely complex.

This study examined an arranged conversational setting involving NS-NNS interaction, which the American and Japanese researchers created. This was not a classroom situation, where students are provided with regular opportunities to interact with each other. Although the locale of this study was not a “typical” classroom or a full 90 minute class length, the content paralleled a typical first session of an English class. English speaking class activities on the first meeting often involve NS-NNS or expert-novice interactions and speaking on topics, such as likes and hobbies, as seen in this study.

As Firth and Wagner (1997) critiqued the study of Varonis and Gass (1985), when miscommunication between the NS and the NNS is caused by the NNS, it is often interpreted as a result of the NNS’ limited linguistic proficiency. In line with socio-cultural views of language learning and language learners, it is hoped that this study sheds light into the difficulties L2 learners could have during NS-NNS interactions, including the reality that situational and cultural factors come into play as well.
References


Cross-Cultural Partnership

Exploring Implications, Observations, and Conclusions of a Cross-Cultural Partnership
between Preservice English as a Second Language (ESL) Teachers and an Italian Middle
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Exploring Implications, Observations, and Conclusions of a Cross-Cultural Partnership between Preservice English as a Second Language (ESL) Teachers and an Italian Middle School

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With

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Abstract

The Texas A&M University (TAMU) Department of Teaching, Learning and Culture has forged a partnership with an Italian middle school in Castiglion Fiorentino, Italy, the home of TAMU’s long-established Santa Chiara Study Center. Following a review of literature addressing the importance of authentic cross-cultural experiences for preservice teachers, the authors provide a narrative of the background of their study abroad program and a description of the day-to-day reality of the partnership. They then discuss implications for the future—viewed from the perspectives of the TAMU participants and their Italian counterparts—and conclude with results from research questions presented in their 2010 “Work in Progress” paper and explored in their 2010 spring semester program.
Exploring Implications, Observations, and Conclusions of a Cross-Cultural Partnership between Preservice English as a Second Language (ESL) Teachers and an Italian Middle School

Angene H. Wilson (1982) begins her discussion of cross-cultural experiential learning for teachers by quoting James Boswell’s 1765 words: “Nine months in this delicious country (Italy) have done more for me than all the sage lessons which books, or men formed by books, could have taught me” (p. 184). After completing our second semester living in Castiglion Fiorentino, Italy and working with the local middle school in this ancient and exquisite Tuscan hill town, we fully concur with Boswell. In fact, the lessons our Texas A&M University preservice teachers and we, their supervising professors, have learned during our months in Italy have spawned questions and yielded exciting results as we endeavor to understand and analyze the significant depth of our cultural immersion and to plan for the continuation of our partnership with the Dante Alighieri Scuola Media and, indeed, with the entire community of Castiglion Fiorentino since we have interacted with community officials, school children, parents of school children, and the many other local citizens who have opened their school and their hearts to us. Although different word choice from James Boswell’s 1765 observations (as quoted in Wilson, 1982), an excerpt from one of our 2010 preservice teacher’s journals seems to express a similar devotion to Italy and, at the same time, express her and our passion for continuing our journey:

As I sit on a mountainside reflecting over the last two months of my life, I can’t help but have a joyful, thankful heart. My emergence into this lifestyle has been incredible and indescribable.
Cross-Cultural Partnership

I have lived in the society, traveled the lands, and worked side by side in Italy to come full circle with the conclusion of great success. I have fallen in love with this country, its people, and its culture to where my return is definite!!

Unlike our earlier paper, which was presented as a “work in progress,” we are presenting a summary of significant observations resulting from our 2010 research questions and both looking back on our progress to date and looking forward with anticipation. Indeed, we believe that our international, cross-cultural experience with our Italian counterparts—which began with powerful implications concerning the potential of such a partnership for all the stakeholders—has continued to develop and mature into a structure that can be sustainable and mutually beneficial for current and future preservice teachers at our university and Italian English Language Learners (ELLs) in Castiglion Fiorentino for years to come. Although the current economic pressures on both our university and our students present challenges, we are confident that our program has the demonstrated value and continuing potential to remain an integral and ongoing part of the our department’s global initiative for our undergraduate, preservice teachers and to play an equally integral and ongoing role in the lives of the students and faculty at Dante Scuola Media.

Following a review of literature addressing the importance of authentic cross-cultural experiences for preservice teachers—in fact the initial and underlying rationale for our Castiglion Fiorentino experience—we provide a narrative of the background of our program and a description of the day-to-day reality of the partnership between ourselves and our Italian middle school partners. We then discuss significant implications from our
2010 spring semester program, within the context of their application to our pre and post research questions and other observations by our students, our Italian counterparts, and ourselves.

II. Importance of Authentic Cross-Cultural Experiences for Preservice Teachers

In developing the rationale for any study abroad experience, the planners must examine the goals and expectations for all who will be involved in or affected by the program and determine if the potential rewards of the proposed international interchange are worth the resources, both human and financial, that are required to create a meaningful program. Certainly, research backs up the premise that a global perspective is needed in today’s world and that, in increasingly diverse American classrooms, such a perspective is particularly important in teachers (Bruce, Podemski, & Anderson, 1991; Faulconer, 2003; Pence and Macgillivray, 2008; Willard-Holt, 2001). Yet, the cultural dissonance between children in our schools and their teachers is disturbing, as noted by Tracy Faulconer (2003), who quotes research by Christine Sleeter in 2001 indicating that, while increasing numbers of teachers have students with limited English proficiency in their classrooms, fewer than twenty-five percent have training working with them. Faulconer goes on to state:

No one is more aware of this gap than those of us who teach in pre-service education programs. Despite our ever-increasing efforts to provide a multicultural perspective in all of our courses and a variety of sensitizing activities in our programs, many pre-service teachers remain completely inexperienced in authentic, personal connections with groups outside their own milieu. (p.3)
In discussing the need to develop global perspectives in the United States, Jan L. Tucker and Peter J. Cistone (1991) call teacher education the “beachhead” in the campaign (p.3). Citing extensive research concerning how teacher perceptions and expectations can negatively impact children in the classroom, Faulconer (2003) insists:

Change in these perceptions should be the goal of every teacher education institution. Designing curricula, immersion experiences, and methods that effectively require pre-service teachers to confront their own biases and to truly see into another culture is paramount to preparing teachers who will honestly and effectively create equitable learning environments for all children.” (p.3)

Colleen Willard-Holt (2001), in writing of her international program for preservice teachers in Mexico, explores research involving global education and provides a suggested list of goals for educating preservice teachers from a global perspective. The qualities that preservice teachers meeting the goals would hopefully possess include cross-cultural knowledge (including knowledge about cultures other than their own), motivation to teach from a global perspective, the ability to perceive and value cultural diversity, confidence and skill in communicating, a sense of ease in other cultural groups, the ability to view peoples of other cultures without the distortions of stereotype, and the perspective of seeing themselves as part of a professional community with peers around the world (p.505-506).

Of course, meeting the goals that Willard-Holt (2001) presents is not accomplished without effort; initial ventures into another culture present challenges and surprises that must be addressed in an immediate sense and then learned from in a
forward-thinking manner. Gary Barkhuizen and Anne Feryok (2006) stress the importance of preparing preservice teachers for an international program well before they arrive—preparation that goes “well beyond the usual advice about clothing, medications, and travel documents” (p. 131). They forthrightly state conclusions and identify implications of their six-week international experience in Auckland, New Zealand with 15 pre-service English second language teachers from Hong Kong. The authors note the necessity for future international experience planners to accept that not everyone will be satisfied with the planned program and to understand the importance of teamwork and transparency at both the macro and micro levels. On the micro level, Barkhuizen and Feryok (2006) note the value they found in investing authority in a classroom teacher at the host institution and in creating honest and open communication with their participating students. They acknowledge that, in a short but intense program, responsiveness is crucial, and needed changes must be made quickly.

Despite the challenges, research supports the premise that authentic international field experiences can help preservice teachers meet the goals we, as university teacher-trainers, have for them (Bruce, Podemski, & Anderson, 1991; Faulconer, 2003; Pence and Macgillivray, 2008; Willard-Holt, 2001; Wilson, 1982). By working in schools serving different cultural communities, interacting with colleagues from different cultures and nationalities, and integrating themselves into a different culture, in-depth learning can be achieved that cannot be replicated in campus classrooms (Bruce, Podemski, & Anderson, 1991). In writing of their field experience in Rome, Italy with preservice teachers from James Madison University, Holly M. Pence and Ian K. Macgillivray (2008) report that “the active engagement and self-reflection required of the field experience
challenged their [students’] preconceptions of culturally different others, how schools and classrooms should be structured, their personal and professional beliefs, and, ultimately, helped them grow as individuals and future teachers” (p.14).

Pence and Macgillivray (2008) also stress the importance of providing preservice teachers the opportunity to interact with the community outside of the classroom, citing Stachowski and Mahan’s 1998 research on the importance of synergy between teachers and their communities. In fact, Stachowski and Mahan’s 1998 article cites research findings that “most students entering teacher education programs are from non-minority backgrounds, possess a narrow cultural worldview, and have limited exposure to cultural diversity” (p.155). The authors chronicle their experiences with cultural immersion student teaching projects on American Indian Reservations and overseas at national schools in England, Wales, Scotland, the Republic of Ireland, India, Australia, and New Zealand (Stachowski & Mahan, 1998). In their programs on reservations and overseas, members of the community, as well as educators and supervisors in the host schools, are vital contributors to the learning process, and student teachers, in addition to their classroom experiences, perform at least one service learning project in the local community as a means of leaving the school environment and venturing into the broader community (Stachowski & Mahan, 1998, p.159). Having to adapt to new cultures in foreign schools and observing foreign children in their own educational systems can challenge and break down prejudices that preservice teachers might have of culturally different others (Faulconer, 2003; Pence and Macgillivray, 2008). Further, “stepping outside of one’s comfort zone and reflecting on one’s reactions can help preservice
teachers become more flexible and reflective practitioners” (Pence and Macgillivray, 2008, p.16).

The nature of study abroad programs and their impact on preservice teachers vary from program to program, and it appears clear that study abroad experiences, even as short as one week (Willard-Holt, 2001), can change and motivate preservice teachers. Barkhuizen and Feryok (2006), however, point out that just being in another country does not create an international experience and caution against the tendency for student teachers to limit many of their activities to their own group members, in their case “leaving little in-depth engagement with ‘real’ New Zealanders” (p.132). In fact, the authors state that this tendency was “the greatest shortcoming of the programme, and one that has continued to be the most difficult to address in subsequent programmes” (Barkhuizen and Feryok, 2006, p. 132). The authors further suggest that innovative ways of providing more intercultural and interlingual contact should be found for a successful international experience, including social activities with members of the community and professional meetings with host-country educators.

The rewards of a successful international program for educators or future educators are significant. Jan M. Robertson and Charles F. Webber (2000), in examining the results of their cross-cultural travel study exchange between Canadian and New Zealand graduate students in educational leadership state “… the breaking of boundaries between theory and practice, between university professors and students, between two nations, and between self and others, can foster the development of critically inquiring leaders who may not only have more questions than answers, but, more importantly, know that there are still more questions to ask” (p. 329). Wilson (1982) notes that an
intense immersion experience, in which the student moves from the level of “dabbler” to “participant,” is the most exciting and rewarding and ends her article, “Cross-Cultural Experiential Learning for Teachers,” with the words, “No one should make the claim of being educated until he or she has learned to live in harmony with people who are different” (p.191). With this, we will move on to the program we, in the Department of Teaching, Learning and Culture at Texas A&M University, have developed in our quest to, in Wilson’s words, become educated.

III. Background

To begin, any discussion of the background of our program must refer to the title and authorship of this paper. Our program is a true partnership between ourselves and our Italian colleagues, Dr. Maria Giovanna Fabianelli and Professor Silena Faralli, who have been involved with the program from its conception and remain integral to its success in the future. In fact, this partnership began in the summer of 2007 through the leadership of Paolo Barucchieri, Director of the Santa Chiara Study Center in Castiglion Fiorentino, Italy, and his assistant, Sharon Jones, both of whom have been involved with Texas A&M University’s (TAMU) sponsorship of Castiglion Fiorentino’s Santa Chiara Study Center since its inception in 1988. The Center, housed as it is in an ancient and beautiful structure dating back, in some sections, to the 1400s, has provided a home away from home to study-abroad students from TAMU and other universities across the country for the past twenty years.

Although the Community of Castiglion Fiorentino and the Santa Chiara Study Center have a longstanding and valued relationship, the program that we have developed with Dante Scuola Media is the first time that university students with coursework and
training in working with English Language Learners have entered into a formal, established partnership with a local public school. Our program with Dante began when the administrators at Santa Chiara introduced us to Silena Faralli, the English language teacher and Professional Development Coordinator at the local “Dante Alighieri” Scuola Media (middle school) and arranged for our Summer 2007 study-abroad group of sixteen preservice teachers to visit Professor Faralli’s English classes at Dante. Although the visit was initially intended to be a one-day event, occurring on the first day of the last regular week of school, we immediately saw the potential of the cultural interchange between her Italian middle school students and our university preservice teachers. As we put them in small conversational groups, we noted the resulting motivation in Silena’s students to use their English skills to communicate with our enthusiastic, young, “different” university students and the corresponding interest in our university students to get to know these young Italian students. The impact on our students was even greater as they realized the challenges of coping in a community where they did not speak the primary language--as they, too, struggled to say even the most basic words in Italian, they began to identify and empathize with the Italian middle school children as they attempted to speak English.

After expanding our one-day Summer 2007 visit to Dante Scuola Media to five days and moving from our initial simple conversations to language arts lessons involving readers’ theatres (based on folktales) and dramatic presentations (based on the Italian students’ recent visit to an English production of Pygmalion), we, as well as the faculty and staff at Santa Chiara and Dante Scuola Media, were able to see the potential of a partnership between preservice teachers who were training in working with English
Language Learners (ELLs) and Italian English as a Foreign Language Learners (EFLs). We could all also see that such a program could not be fully realized in a summer program; thus, we were invited to return to Castiglion Fiorentino for the spring semester of 2008 for a semester-long program.

Luckily, we found that we had strong support and enthusiasm from our department and college, as well as from the study abroad office and university as a whole, as evidenced by our university’s Vision 2020, which states, among other things:

“To position our students to live and compete in a global society, Texas A&M University must produce graduates who are not only academically prepared, but who have the capacity to understand other cultures and to live and work outside their own cultural framework.”

A crucial additional sponsor of our program was the Texas A&M University’s European Union Center of Excellence (EUCE), one of eleven such centers across the US that are funded by the European Union. In addition to a wide range of interests within the EUCE, a strong K-12 Educational Initiative exists with the purpose of nurturing relationships between schools in EU countries and American schools. Since the prospect of recruiting preservice teachers--as well as planning and implementing the university curriculum and planned field experience with only a few months lead time--was daunting, we were delighted when the EUCE provided grant funds for us to bring Dante’s principal, Dr Maria Giovanna Fabianelli and Professor Faralli to the TAMU campus in October of 2007 to meet with the preservice teachers who had applied for the program and to address the details of our field activities in the Italian middle school.
On campus at TAMU during the fall semester, we tried to lay the groundwork for the spring semester’s program. We determined that we would combine university coursework with the students’ field experiences, in order to allow our preservice teachers to remain on-track with their degree plans. Their work with the Italian middle school was scheduled for the mornings while their more theoretical university coursework at Santa Chiara was planned for the afternoons. Wednesdays were reserved for fieldtrips that the students would take in conjunction with the larger group of study abroad students at Santa Chiara (including architecture, art, and general studies students from TAMU and other universities). In addition to ESL, Multicultural Studies, and Language Arts courses that the students took from us, they also took one course on Italian Art and Culture from the Santa Chiara Director, Professor Barucchieri.

As we forged together a group of fourteen preservice teachers, most of whom were in their first or second years of university, and made plans to begin the first of what we hoped would become a longstanding program, we realized that we were embarking on an exciting, important, innovative, and somewhat intimidating project—and that the stakes for success or failure were high.

IV. Spring 2008 Program Description

We were welcomed with open arms by the Community of Castiglion Fiorentino from the first day. In fact, this first day was marked with a beautiful reception at Dante Scuola Media, attended by the Mayor, Vice-Mayor for Education, the local print journalism reporter, representatives from two television stations, and other town dignitaries. Our department head and associate dean, as well as representatives from the faculty and staff at Santa Chiara, joined in showing their support. As the leaders of the
TAMU group, we experienced for the first (but not the last) time how inarticulate and foolish it was possible to feel when we stumbled over Italian words with a microphone to our mouths (usually saying something profound like, “Me.....happy.....here”). Fortunately, we also found—from this first day—how forgiving and understanding the people of Castiglion Fiorentino were and how ready they were to help us learn Italian as they improved their English. Humor, flexibility, patience, tolerance, and friendship soon became the guidewords by which we all lived during our intense, often exhausting, but always exhilarating semester with Dante. The actual structure of the program that emerged is best described in terms of the regular school days at Dante, the university coursework at Santa Chiara, the extracurricular activities with Dante, and the external relationships with the citizens of Castiglion Fiorentino.

Dante Scuola Media has approximately 350 students in Levels I, II, and III (or grades six, seven, and eight) who are studying English, and we were asked to work with all of these students, since the administrators felt strongly that all Dante students should be given the same opportunities. We were also asked to provide adequate supervision to our preservice teachers in the Dante classrooms, so we divided students into teaching teams of two-to-three students with at least one of us as a faculty observer. We were at Dante every morning, Monday through Thursday, after which students returned to Santa Chiara for lunch and afternoon coursework. On days when activities at the Santa Chiara Study Center or fieldtrips precluded our preservice teachers from teaching scheduled classes at Dante, one of us presented the lessons. Because our students were taking English as a Second Language (ESL) coursework, appropriate weekly lessons for the three levels of students were planned, developed, and assessed in those classes and then
taught in the Dante classrooms. The subject matter was developed in collaboration with
the Italian English teachers who suggested specific language emphasis (such as working
with present tense or irregular verbs) and content emphasis (such as American customs,
US geography, etc.). Since a number of our students had laptops, they often brought their
computers to the school and showed PowerPoint presentations on their subjects and
downloaded illustrative clips and/or music for English songs.

In the afternoons, our students would attend classes at the Santa Chiara Study
Center, including a course on Italian Art and Culture taught by Professor Barucchieri,
voluntary Conversational Italian classes, ESL, multicultural education, and multicultural
English language arts. The English language arts coursework included, among other
pieces of European-based children’s and adolescent literature, the study of Carlo
Collodi’s *Pinocchio*, and this beloved Tuscan classic became the basis for the
development of a bilingual readers’ theatre and performance of *Pinocchio* for the entire
community of Castiglion Fiorentino. As with so many of our activities this first semester,
many of our classroom activities at Dante and our related coursework at Santa Chiara
evolved as we became more familiar with the Dante students and found teachable
moments to increase English language learning while building cultural bridges.

The evolution of our ESL lessons and related university coursework expanded to
include various extracurricular activities, some that were planned from the beginning and
some that developed as the need and/or interest arose. One planned program, supported
by the grant we received from the European Union Center, was the development of a pen-
apal club between Level I (sixth grade) students at Dante and fifth and sixth graders at a
private middle school in Brenham, Texas, a town approximately the same size as
Castiglion Fiorentino. We were delighted with the enthusiasm of the Italian children as they crafted detailed English letters to their Texan pen-pals, resplendent with colorful self-portraits and other delightful artwork that we found were more the rule than the exception with these artistic students. During the course of the semester, we succeeded in having two rounds of letters to and from Texas, and we concluded the year with the creation of DVDs of the Italian and Texan children introducing themselves in person to their pen-pals and exchanging (if they chose to do so) home addresses, so they could continue their correspondence over the summer and into the future. Another planned activity involved regular after-school, one-on-one tutoring sessions between our preservice teachers and students at Dante who were preparing to take formal Trinity English Examinations at the end of the school year.

Spontaneous extracurricular activities that evolved into two of our most successful cross-cultural activities were the weekly English classes that we taught to Italian teachers and administrators at Dante and the Pinocchio production discussed above. The adult English classes developed into a rich and enjoyable cultural exchange between educators, and as the Italian teachers learned a little English and we learned a little Italian, we also discovered how alike we were and how much we liked each other—in other words, we became colleagues and friends. The Pinocchio production, resulting from Professor Faralli’s suggestion that it might be nice to have “a little play,” was performed in the beautiful and historic Castiglion Fiorentino theatre and truly became a community project involving children, parents, town officials, local entertainers, and many of the other American students and faculty at Santa Chiara. By the time we took
our final bows at the play and boarded our plane to return to Texas, we felt that we were leaving a part of ourselves behind.

V. Program Perspectives of Our Italian Partners

We found the implications of our first-full semester to be profound. Many of the lessons learned and advice given by the authors of the cited references in this article rang true and were gratifying to read, both in terms of sharing the realization of the urgent need for a broadening global view in today’s university students, particularly preservice teachers, and in facing the fact that a true cultural immersion will not be without its challenges. That said, we found the rewards to be well worth the effort and looked forward to establishing a program that could grow and develop in the years ahead. In fact, the later portion of this paper, which draws conclusions and establishes firm footing for the future, could not have been accomplished without a careful analysis of the first full semester’s successes and challenges. Of course, for a partnership to be successful, it must be beneficial to stakeholders on both sides, and we are only one-half of the equation. For this reason, no description of the beginning semester of our program is complete without the crucial and vital observations and perspectives of our Italian counterparts, Dr. Maria Giovanna Fabianelli and Professor Silena Faralli, and the added reinforcement by Castiglion Fiorentino Vice-Mayor for Education, Dr. Edoardo Lucci.

Excerpts from Perspectives of Dante Principal, Dr. Maria Giovanna Fabianelli (translated by Silena Faralli)

The experience enabled the two partner institutions to interact in a formative cultural exchange. The American students proposed various teaching units which totally involved all the middle school students, who were strongly motivated to use effective
communicative strategies. Therefore, Scuola Media students became aware of the importance of learning a foreign language to get in touch with people who use a different linguistic code. Moreover the contact of two different cultures and lifestyles not only enriched the students’ cultural background, but also the Istituto Comprensivo faculty who, after the project, expressed the unanimous wish to be involved in similar programs in the years ahead.

The experience required quite a long time for research and lesson planning, but the activities which were proposed created a positive atmosphere in class and, keeping attention levels high, fostered varied learning styles. The numerous activities were also carried out by the TAMU professors and the school English teachers in perfect synergy. The *Pinocchio* theatre production constituted a strong catalytic factor which allowed students to become masters of their learning, in a lively environment. On the whole the TAMU-Dante cultural exchange stimulated creativity and facilitated educational action through scrupulous graded planning of the activities. Besides, constant supervision by TAMU professors allowed regular feedback, analysis and adjustment of the process which was being put into practice. The best we can wish for is that cooperation between TAMU and Istituto Comprensivo “Dante Alighieri” will continue in the future and that the cross-cultural exchange program will become a privileged means in the teaching-learning process of a foreign language, fostering the dialogue between different cultures and people.
Excerpts from Perspective of English Language Coordinator and Professor Silena Faralli

When my principal, Dr Maria Giovanna Fabianelli, and I were welcomed at College Station for a planning workshop sponsored by the E.U.C.E., late in October 2007, we soon found out that large schools in the metropolitan Houston area or small town schools such as “Dante Alighieri” Comprehensive, all have similar problems to solve and challenges to meet - intercultural issues due to immigration, second language teaching, integration of multiple perspectives, and professional competence in teaching in an international environment. Therefore our school, whose seat is at a walking distance from Santa Chiara Study Center, could become a suitable a place where student teachers, supported by their professors, would start an innovative program and action research activities which required not only motivation, enthusiasm, and devotion to the project but also adaptability to a different culture and a certain spirit of sacrifice.

During their time in Castiglion Fiorentino, the student teachers, who demonstrated to be not only professional but also hard working, were able to design very well structured lessons, implementing them with suitable teaching aids that they regularly constructed and using multimedia materials.

They also showed skills in managing class life, creating a positive learning environment, where all school children, including the weaker ones, were totally involved in numerous activities. Moreover, bringing a characteristic Texan flavor to school life, the beautiful young mother tongue teachers were able to raise enthusiasm in the middle school students.
Besides class work, extracurricular projects were also carried out in the afternoon. The “Pinocchio Play,” based on a typical Tuscan story, was particularly important not only for offering middle school students the chance of taking part in fun educational activities, but also because the bilingual script intermingled both Italian and American cultural aspects (Walt Disney songs, Italian music, etc.), which made socialization and integration easier, involving not only students but also students’ parents and the population of Castiglion Fiorentino.

The preservice teachers also spent long afternoons to help me and my colleagues prepare 60 second and third year students who had to take a graded exam in spoken English with Trinity College of London, a qualified British Examination Board. The very positive results of the exam taken by the students in May, demonstrated that conversation and oral practice with mother tongue speakers had been a powerful procedure for reinforcing communication skills.

First year students were also involved in a Pen Pal Club with fifth and sixth graders of a private middle school in Brenham, Texas. The Italian students were successfully encouraged to use their English for real communicative purposes exchanging information and sharing feelings with their age group American correspondents. The result of the experience showed that friendship relations between people from different cultures are a powerful incentive to develop mutual understanding and consolidate linguistic competence.

My role as one of the coordinators was very rewarding in that I had to communicate (and often translate and interpret from one language to the other) to TAMU professors and their students, the school principal Dr. Maria Giovanna Fabianelli,
the Director of Santa Chiara Study Center, Professor Paolo Barrucchieri, his Assistant Director, Mrs. Sharon Jones, the Vice Mayor, Dr. Edoardo Lucci, and my colleagues whose precious cooperation was essential to the fulfillment of the project.

Living a semester full of activities, social life, field trips and participation in local events was also a very rewarding experience which contributed to enriching my professional and human background, and at the same time, having so many people working for one big project was also a strong message to Italian middle school students who felt “immersed” in the American culture and exposed to real English speech.

**Excerpts from Letter from Castiglion Fiorentino Vice Mayor, Dr. Edoardo Lucci to Dr. Fabianelli (translated by Professor Faralli)**

The experience we had in 2008, together with the Principal of Dante Alighieri Comprehensive school, Dr. Maria Giovanna Fabianelli and Texas A&M. University professors and their students, represented a meaningful moment for those who care for the younger generations’ future.

The chance to learn a second language, especially English, is a unique opportunity for our students which is going to be decisive when they start approaching the world of work. The presence of Texas A & M students in our community, due to an agreement with Dante Alighieri Comprehensive School, made this difficult but exhilarating project possible. Dr. Silena Faralli’s devotion to the program also represented another fundamental link for a perfect integration between American student teachers and Italian middle school learners.

The Local Administration and the Town Council for Public Education supported some activities caring for the necessary logistics which they needed. It was possibly a
small contribution, compared to the hard class work, but it is important to know that we are present and fully share your common project.

VI. Summer 2009 and Spring 2010 Program Descriptions

As expressed so eloquently by our Italian counterparts, the first full-semester of the TLAC-Santa Chiara-Dante Partnership was life-changing for us and for our students, and we came away with the passionate conviction that we had a unique and valuable program that we needed to nurture in the years ahead. However, our first semester was not without its growing pains, and we tried to learn lessons and make plans for the ongoing partnership that would address the parts of the program that needed addressing. Clearly, despite our attempts to prepare in advance for the semester, we simply did not fully know what to expect when we first arrived at the doors of Dante Scuola Media, and we had to be flexible and adaptive, something that does not always come naturally to many of today’s university students who are used to having detailed course syllabi and schedules and don’t particularly like surprises. We also realized that we were trying to do it all, expecting our students to be well-prepared teachers at Dante, responsible university students in the afternoons at Santa Chiara, and fun-loving undergraduates “experiencing” Italy with their study abroad counterparts in the larger Santa Chiara program (who did not have to be up at 8:00 “looking and acting like teachers”).

Ironically, as we tried to reduce the pressure on our students by staggering their hours at Dante and allowing days off to go on field trips with the larger Santa Chiara group, we somewhat diluted the value of the cultural immersion for them and enriched it for ourselves. We, on the other hand, because of our commitment to supervise every
class that any of our students were in and because of our need to cover class days on our
own when our students were away on field trips and other activities, were at the school
every day for most of the school day and many after-school afternoons for Trinity
tutoring sessions and English classes for the Dante teachers—and we loved it!

Based on our realization that frequent and extended immersion was necessary
for the most meaningful cultural exchange and that our students still needed to have time
for travel and fun with their peers at the Santa Chiara Study Center, we redesigned the
full-semester program for the spring semester of 2010, incorporating extensive pre-
departure preparatory work on campus in Texas in order to allow for total dedication to
cultural immersion through fieldwork in the Italian school after our arrival in Italy.

During the Summer of 2009, we piloted our new structure in a five week summer
program that involved 17 of our university preservice teachers teaching English lessons at
Dante Scuola Media during the last two weeks of school, followed by a three-week
summer enrichment camp for interested Italian students that included continuation of the
Pen-Pal Club and the development of a bilingual readers’ theatre production using High
School Musical as the focus (since during our 2008 program we had learned of the Italian
students’ fascination with the musical and wanted to do something fun for the summer
camp). By doing essentially all of our planning on campus before our departure,
complete with our students actually presenting their individual lessons, we were able to
immerse ourselves in the field experiences with the Italian students and limit our
scholarly coursework to regular written reflections on what was actually happening with
the partnership. Excerpts from our students’ journals can show the success of the
program better than we can:
• “Every place you go has a treasure to find.”

• “This experience makes me realize the importance of making English Language Learners comfortable in our classrooms.”

• “This has been beyond AMAZING! I will be a different teacher now. You have changed my life by creating this program!”

• “After being an ILL (Italian Language Learner) for five weeks, I can fully sympathize with my students. It is hard to learn a language!”

• “Now I can see why modeling is so important in the classroom. If children see the action done, they are more likely to understand, especially if they are English Language Learners.”

• “This experience is absolutely worth it because I feel like I have officially learned what it takes to not only teach ELLs, but to understand what it feels like to be the actual learner.”

• “I learned the most valuable lesson because I came to realize how it feels to not know a language, as well as becoming aware of how to treat and be patient and understanding with my future ELLs.”

• “I came here with the mentality that I was going to drastically change and enhance these children’s lives, but really they have done that to mine.”

• “The Italian children were learning from me as I was learning from them.”

• “This trip has shown me how ELLs and EFL students are still typical, everyday children. Often, I believe we try to categorize our students, which sometimes can lead to their failure. I now feel better prepared on how to incorporate instruction for my ELLs into my everyday classroom
activities. I know that I need to speak clearly, speak slowly, and use hand
gestures and lots of visual aids.”

• “…an experience I will never forget; it will be carried in my heart on a
daily basis and will forever influence my teaching!”

Our 2010 spring semester program, because more coursework was required than
in the summer pilot program, required us to accelerate completion of contact hours for
courses that had to be completed before our departure, while also conducting extensive
preparatory English as a Second/Foreign Language (ESL/EFL) coursework developing
and practicing lessons that were to be taught in the Italian classrooms. This was
accomplished by online coursework, coupled with all-day workshops on campus in Texas
during the months of January, February and part of March (eliminating the need for our
students to pay for on-campus housing and thus reducing costs). Then, beginning in mid-
March and continuing until mid-May, we traveled to Italy, where all of our students spent
the entire school day, Monday through Thursday, at Dante Scuola Media. In effect, they
put their theoretical preparatory coursework to practical use when they got to Italy; at
Dante, they taught lessons they had already prepared, assisted with lessons their peers
had prepared, observed Italian classes in other subjects (where they learned what it felt
like to be a language learner in math, physical education, art, etc. classes), tutored after-
school sessions with Italian students preparing to take their Trinity English Examinations,
and organized rehearsals for the highly successful spring 2010 bilingual readers’ theatre
and musical production of *Tom Sawyer* (this production, as our earlier ones have been,
was presented to the community in the historic and beautiful town theatre and included
skits, songs, dances, and a readers’ theatre with our preservice teachers speaking Italian
and the Italian children speaking English). Their coursework in Italy was limited to their extensive fieldwork at Dante, with the exception of written journal reflections reporting on their experiences in the Italian classrooms and the implications of these experiences on their teaching philosophies and practices for the future. Our students were still able to take group trips to Rome, Florence, Arezzo, and Cortona at the beginning and end of their program; they had most evenings free, and they had most Fridays, Saturdays, and Sundays for their individual travel plans. However, Monday through Thursday, they were, first and foremost, “teachers” at Dante. We were gratified to see this restructuring result in what we believe was the best of both worlds for our preservice teachers, and our Italian counterparts were pleased to see the concentrated immersion at Dante result in the same or more actual time with the Italian students. We hope a selection of comments from our 2010 student journals conveys the overwhelming satisfaction with our new structure:

- Before coming on this trip, I can honestly admit that the thought of teaching an Italian middle school class terrified me…I am so much more confident in my teaching methods and techniques after my time at Dante; learning teaching methods and adaptations in the lessons being taught are such valuable skills that I would never have been able to experience if I wasn’t part of this unique program. The time spent in the classroom and many hours with the students in Tom Sawyer play practice have fueled my excitement and motivation to work with my own students in the future.
• I will never forget my students at Dante, the precious relationships built, and in the long run, the students were the ones teaching me valuable lessons.

• I will be an ambassador for this program because it changed my perspective, life style, and heart forever.

• I have gained so much confidence in the classroom and feel so comfortable teaching lessons now…I can only hope they’ve learned half of what I’ve learned from them.

• I could not have asked for a better introduction into teaching…This teaching experience was also my first ELL teaching opportunity…I would not be able to tell you how attached I would be to the students at the beginning of the trip; after all of the hours of teaching, observing, tutoring, and Tom Sawyer, it makes sense. Being able to plan and teach lessons has been really great for me; I have learned so much about classroom management and different teaching styles as well.

• I have learned so much about myself, teaching, students, other cultures, and relationships. Looking back, I am so proud of myself and everyone else on this trip and how far we have all come…I have truly learned to appreciate our culture and now know how important it is to be experienced in different cultures…my time in Italy has been the best time of my life and the best experience a future teacher could ever have!

• Living in Italia for seven weeks has completely changed my heart. I have a newfound respect for people from other countries. I can still remember
our arrival in Rome and how terrifying it was for me to try and speak to Italians…I feel like now my experience would be so different because I am relaxed and feel comfortable around the people. My outlook on people who speak different languages has changed so much. Before this trip I had no desire to learn another language, but now I am eager to return and spend time conversing in a second language…I now know that I can and will be passionate towards children in American schools that come from other countries. Being the minority for a short period of time myself, I can sympathize with and understand my students.

- My time in the classroom, at Trinity tutoring, and at Tom Sawyer revealed to me how important it is for a teacher to possess confidence, joy, patience, perseverance, and as cheesy as it sounds, love. There were times that I said or did something incorrectly, but it was imperative for me to press on. Truthfully, I believe the students taught me more than I taught them.

- I have learned so many things about becoming a better teacher. I learned to articulate and project your voice and to always use hand motions or visuals. Each student has a different need, and it’s important to catch onto these needs for the beginning so that, as time progresses, you know how to let those children gain their fullest potential of learning.

- I am so thankful that we had the opportunity to sit in and observe some of the Italian classes. Although I was unable to understand the majority of the lessons, I learned so much about being an ESL student in a class.
Because I now understand the difficulty of what it is like to be in those students’ position, I will be able to better identify with any of my future ESL students.

- Through the last two months in Italy, I’ve gained not only 17 best friends, but one more including a girl with a new appreciation for history, art, beauty, and life itself, and thankfully, that girl is me…First and foremost, the experiences I’ve had at Dante have taught me not only patience but work ethic as well.

- The things I have seen, though many and beautiful, do not compare to what I have felt and learned.

Conclusions, Pre and Post Research Questions and Responses, and Plans for the Future

Thus, with the support of our university and the Santa Chiara Study Center in Castiglion Fiorentino, we have completed our second full semester of this vibrant, dynamic partnership between our university preschool teachers and the students, teachers, parents, and administrators of Dante Scuola Media. Based on our students’ comments, our own observations, and input from our Dante counterparts, we feel that the program was immensely successful and incredibly important. Truly, when looking back at the earlier mentioned goals for educating preservice teachers from a global perspective (Willard-Holt, 2001), we believe we can confidently look at our participating students and answer each quality with a resounding “yes.” Further, we believe that the changes we have made in the program since 2007 have improved it without depriving it of its heart, depth, and vision.
On a more quantifiable basis, last spring’s Trinity Exam results indicated that, out of 62 examinations, only one student didn’t pass, the majority with As and Bs. Although our Italian counterpart, Silena Faralli, confirms that it is not unusual to have this sort of passing rate from those students who choose to work afterschool to take the proficiency exam, she notes that the number of students who take the Trinity classes has increased and, she believes, will continue to increase whenever our students are involved. She goes on to state the impact of our preservice teachers’ involvement in more intangible but equally significant ways:

…because of the one-to-one interpersonal relationship they [Dante students] had with their Texas tutors, who were incredibly patient and understanding, I believe that our middle school students will never forget how important it is to be able to interact and communicate with people who speak a different language and belong to a different culture—it is a way to discover themselves and become better people, besides the fact that they are offered the chance to improve their English…but my overall estimate is that the main difference is the change of their perspective, in the different approach they have to the language and culture, in other words, in the way they see “English”—not just an “empty” school subject, but a world to discover, a way to learn interesting things, make friends and have fun…
Cross-Cultural Partnership

We quantified our preservice teachers’ perceptions by using the following instructions and research questions on a pre and post experience basis:

Texas institutions of higher education face many challenges in preparing pre-service teachers to teach linguistically and culturally-diverse students. An opportunity to live and teach internationally is one possible response to this dilemma. Please respond to the following questions:

- Do you consider it important to be interculturally experienced? Why?
- What skills do you consider as important to possess when teaching in a multicultural environment?
- How can you improve these competencies? (include examples of your own experience if applicable)
- Do you think it is important to understand the cultures of people from other countries that are living in your home country?
- What role do you think language plays in intercultural competence?
- Do you feel competent to teach children who are not fluent in English?

In the following segment of our paper, we will address the results of each of our research questions by providing a summary statement of the overall responses from our students and then follow with an example of a pre and post quote that exemplified our findings:

- **Do you consider it important to be interculturally experienced?**
  
  Why?

  All but one of our students indicated their belief that it was important to be interculturally experienced in both their pre and post answers; most
Cross-Cultural Partnership

addressed the fact that, as teachers in ever-increasing multicultural classrooms, they needed to gain experience in working with children from other cultures. The main difference between the pre and post responses had to do with the somewhat theoretical, third person approach in the pre-departure responses to the emphatic and personal answers in the post-experience responses. The following are the pre and post responses from the single student who did not initially consider experience essential:

**Pre-departure response:**

I think it is important to be interculturally aware, but not necessarily experienced. Not everyone has the opportunity to become experienced in different cultures. It is definitely a bonus to be able to physically experience the cultures, but not necessarily important. Researching and learning about the other cultures is important because it helps us to understand the world around us. Experiencing the cultures is taking it a step up and adding to the important part, learning and understanding the different cultures.

**Post-experience response:**

I consider it to be extremely important to be interculturally experienced. After this study abroad experience, I have realized how much of an impact experiencing another culture has had on my life. I have learned so much about my culture from the culture of the Italians. It’s strange to think you can
learn so much about your culture from another culture. This experience has broadened my view of the world and opened my eyes to new things.

- **What skills do you consider as important to possess when teaching in a multicultural environment?**

For all of our students, the repeated words in both the pre and post surveys were *patience and understanding*. The main difference in word choice and, especially, emphasis in the post-experience responses was the need for flexibility and for the teacher to adapt her teaching methods to the particular needs of different children--although patience, understanding, a sense of humor, and other qualities were still noted. The following pre and post responses from one of our students exemplify the importance placed on the teacher’s ability to adapt:

**Pre-departure response:**

First and foremost, I think that patience is required for a teacher to work with students of different cultures. As teachers in the US, we are used to teaching our own specific way and to fluent English speaking students. Teaching in a multicultural environment will require both patience and much adaptation in order for the students to succeed. I also think we need to be very understanding and put ourselves in the student’s shoes. I think it is important for teachers to get to know all of their students, especially those of different
cultures, in order to best educate them.

**Post-experience response:**

Adaptation would definitely be on the top of my list. I have learned that different cultures run in different ways, and we have to be quick to adapt to the best learning style for those specific students. I have also learned that patience and flexibility are necessary skills to possess when teaching in a multicultural environment. Because we were not teaching native English speakers, there was a language barrier that could often cause frustration. But if I constantly reminded myself to have patience and put myself in the student’s shoes, I would always communicate more effectively.

- **How can you improve these competencies? (include examples of your own experience if applicable)**

Most of our students did not have experience in working with students in a multicultural environment, and those that did seemed to have only observed diverse classes or worked as volunteers in various settings. Although in the pre-departure comments, they expressed, in theory, the importance of having empathy and the need to gain experience, the post-experience responses were more personal and specific, with an emphasis on experience, as displayed in this example:

**Pre-departure Response:**

I have actually never had the privilege of working in a
multicultural classroom, although I have observed one before, but I would imagine that these skills take much practice and experience to improve them. I think that following the example of a teacher who has worked in a multicultural classroom would be a wonderful experience and open you up to other teaching techniques.

Post-experience Response:

Experience, experience, experience! I think that by getting as much time as possible in the classroom, the skills to work in a multicultural classroom will improve. I had very little experience in a multicultural classroom before coming on this trip, so I felt pretty clueless before going into the classroom. But after writing lesson plans for the students and being in the classroom, I have gained so much knowledge and have improved many of those skills. Also, after having the opportunity to observe many Italian classes, I have been able to see the classroom from an ESL (or EFL) student’s point of view. As a future educator, it is SO important to be able to relate to each of our students. By experiencing a classroom where a foreign language is being spoken, we will be able to better understand how some of our students will feel.

- Do you think it is important to understand the cultures of people from other countries that are living in your home country?
Most of our pre-service teachers recognized the importance of understanding the cultures of immigrants living in the U.S. but defined their answers by recognizing the importance of knowing the cultures of their future students rather than the cultures of all immigrants. In the pre-departure responses, three pre-service teachers questioned or dismissed the importance of understanding the cultures of immigrants and expressed that, in their views, the immigrants should embrace the culture of their adopted home, “Part of me at times wishes these people from other countries would focus on learning our culture and language.” The post experience responses demonstrated a personal appreciation of the Italians who acknowledged and valued a culture different from their own. All post experience responses of the pre-service teachers expressed a desire to understand the cultures of people living in the United States as demonstrated in the following example.

**Pre-departure Response:**

I do think it is important to understand, but not to the extent that I’m sure I will when I am finally teaching, especially if it’s in a Texas classroom. I think the better we understand how all our students live and where they are coming from, the better we will be able to adjust our teaching styles to meet their individual needs.

**Post-experience Response:**

I believe that it is one of the most important things to understand.
While being in Italy, it has been so nice to meet people who are attempting to speak English back to me, or are patient with my Italian, and it is so pleasant to hear when people here speak about Texas, or what they know about the U.S. It makes me so proud when the students talk about different areas they know about America, and I like to talk to them as well about Europe! I think it is so comforting to have them understand where I come from, and I definitely want to make sure that I understand different cultures of people visiting or living in the US so that they feel the same comfort that I do.

- **What role do you think language plays in intercultural competence?**

Prior to the Italian experience, all of the pre-service teachers expressed that, in their opinions, language played the most important role in intercultural competence. Five of the students also shared in their pre-departure responses that gestures, body language, and drawing assisted with communication when people do not share the same language. Following the experience, all but three of the pre-service teachers shared the view that language, while important, was simply one component in intercultural competence as expressed in the following example.

**Pre-departure Response:**

I think language plays a crucial part in intercultural competence. Whether spoken or written, people have to communicate somehow. Yes people can draw pictures or point to things without using
language, but nothing compares to the direct relationship when language is the form of communication.

**Post-experience Response:**

Now that my teaching and study abroad experiences is coming to an end, I think that language plays a much smaller role in intercultural competence that I originally thought before I left Texas. While I feel like I picked up A LOT of Italian vocabulary and I could definitely continue on to become fluent one day, learning Italian wasn’t completely necessary. Hand gestures, pictures, body language all played much larger roles than I anticipated. We are all humans working toward the same main goals in life, and we all have the same basic everyday needs at around the same times each day, so communicating effectively was much easier than I expected it to be.

- **Do you feel competent to teach children who are not fluent in English?**

Prior to the Italian experience, five pre-service teachers felt component to teach English language learners while most of the students felt overwhelmed and lacking in competence to teach children who are learning English as a foreign language. Following the intense teaching experience in which the pre-service teachers taught English four days a week to Italian middle grade students, all of the future teachers felt competent and skilled in teaching English and recognized the value of this competence for their future teaching positions. The following is one
example but expresses the views of most of the pre-service teachers who participated in the Italian study abroad.

**Pre-departure Response:**

Not yet, but I am confident that I will one day be good at it! The more I learn about teaching ESL, the more I realize that it is exactly what I want to do with my life. I’m hoping that studying abroad will give me the experience I need to feel competent, or at least closer to competency.

**Post-experience Response:**

I feel extremely competent to teach children who are not fluent in English after this study abroad experience. I was fearful before I came about the language barrier, and the students just staring at me. This was not the case, and even if it was, I adapted to it and it would end up working out. The Italian children are so accepting of us and are eager to learn. I think these traits of the Italian students helped to make me feel more comfortable with teaching students who are not fluent in English. I have loved teaching the Italians, and it is a good experience for me since I will be ESL certified when I graduate.
Cross-Cultural Partnership

With the crucial support of our university in tough economic times, our hope is to continue our program on an every-other-spring basis so that all of our students and all of the Dante students will have the opportunity to participate in the program during their university and middle school years, respectively. Clearly, our program is becoming a well-loved tradition with our preservice teachers, as seldom a day goes by without our current students asking us when we will be going back to Castiglion Fiorentino or our “alumni” students telling us how much the experience has helped them in their student teaching experiences and has impacted their lives. In Castiglion Fiorentino, after four years of working in Dante, we believe the same evidence of a meaningful, significant partnership is true and conclude our discussion of our program and our hopes for the future with more words from our eloquent and passionate counterpart, Silena Faralli:

You and your students have become almost a “tradition” in our school; therefore, when students think of you and your lessons, they think you are a part of their world, not a world across the ocean! And that is quite an important point, especially for teenagers who always have to refer what they student to their experiences, in order to learn.
References


Cross-Cultural Partnership

*Practice, XXI*(3), 184-192.
LEAVING A STUDENT BEHIND: THE CASE STUDY OF SAM AND A SPECIAL EDUCATION TEACHER LEADER WHO FULLY EDUCATES STUDENTS WITH DISABILITIES.

by

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Defining the Problem

The dual pressure of providing a general education curriculum that best accommodates the needs of special education students while also meeting the ever-increasing demands of state testing has placed special educators in a quandary. There are ethical and legal challenges that come with attempting to both accommodate disabilities while pushing students to perform in high-stakes testing environments. The result is extraordinary pressure on teachers and students alike. As a special education teacher, education professor, special education supervisor, and parent of a child with special needs, I will present a session that addresses the need for effective special education teachers in the era of high stakes testing and data driven decision making. Both this abstract and the session draws attention to the need for effective teachers who are leaders in the field of special education as well as also school systems that are committed to the collaboration between teachers, parents, and school personnel so that no child with disabilities gets left behind.

The cornerstone of special education is to provide specialized instruction to meet the unique needs of each child with a disability. Special educators are expected to utilize individualized referenced decision-making and continually plan and adjust curriculum and strategies to educate and motivate their students. In the age of high stakes testing where intensive interventions are expected to help all students in general education classrooms, one has
to speculate about the ability of general education teachers and school systems to evaluate student progress using procedures that are fair, meaningful, and address the varied needs of today’s diverse student populations. Indeed, are the students that need the help getting the necessary help that they need, and is there the potential for students with disabilities to be left behind? The answer to this question will determine whether or not general and special educators are collaborating and sharing responsibility for successfully educating these students.

Special education teachers are on the front lines of implementing a standards-driven system for their students while maintaining the core practices of individualization, intensive instruction, and the teaching of explicit skills for students with disabilities. The session will also share the findings of a case study that shows that without due diligence it is possible for a student with a disability to fall through the cracks of the public school system in the Commonwealth of Pennsylvania.

Structure of Session

A Brief History of the Evolution of Special Education in Public Schools

IDEA, Accountability Requirements

Achievement Testing & Students with Disabilities

The Case of Leaving a Student Behind—with Questions to Ponder Including:

1. How did Sam progress from 2nd to 9th grade without special education support?
2. What happened to Sam’s early records?
3. What happened to the regularly scheduled re-evaluations that should have taken place for Sam in kindergarten, first grade, or second grade?
4. Why didn’t Sam’s mother press for an IEP in grades 2-8?

5. Where was the collaboration between the family, general education teachers, special education teachers, administrators, guidance counselors, paraprofessionals, and related service personnel to effectively meet Sam’s needs?

6. What happened to Sam?

*Future Implications from this study*

Laying the foundation

As special education law approaches its thirty-fifth anniversary in the United States, the Individual’s with Disabilities Education Act (IDEA) continues to guarantee students with disabilities the right to a free appropriate public education to take place in what the Act defines as the “least restrictive environment” (Ward, Montague, & Linton, 2003). Today’s educational system is working to provide the maximum level of inclusion appropriate for students with disabilities, while also managing the pressure created by an educational climate that has placed increasing emphasis on high stakes testing and evidence-based practice as mandated by No Child Left Behind. Striking the balance between “least restrictive environment” (LRE) and strategizing to attain the highest possible scores on standardized tests has left special educators in a quandary, as they feel torn between the spirit of IDEA and the expectations imposed by NCLB (Hardman & Dawson, 2008).

The mantra of “leave no child behind” is a pledge rather than a reality in today’s public schools. Plainly, research is needed to directly support or refute the supposition within national educational policy that a standards-based education system will improve results for students with
disabilities. Nevertheless, the current system requires both effective teachers and supportive school systems that collaborate to deliver educational services that indeed leave no child behind.
REFERENCES


Abstract

This presentation examines native-English speaking instructors’ narrative accounts of both professional identity and tertiary classrooms in Japan. What do so-called native teachers say about teaching in the Japanese tertiary system and how do they rationalize their career trajectories? What do they perceive to be the rewards and challenges of working in Japanese universities and how do they characterize both the students they teach and the institutions they work at? Finally, do native teachers adapt their pedagogy in response to perceptions of socio-cultural differences between Japanese classrooms and classrooms in their countries of origin?

Kiernan (2010) has recently argued that although narrative as a methodological approach has extensively been employed in studies of language learners, it has, to date, remained surprisingly underutilized in research on teachers. This paper draws from Kiernan’s pioneering work in its use of qualitative semi-structured interviews with native English-speaking instructors working in Japanese universities. It frames these narratives within wider discourses about the English language, ‘foreignness’, and ‘native-speakers’, because, the meanings associated with language and language teaching are cultural constructs that, as Seargeant (2009, p. 2) has argued, are specific to the society in which that language is operational rather to the language itself.
References:


Preparation for Effective English-Medium Subject Matter Instruction within Japanese-Curriculum Institutions: Lessons from Bilingual Education

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Abstract

Pressure is increasing more than ever on the Japanese university system to provide a greater supply of graduates who are capable of functioning proficiently in an English-speaking professional and/or academic environment. In response to these pressures brought about by the globalization of higher education, many Japanese institutions have increased the number of academic subject matter courses offered using English as the language of instruction. The government has recently attempted to encourage these efforts by providing funding over a five year period for more than two-dozen universities to begin offering full degree programs conducted completely in English. As the specific curriculum design of these programs has been left to the discretion of the funded institutions, this will likely result in a variety of designs, of which some may prove to be effective and some perhaps not. Traditionally, Japanese institutions have tended to simply create exclusive programs for foreign students, and perhaps some returnee Japanese students. This approach provides virtually no support for Japanese students of lesser English proficiency who might have the desire to participate, and therefore effectively provides for very little interaction between the program's students and the institution's 'mainstream' Japanese students studying in Japanese. This lack of interaction benefits neither group. Institutions that have the desire to create a more inclusive program will have to have mechanisms in place to support students (Japanese and non-Japanese alike) whose academic English proficiency is not fully developed enough to benefit from English-medium instruction. The purpose of this paper is to look to the very large body of research in bilingual education in English speaking countries and identify pedagogical approaches that can be applied to the English-medium subject matter taught in a foreign language environment. The paper will review several thoroughly researched concepts in the field of English as a second language (such as scaffolding, sheltering, and comprehensible input) that can contribute to making English-medium subject matter instruction in Japanese universities more effective, more efficient, and perhaps most importantly, more inclusive for Japanese students.

To request a full text copy of this paper, please email the author at mselzer@ir.ritsumei.ac.jp
Effects of Using the 3G Man Smart Manikin Patient Simulator with Adult ESL and Non-ESL Students in a CTE Licensed Practical Nursing Program

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Abstract

With a national shortage of qualified nurses, successful career training programs for this occupation are critical to the nation’s well-being. High levels of conceptual, procedural, and language complexity of many nursing skills make mastery difficult, especially for non-native speakers of English. The classic instructional design model Dale’s Cone of Experience suggests that learning activities that are “concrete” or closest to actual real-world experience are most successful for many learners, particularly when information is complex and/or new to them. Simulation technology is intended to replicate real-world experience with a high degree of fidelity, thus removing learning barriers caused by more abstract instructional methods. This study is an application of Dale’s theory of instructional “concreteness.” Using a time-series experiment research design, the study describes the positive effects of simulation technology in the form of a “smart manikin” on the learning performance and confidence of adult native and non-native speakers of American English in an occupational LPN training program in a large urban technology center.

Introduction and Conceptualization

Recent literature has documented a shortage of nurses throughout the United States that is having negative effects on hospital quality, patient care, and American society (Aiken, 2002; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; DHHS, 2000; Sammons, 2009). This shortage is complicated by (a) recent estimates that 77 million Baby Boomers plan to retire in the next 10 to 15 years, placing a heavy strain on an American health care system already struggling under a severe shortage of trained nurses, and (b) the fact that the current nursing workforce is aging and new nurses are not replacing those who are retiring or leaving the profession (Sammons, 2009).

The significant shortage of trained nurses and its negative effects on the health and well-being of the nation’s aging population draws attention to the importance of programs intended to prepare professional nursing personnel for the health care industry. Given the current and predicted shortages of qualified nurses, training programs cannot afford to lose students unnecessarily and must consider all available instructional methods and technologies to maximize numbers of successful graduates. One group of technologies that has a record of success in health occupations training and is currently expanding in available options and applications is simulation.

Simulation technologies are generally considered to be imitations of a process, environment, or item in which certain critical elements, aspects, or characteristics of reality are
represented or replicated. Hunt and Waller (1999) explained that a true simulation, as opposed to a mere representation, is defined by preservation of important visual and operational/functional aspects of the reality being modeled. They asserted that when this preservation of key aspects of reality is maintained in a simulation, that simulation has “fidelity,” or a high degree of replication of the real world.

Simulations have historically been used successfully in a wide variety of applications. Beginning with the introduction of the famous Link Flight Trainer in 1929 and extending to currently-emerging high-tech hands-on “smart” apparatuses and computer-based virtual reality simulations, the goal of simulation technology is to facilitate development of specific skills or to improve performance. Simulation has been particularly important in environments that are complex, difficult, or dangerous in the physical world. Most simulators in the current occupational and professional training market are in the category of interactive or “human in the loop,” defined as physical or computer simulators that include human operators (Bronaugh, n.d.; Sollenberger, Willems, Della Rocco, Koros, & Truitt, 2005).

High-tech interactive “human-in-the-loop” simulators have already had considerable success in professional training in the medical field. One example reported in the research is the highly successful computer-based virtual reality (VR) trainer MIST-VR (Minimally Invasive Surgical Training) for improving laparoscopic surgical skills (Ahlberg, Enochsson, Gallagher, Hedman, Hogman, & McClusky, 2007; Harb, Adams, Dominguez, Smith, & Randall, 2005; McClusky, Gallagher, Ritter, Lederman, Van Sickle, Baghai, & Smith, 2004; Seymour, Gallagher, Rorr, O’Brien, Bansal, & Anderson, 2002). Another successful VR training simulator is Emory University School of Medicine’s Vascular Interventional System Trainer (VIST) that has demonstrated significant improvements in carotid angiography skills (Patel, Gallagher, Nicholson, & Cates, 2005).

In addition to computer-generated virtual reality simulations, medical training is also currently using many “smart haptic devices.” These devices use touch as well as visual feedback to develop and improve such skills as laparoscopy; injection and venipuncture; suturing; respiration and airway procedures; fracture diagnosis and treatment; and arthroscopy (c.f. surgical simulators at www.simulation.com).

One of the newest hands-on “human-in-the-loop” simulation trends in medical training is the “simulated patient” approach. At the Shelden Clinical Simulation Center of the University of Missouri, this training takes the form of the Standardized/Simulated Patient (SP), in which trainee medical workers interact with a real person carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled healthcare provider (University of Missouri School of Medicine, 2010). While this real-life simulation has been successful, it is extremely time-intensive to create. The more popular technology-based alternative is currently the “smart manikin,” a computer-augmented “virtual patient” that simulates a human patient with various characteristics, injuries, and ailments. One of the first virtual human trainers was designed at Emory University Hospital to train physicians in carotid stenting procedures. This simulator provided early evidence of the efficacy of virtual patient technology and led its developers to conclude this type of simulator training could reduce cardiology surgical errors and resulting patient deaths (Emory University Hospital Heart Center,
Despite its high costs, smart manikin technology is now beginning to appear in nursing curricula in career and technical education (CTE) programs. However, empirical evaluations of this technology are not yet found in CTE research literature. At Tulsa Technology Center (TTC) in Tulsa, Oklahoma, state-of-the-art new teaching facilities include advanced laboratories and smart manikin simulators. Adult students in the TTC Licensed Practical Nursing (LPN) program that has this new technology include both native English speakers and a significant number of English as a Second Language (ESL) students. The LPN faculty and the school’s administration have collected for these students both demographic and performance data obtained in the naturalistic classroom setting. To apply these data to an assessment of the effects of smart manikin simulators on their ESL and non-ESL students, the Tulsa Technology Center teaching faculty partnered with researchers of the Occupational Education Virtual Reality (VR) Research Team at Oklahoma State University (OSU). The results are presented in this paper. The study is conceptualized as an empirical trial of a high-fidelity simulator as defined above by Hunt and Waller (1999) in a naturalistic instructional setting. Specifically, the paper presents a time-series experimental study of the efficacy of smart manikin technology as a realistic hands-on instructional strategy in a CTE practical nursing course and its comparative effects on the performance of ESL and non-ESL students.

Theoretical Framework

The theoretical underpinning for this study is provided by the iconic instructional design theory Dale’s Cone of Experience. Based in Piagetian psychology, Dale’s Cone posits that more concrete experiences and media are truer representations of reality and can facilitate learning, particularly when the represented reality is complex, unfamiliar to learners, or presents opportunities for confusion when more abstract representations are used (Dale, 1954). According to Dale’s Cone, direct real-world experience is the most concrete learning medium, followed by simulated reality, while the most abstract media are spoken and printed verbal communications. Smart manikin simulators represent realistic learning experiences with a high level of concreteness on Dale’s media taxonomy. The hands-on and concrete nature of these virtual patients suggests they may have not only strong appeal to many CTE students, but also the ability to assist students – particularly ESL students – in medical programs where abstract instruction in spoken and printed English could be problematic in learning complex and unfamiliar content. From this theoretical perspective, it was hypothesized that the use of virtual patient simulators would improve learner performance in the LPN program, and that this improvement would be particularly evident in ESL students who might encounter greater difficulty with the more abstract medium of verbal instruction in English.

Purpose and Research Questions

The purpose of this study was (a) to describe, using data collected in the naturalistic setting of classroom instruction, the effects on the performance of adult students in a CTE LPN program of using a virtual patient “smart manikin” simulator, and (b) to compare these effects for ESL and non-ESL students.
The study addressed the following research questions:

1. What effects are observed on learning performance and perceptions when a smart manikin patient simulator is introduced in a CTE LPN course?

2. What pattern of learning performance effects are observed over time before and after introduction of the simulator?

3. Are there differences in the learning performance and perceptions of the simulator between ESL and non-ESL students?

Methodology

Research Design

This study was descriptive and *ex post facto* in design. Quantitative learner test data were collected by Tulsa Technology Center (TTC) faculty as part of their student assessment process in the LPN program. Additional supporting quantitative and qualitative data were collected through a short questionnaire administered to the study participants and an interview with the TTC LPN simulation lab coordinator. Both the learner data collection and the instructional procedures with the “smart” virtual patient simulator were done in the naturalistic context of the LPN program’s normal classroom instruction. Because of the naturalistic context of the data-gathering and experimental instructional process, typical experimental pre/post testing, assignment of subjects to treatment groups, and manipulation of instructional procedures between groups were not possible. Therefore a time-series experimental design was adopted for the study and data analysis. According to Campbell and Stanley (1963), “The essence of the time-series design is the presence of a periodic measurement process on some group … and the introduction of an experimental change into this time series of measurements, the results of which are indicated by a discontinuity in the measurements recorded in the time series” (p. 37). This describes well the procedure used by the TTC faculty in collecting their learning performance data. Multiple sets of performance score data were collected for the LPN students as a single class group both before and after introduction of the manikin simulator, presenting a rationale for treating these data as a time-series experiment.

Subjects

A population of 20 subjects participated in this study. This population comprised one whole class intake within the Tulsa Technology Center’s LPN program. Of the 20 participants, 18 were female and two were male. This gender distribution was consistent with the typical female/male ratio for the LPN program at TTC and is reflective of the highly gendered nature of this occupation. The age range of the participants was from 20 to over 40, with nine aged 20-30, four aged 31-40, and seven over age 40.

Participants were also divided into two groups based on whether they were native speakers of American English. These two groups were designated English as Second Language
(ESL) students and non-ESL students. The non-ESL group consisted of 10 females, while the ESL group consisted of eight females and two males. Of the 10 ESL subjects, six were from African countries, two were from Eastern European countries, one came from East Asia, and one was from the Caribbean.

**Instructional Treatment Intervention**

The 3G SimMan patient simulator manikin was used as the instructional treatment intervention in this study. It provided the study’s LPN students/participants with realistic, practical hands-on learning scenarios to practice various medical procedures.

The 3G “smart” manikin made by Laerdal is a high-tech computer-integrated simulator that realistically replicates a full range of physiological conditions of a human patient. Founded in 1940 in Norway, Laerdal Medical AS today produces a comprehensive line of medical “smart” simulators (Laerdal, 2010a). The 3G system, with a price tag of over $70,000, is one of its latest and most advanced computer-integrated training simulations. A complete description of the 3G manikin, its associated computer equipment, teaching scenarios and materials, and an interactive online demonstration are available at the Laerdal website (Laerdal, 2010b). The 3G manikin and part of its integrated computer system are shown in Figure 1.

![Laerdal 3G Man smart manikin patient simulator and its integrated computer interface.](image)

**Instrumentation and Data Gathering Tools**

The data for this study were gathered from four instruments:

1. The Health Education Systems, Inc. (HESI) standardized Admission Assessment Examination,
2. Content-specific teacher-made tests developed by TTC faculty to assess progress of their LPN students,
3. A teacher-developed questionnaire to determine student perceptions of their experiences with the 3G Man patient simulator, and
4. A qualitative interview with the TTC LPN simulation lab coordinator to document her perceptions of the 3G patient simulator experience.

_HESI Admission Assessment Examination_. The HESI Admission Assessment Examination is a commercially-available standardized test used by the Tulsa Technology Center to assess students for admission into their LPN program. This admission test battery is part of the HESI suite of exams that include tests for entrance, content testing, and exit evaluation in the nursing professions. The HESI exams are standardized and computerized, rapidly increasing in use in schools of nursing, and well respected for their validity and reliability (Morrison, Adamson, Nibert, and Hsia, 2008). The HESI Admission Assessment Examination consists of nine academic exams, as well as a personality profile and learning style assessment. The academic exams were used to assess the entering LPN students’ knowledge in the three general areas of English language, math, and science.

The English battery included four tests: Reading, Grammar, Vocabulary, and English Comprehension. The Science battery included four tests: Biology, Chemistry, Anatomy/Physiology, and Science Comprehension. The Math section was a single test. Individual scores were obtained for each student for each exam and the nine scores were combined to provide a HESI cumulative total score for each student.

In addition to the knowledge assessment tests, the HESI also used concepts related to introversion and extroversion to classify each student’s personality profile as either Calm, Creative, People-Oriented, or Leader. This exam also assessed the preferred learning style of each student as Visual, Auditory, Kinesthetic or Cognitive. It also classified each student’s information processing preference as Analytical or Global.

_Teacher-developed content tests_. Several content-specific course tests were developed by TTC LPN faculty to assess the students’ learning of the information presented in classes. Several content-specific tests were administered before and after the smart manikin treatment intervention to assess student learning at several points prior to and after being exposed to the SimMan 3G patient simulator manikin.

_Teacher-developed student questionnaire_. This short questionnaire was developed by TTC LPN faculty to obtain student feedback regarding their perceptions of their interactions with the SimMan 3G patient simulator.

_Qualitative interview with TTC LPN simulation lab coordinator_. This interview was designed to document the coordinator’s personal perceptions and conclusions regarding her students’ experiences with, and reactions to, the 3G simulator. It was conducted by a member of the OSU VR research team.
Procedures

The collection of student data and the instructional application of the 3G smart patient simulator were done entirely by the Tulsa Technology Center (TTC) LPN program faculty as part of their routine instructional process, and in the regular classroom environment of the LPN program. This phase of the study was completed before the TTC faculty partnered with the VR research team at Oklahoma State University (OSU). Once the TTC faculty entered a research partnership with the OSU team, the OSU researchers obtained written permission to join the study from the Superintendent of the Tulsa Technology Center, the Director of the TTC Health Sciences Center, the instructors involved in the LPN simulation lab, and the OSU Institutional Review Board. Before data analysis was undertaken, student participants received consent information from the LPN lab instructors. All 20 students in this program agreed to have their data included in this study.

The first data collected for the 20 student participants came from the administration of the HESI Admission Assessment Examination, which was used to establish initial baseline performance marks. This test battery of nine scores plus a cumulative score was called HESI 1 scores for this study.

After reviewing the HESI 1 scores, the TTC LPN faculty formulated teaching plans based on the needs of the students as identified by the HESI assessment. The students were also identified as non-ESL or ESL, based on whether or not they were native speakers of American English.

During the next few weeks, the LPN students were administered four teacher-developed tests covering specific units of course content. These were called pre-intervention scores for this study. Based on these scores and personal observations, the TTC teaching staff realized that the ESL students were struggling and had considerably lower learning performance than the non-ESL students. At that time, the instructors re-assessed their available student data. They reviewed the HESI 1 data and observed that all but two of the students’ preferred learning style was identified as kinesthetic or hands-on. They also observed that most of the students (n = 12, or 60%) had been identified as having a global cognitive processing style, while the remaining (n = 8, or 40%) were identified as analytic in their cognitive style.

In an interview with a member of the OSU VR research team, the TTC simulation lab coordinator explained:

… we noticed that…the ESL students were testing out to be kinesthetic learners…and none of them proved to be cognitive learners…so they were not getting the concept that they were reading so…there seemed to be a learning gap. They had to read English and when I visited with them, they would say, ‘Well, you know, we don’t know some of these words’ and then they were trying to figure out in their own language what it was saying, but…they couldn’t bridge the gap to get to understand the actual process…., so there was a learning problem.
Based on their analysis, the TTC instructors altered the way they presented the LPN program. They began to supplement lectures and written materials with more concrete hands-on practice to reinforce information and help students connect with abstract medical terminology and concepts. Specifically, the instructors introduced both the ESL and non-ESL students to the SimMan 3G manikin patient simulator and allowed them to work on the manikin in small groups, with ESL students working with only other ESL students. In the words of the TCC simulation lab coordinator:

…since we determined…[the ESLs] were all kinesthetic learners, we pulled them aside separately and we started using our new high fidelity manikin… and we tied in the concepts that they were having difficulty grasping and we allowed them to see it and experience it through him…. They were only with other ESL students… over a two-week period.

Instructors used the new manikin simulator to help demonstrate concepts and procedures the students were having difficulty grasping. Students were able to see and experience the difficult concepts in a highly realistic and concrete manner through the patient simulator. The manikin provided all the students with a hands-on, safe learning environment to try out various complex procedures without dangerous consequences for errors.

After the implementation of the 3G patient simulator manikin in the instructional process, the TTC LPN instructors collected additional student data in the form of a series of eight more teacher-made unit content tests (called post-intervention scores for this study) and a brief student questionnaire to document the students’ perceptions of their interactions with the simulator. Then, they administered the HESI test battery a second time (called HESI 2 scores in this study), and finally one more teacher-made content test (post-HESI 2 score) to complete the time-series.

After completing all these pre- and post-intervention data collections and instructional processes, the TTC LPN faculty partnered with members of the OSU virtual reality research team to complete the study. All data were given to the OSU team for analysis. Additionally, a member of the OSU team conducted a qualitative interview with the TTC simulation lab coordinator to document her perceptions of the students’ experience with the 3G patient simulator manikin.

Data Analysis

Quantitative data in the form of student test scores and multiple-choice responses on the teacher-made student questionnaire were entered into an Excel spreadsheet and then uploaded into the SPSS statistical program for analysis with descriptive statistics and time-series charting. Qualitative data obtained from the open-ended questions on the student questionnaire and the interview with the TTC simulation lab coordinator were analyzed using content analysis techniques.
Findings

Effects on Learning Performance and Perceptions When 3G Smart Manikin Patient Simulator Was Introduced

In this time-series experimental design, learner performance effects of the 3G simulator were examined based on three pre- and post-intervention data sources: (1) quantitative descriptive test data for students on HESI 1 (pre-intervention), HESI 2 tests (post-intervention), and pre/post-intervention teacher-made content tests, (2) qualitative comments from the interview with the TTC simulation lab coordinator, and (3) input from the short questionnaire administered to the LPN students.

Findings from descriptive test data. Descriptive data for the students’ test scores on HESI1, HESI 2, and all teacher-made content unit tests are shown in Table 1.

Table 1. Descriptive Data for All Subjects on All Tests

<table>
<thead>
<tr>
<th>TESTS</th>
<th>Minimum Score</th>
<th>Maximum Score</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 20 for population</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>n = 10 for Non-ESL students</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>n = 10 for ESL students</td>
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<tr>
<td>No missing data</td>
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<td><strong>HESI 1 TEST SCORES</strong></td>
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<td></td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
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<td>93.50</td>
<td>76.16</td>
<td>14.73</td>
</tr>
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</tr>
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**PRE-INTERVENTION CONTENT TESTS**

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**HESI 2 TEST SCORES**

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The data in Table 1 indicate that introduction of the SimMan 3G patient simulator manikin produced changes in students’ score patterns on both the HESI tests and the teacher-made content tests. Prior to the use of 3G, the ESL students scored generally lower on HESI 1. Their mean scores were lower than the non-ESLs on all HESI 1 tests except Math; their scores were more variable on 8 of the 9 HESI measures; and they generally had lower minimum scores, often considerably lower than the non-ESLs. This pattern was also observed on the four pre-intervention content test scores. On all four of these tests, the ESLs performed worse than the non-ESLs, demonstrating lower mean scores, lower minimum scores, lower maximum scores, and in no case scored the highest observed score in the population.

After introduction of the simulator, several performance effects are observable. ESL students’ test scores were raised to levels very similar to those of the non-ESL students. On the eight post-intervention teacher-made content scores, scores were raised for both ESLs and non-ESLs, but the greater gains were made by the ESLs. Further, the ESL/non-ESL means and standard deviations were much more similar on the post-intervention tests, and four of the eight
highest scores were made by the ESL group. On the HESI 2 tests, post-intervention scores were also generally higher for both ESLs and Non-ESLs, and the means and standard deviations were more similar for the two groups. On the post-HESI 2 content test, the means, minimum scores, and maximum scores were very similar for the ESLs and non-ESLs.

**Qualitative interview comments.** Additional information on the effects of the 3G simulator relating to the confidence of the ESL students came from the interview with the TTC simulation lab coordinator. She asserted that:

>[When using the 3G] the ESL students did not feel embarrassed to ask questions or to converse with each other in their own language.…. What we saw was that they grasped it. It was like a light bulb came on and finally the dots were all connected and the things that they were struggling terribly to understand cognitively were now clear.

The lab coordinator further explained that the TTC LPN teaching faculty were concerned that when they reviewed the HESI 1 scores of their ESL students, they felt that, “… unless we intervened in some manner … they would not be successful in this program, nor would they be successful on taking the … Board [examinations].” The lab coordinator reported that the faculty were very pleased to find that after the introduction of the 3G patient simulator, the test scores of the ESL students came up and met those of the non-ESLs and “… in some cases … surpassed them.” The score increase of the ESLs was dramatic and sudden with introduction of the simulator. Faculty were also pleased that after the 3G instructional intervention, both groups of students performed better on HESI 2 than they had on HESI 1.

**Student perceptions on questionnaire.** Information on the nature of the learning assistance the students felt they received from the 3G patient simulator came from their responses to the question on the questionnaire they completed for the TTC faculty that asked them to “List ways 3G was beneficial.” Their responses included:

- Lung sounds are real and easily identifiable in clinical.
- Bowel sounds are realistic and easily identifiable in clinical.
- Realistic pupil dilation, pulses, heartbeat, etc.
- Hearing the heart/lung sounds, assessment practice
- It has been extremely beneficial to be able to hear the sounds/feel the pulses before adding the difficulties of the field. It is a confidence builder.
- If I make a mistake I can learn from it without punishment.
- Hands on experience, real sounds, scenarios
- He responds like a real person. We get to hear the different heart ... and lung sounds.
- It gives me a true experience of a real situation - with real person.
- It made it seem more real.

These comments appear to support Dale’s theory (1954) that learning benefits accrue from experiences that are concrete, realistic, and replicate reality as closely as possible. These are basic and defining characteristics of simulation technology.
Pattern of Learning Performance Effects over Time before and after Introduction with the 3G Patient Simulator

To examine further the pre- and post-intervention effects of the 3G simulator over time, a time-series chart was developed. Mean scores for all student tests from pre-intervention HESI 1, pre-intervention content tests, post-intervention content tests, post-intervention HESI 2, and the post-HESI 2 content test were entered in the order in which they occurred chronologically into a time-series chart. Separate trend lines were drawn for ESL and non-ESL students. The resulting time-series chart is shown in Figure 2.

The time-series chart shows graphically the pattern of test scores for both ESL and non-ESL students before and after introduction of the simulator. The time-series illustrates several post-intervention trends for both ESLs and non-ESLs: (a) generally improved performance in both HESI scores and course content test scores, (b) greater consistency of performance, and (c) greater similarity of performance between the groups. The greatest positive effects of the simulator were demonstrated by the ESL students. These trends remained consistent over time after introduction of the simulator and showed no signs of reversal as the study progressed, suggesting they may represent permanent changes in learning attitudes and performance.
Differences in the Learning Performance and Perceptions of the Patient Simulator between ESL and Non-ESL Students

As shown in the quantitative test descriptive data and the time-series data, the general pattern observed in this study was that introduction of the 3G simulator resulted in improved and more consistent performance for both the ESL and non-ESL students. However, the greater gains were attained by the ESL group.

In her interview, the TTC simulator lab coordinator concurred, stating that in her perception, the 3G “…was very beneficial to our non-ESL students… but we were not finding it to be as dramatically impacting as it was on the ESL students.”

Additional data from the questionnaire administered to the ESL and non-ESL students by their teachers showed that both groups perceived the simulator as beneficial. Asked if they felt the 3G was beneficial in their beginning lab experiences, 15 of the 20 LPN students strongly agreed and 4 agreed. Asked if they felt the combined use of the simulator plus the written word enhanced their learning, 12 strongly agreed and 8 agreed. All 20 students said they felt they would have benefitted from more simulator experience.

In addition to learning performance outcomes, qualitative data from the lab coordinator’s interview indicated the ESL students also experienced strong affective outcomes from the patient simulator. For example, one way the simulator impacted the ESLs was improving their confidence. According to the lab coordinator, …when we first started bringing [the ESL students] into the lab…they were very uncertain of themselves and they would be standoffish… and they would not participate [but] now they are equally as confident as the non-ESLs.” She further pointed out that “…the impact of their increased confidence has now carried over to the actual clinical site where … the clinical instructors are also seeing no difference [between the ESL and non-ESL students].”

Several comments from the lab coordinator pointed to the intense emotional response of the ESL students to their simulator experience and their almost anthropomorphic feelings for the virtual patient. The coordinator affirmed:

… the feedback [about the patient simulator] that we received from all our students was very positive. However the ESLs definitely embraced ‘him’ even more and they would use phrases like ‘He’s a God send.’ You know, …they stopped referring to it as a mankin and it became ‘he.’ He has helped us learn. And so in their minds, he is a virtual patient and he is the one that helped them learn, not me, not any other instructor, but HE did.

The coordinator also recounted the emotional reaction of the ESL students to their learning success with the simulator and her own resulting sense of satisfaction:

It was very rewarding, but it was also very humbling because there … was a time when each one of them thought that they were going to not be successful and we were in the lab with 3G and all of a sudden they said, ‘We’ve got it’ and they all
broke out into a dance and they were dancing in the lab. … it was because they … accomplished a goal. They… passed a hurdle and they got it and it was from that day – I remember the instant – that the light bulb came on and they figured out, you know what, we can do this, we’ve got it – and they did, they do have it.

Conclusions, Discussion, and Recommendations

Triangulation of the findings of this study suggest several conclusions, implications, and recommendations. The results indicate that “smart” patient simulators can be effective in helping licensed practical nursing students, particularly those whose first language is not American English. Students struggling with the complex concepts and vocabulary of nursing programs may be aided by the concrete, hands-on nature of the patient simulator. Findings of this study show the simulator had both cognitive and affective effects on the LPN students and that both effects may have contributed to improved learning performance.

This conclusion has implications at several levels. At theoretical level, it supports the basic premise of Dale’s (1954) iconic instructional design theory that more realistic and concrete learning experiences benefit learning. Realism and “fidelity,” or accurate representation of the real world (Hunt & Waller, 1999), are definitional characteristics of simulations. This study acknowledged these characteristics. It allows the placement of new-generation patient simulation technology near the base of Dane’s Cone of Experience along with actual real-world experience and supports this technology as a “realistic” learning experience.

At the instructional methodology level, this study justifies the expense of “smart manikin” simulators and encourages their inclusion in nursing education programs. Computer-integrated smart manikin systems such as the Laerdal 3G Man have both substantial price tags (e.g. approximately $70,700 at TTC) and rather steep learning curves – both of which could discourage their use in nursing training. The TTC simulator lab coordinator in this study pointed out that they were using their 3G only “very scantily” to teach basic skills until they “were struggling, trying to figure out how to help our ESLs.” This study suggests that fully integrating simulator technology into the nursing teaching process may be a very effective learning performance enhancer that justifies its costs and efforts.

This study also has implications at the level of CTE nursing training programs, particularly for ESL students. The TTC simulation lab coordinator discussed the impacts on their LPN program if capable ESL students were lost. In addition to ethical concerns for attracting and retaining ESL students, faculty in many CTE programs are worried about program retention rates, professional certification rates, accreditation, and return-on-investment. The TTC coordinator affirmed this concern, stating that “if we can’t find a way to make our ESL student successful, then our…drop-out rate will be very high and, ultimately, if they should make it through the program, our Board passage rate will be very low, which can affect our accreditation….“ The coordinator further pointed out that they were planning to use the HESI admission tests as a tool to select who would be able to enter their LPN program. She stated that this process would have excluded all 10 of the ESL students in this study from even starting their program, yet they were able to succeed when the patient simulator was used for instruction. In difficult economic times when many programs must compete for students, new instructional
technologies that might help all capable students to successfully enter and complete CTE programs merit full investigation.

At occupational or industry level, a similar argument can be made. The nursing shortage documented at the beginning of this paper (Aiken, 2002; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; DHHS, 2000; Sammons, 2009) and its negative effects on health care are a significant concern to an aging American population. Nursing programs cannot afford to lose to attrition potentially successful personnel for the health care industry if this nursing shortage is to be addressed. If simulator technology can contribute to retention and course completion of trainee nurses, it should be fully investigated through studies similar to this one in various populations and settings. If this new technology continues to demonstrate positive learning effects and ability to retain nursing students and certify them into a health care system troubled by diminishing staff resources, they may justify their relatively high costs and help CTE to fulfill its primary role of workforce development.

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References


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‘REAL’ DATA IN THE INTRODUCTORY BUSINESS STATISTICS COURSE: USING CARBON EMISSIONS DATA TO ‘HEAT UP’ DESCRIPTIVE STATISTICS

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ABSTRACT

This paper explores using a carbon emissions dataset to enliven an introductory business statistics assignment with real data. The carbon emissions data have all of the desirable characteristics of real data in that a choice needs to be made as to which measure to use, and further the data have some desirable complex properties such as skewness and the presence of outliers. In addition, the complexities in the data allow elements of research and public policy complexities to also be introduced.
Prime the Pipeline Project: Innovative Instruction through Scientific Villages

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“Today, mathematics education faces 2 major challenges: raising the floor by expanding achievement for all, and lifting the ceiling of achievement to better prepare future leaders in mathematics, as well as science, engineering and technology” (AERA, 2006).

“If America is to sustain its international competitiveness, its national security, and quality of life for its citizens, then it must move quickly to achieve significant improvements of all students in mathematics and science.” (Business-Higher Education Forum, 2005).

These two quotes underscore the call to address national concerns regarding rigorous mathematics content, achievement for all students and professional development. Significant deficiencies in American K-12 mathematics education have been brought to light in many prominent reports e.g., A Nation at Risk (1983), Shaping the Future (George 1996), TIMSS (1998), the Glenn Commission (2000), and PISA (2003). It is worth noting that these reports span over twenty years but the issues they address remain unresolved. The consensus of these reports is that over one-third of the instructors who teach secondary school mathematics in the United States do not have a major or minor in mathematics, mathematics education,
nor in related disciplines. (Ingersoll 2007). Further those teaching middle school core areas, such as math are typically certified in elementary education hold generic multiple subjects certificates.

Student poor performance in middle school mathematics has been cited as a national problem. Cities across the nation are reporting failure rates in Algebra I in the range of 35% to 45%. In several districts, Algebra I has been cited as the major cause for school dropout. Some studies claim that students’ difficulties stem from a lack of preparation for algebra in the earlier grades. Other studies claim that students’ difficulties with math begin in grade 4 and that their interests in the study of math also begin to wane at that time. It is not clear which comes first, decline in achievement or loss of interest. Both conditions set the stage for math failure.

The need for more experts and innovators in the fields of science, technology, engineering, and mathematics in the United States has become a paramount for the success of the nation (National Science Board, 2008; Lewin & Couto, 2006; U.S. Department of Labor, 2008). While the need for more experts in STEM fields is increasing dramatically, the number of students who are pursuing college degrees in these fields is decreasing (NAEP, 2007; National Science Board, 2008; National Academies of Sciences, 2006, National Science Board, 2006). Factors that may be influencing this decrease may be: 1) lack of alignments between high school and college programs and skills needed for the workplace 2) students’ poor performance in high school mathematics and science (OECD, 2007); 3) students’ lack of knowledge of STEM careers 4) teachers under-prepared to engage high school students in the study of mathematics and science, and the use of technology
in investigating ways that mirror the types of projects and problems faced by the workforce (National Science Board, 2006).

Typically curriculum, particularly in the STEM disciplines (science, technology, mathematics, engineering and mathematics) has been siloized through the critical school years. These global imperative disciplines rarely connect to the content and intersections of the other disciplines.

Researchers have suggested the early introduction of complex mathematics to begin to address these needed exploration opportunities. Xin (2008) reported that introducing symbolic representation and algebraic thinking in earlier grades might facilitate a smoother transition from elementary to higher-level mathematics learning and improved middle school mathematics performance for students with learning disabilities.

Mathematics educators do agree that: (1) To enhance learning, students need more time on task; (2) Long-term projects that engage students in “hands-on” explorations and collaborations, and applications of mathematics to the solution of problems in other content areas, lead to deeper and longer-lasting understanding of concepts and skills; (3) Students can do more if challenged and expectations for their performance are higher; and (4) Focusing instruction in the lower grades on the development of key mathematical ideas that prepare students for the study of higher level mathematics, will result in greater success with the more advanced courses and concepts.

The Prime the Pipeline Project (P3) goal is to transcend traditional and stagnant borders between the critical elements of pedagogy and learning by creating and
evaluating new teaching and learning spaces. The P3 project developed Scientific Villages that provide a confluence of the STEM areas problems-based learning. The Villages are co-lead by university faculty and bench scientists from corporations and industry. The village participants include high school sophomores and high school STEM teachers who were side-by-side learners. An undergraduate student majoring in the STEM field served as a mentor. The villages are, in essence, multigenerational, multiethnic, multidisciplinary, and multiprofessional. The goals that have been met through the Villages include 1) increase student interest and success with the study of STEM in high school; 2) Increase student awareness of STEM careers, university preparation programs and their own talents as related to these fields; and 3) update teachers’ content in their own and related fields.

Each village focused on critical global issues such as strategic planning for wind turbines, cellular network communication, international clean room development, and 3-D visualization for architectural design. A follow-along research model has assessed longitudinal achievement and persistence of participants in STEM fields as well as teacher efficacy.
References


Organisation for Economic Co-operation and Development (2003). Programme for International Student Assessment. OECD.


In this paper, I examine the growing body of education-abroad literature on experiential/service learning programs available to North American students. Experiential/service learning programs entail short-term volunteer opportunities for youth. While some experiential/service learning programs take place within North America, there is a growing desire to travel internationally and to combine this travel experience with a volunteer placement for academic credit. In the United States, these programs are often referred to as service learning, while in Canada the terminology of experiential learning is frequently employed. In reviewing the available literature on experiential/service learning in international contexts, there is a widely held view that these programs have a positive impact on youth. Such programs are believed to offer enriching learning, personal growth and career opportunities for young North Americans. For my research I carried out interviews with 100 young Canadians who traveled abroad for experiential/service learning programs in developing countries. In this paper, I highlight the specific benefits of these educational programs as identified by Canadian youth between the ages of 18 and 30. In particular, I examine how overseas learning experiences have impacted their career goals and plans.
Undergraduate Student Perceptions of Affiliate Organization Contributions to What They Learn about Leadership While Serving as Officers in Professionally Oriented Clubs

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Abstract

This poster presentation will present a current study exploring undergraduate student perceptions of the contributions of a relationship with an organization outside the university to their experiences as leaders in a professionally oriented club. It focuses on student leaders of a Public Relations Student Society of America (PRSSA) chapter at a public state university in Northern California and its Public Relations Society of America (PRSA) affiliate.
Cases from the Field:
Preventing Litigation in the Trenches

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Cases from the Field:
Preventing Litigation in the Trenches

From the backdrop of case law, up to and including recent cases before the Supreme Court, narratives are presented from the field of an individual school district, describing particulars in the life of a superintendent/district in the area of religious controversy in the public schools and tactics utilized to avoid litigation. Samples of described events include a ‘little preacher’ on campus (8 year old, third grade student), volunteers (from churches) providing ‘guidance’ during recess breaks, removal of particular texts from the school (based on family values/morals), prayer in numerous locations on campus and the notorious ‘December Dilemmas’ that are posed to school districts throughout the nation.

Prevailing board policy and/or school policy dictates are impeccably scrutinized by the Courts when examining the factual basis of the cases presented. The Courts do not try to interfere with the administrative decisions of the schools, unless they are in conflict (in the case of religious controversy) with the 1st Amendment/Establishment Clause/Free Exercise Clause of the Constitution. Perception is important – what do children/those outside of the schools perceive? Do they perceive that favoritism of religion/practice is occurring? Do they perceive that the schools, by condoning the actions are endorsing religion (or a particular religion in the schools?) These questions and case precedent guide the decision making of the Courts. Leaders need to be informed of precedents in guiding their decision processes.

The Constitutional guidelines

1. **First Amendment:** Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press, or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

2. **Establishment Clause:** Prohibits the government from passing laws that aid a religion or show preference of one religion over another.

3. **Free Exercise Clause:** Prohibits the government from interfering with individual religious freedoms.

Rulings of cases have reflected multiple standards:

1. **Lemon Test:** 1971 – Lemon v. Kurzman – Three-prong test that stated that a governmental action or policy must:
   a. Have a secular purpose
   b. Neither advance nor inhibit religion
   c. Not cause excessive entanglement between government and religion.

For many years, if any one action failed any one of these three prongs it did not pass the constitutional test through the courts.
2. **Endorsement Test:** Have a purpose or effect of endorsing or disapproving religion.  
   (Example: Agostini v. Felton, 1997 – Payment of Title I Teachers)

3. **Coercion Test:** Place direct or indirect government coercion on individuals to profess a faith. (Examples: Ward v. Santa Fe Independent School District, 2004 – court maintained that the policy encouraged prayer on school property and at school-sponsored events and Dobrich v. Walls, 2005 – parents claimed they suffered retaliation after they sought to change a board policy regarding prayer as part of graduation ceremonies, board meetings, and other school activities).

Also Examined by the Courts

**Intent of School District Policies:** Courts began to look to the intent of school district policies and for any patterns that include prayer/devotionals in the schools.

**With Regard to Board Policies:** The courts are now looking towards principles of both neutrality and non-coercion.

**Case Study I**

Prayer at the flagpole: students, generally high school, gather around the flagpole at front of school prior to first period, hold hands and pray. This began with National Prayer Day, in 2006 on the fourth Wednesday in September. “See you at the pole” is an annual meeting for public prayer, generally organized by conservative Protestant public school students. In addition to the students who are actively engaged in the circle of prayer, others will 'look on' including parents who are dropping off students in front parking lot. The gathering became a concern when faculty/staff joined the students and prayed with them or led the prayers. Solution includes: at the beginning of each new school year, prior to first prayer, faculty/staff are informed of their rights re. religious activity at school. Specifically, we do not pray with the students, nor participate in this activity during school day. This is a student-initiated prayer, to be led by students to ensure that there is not a nexus of public school's endorsement of the activity. In addition, the administration determined that the ‘Amen’ needed to be stated in advance of the first school bell of the day.

**Court Decisions**

**Prayer/Restriction on Speech:** Restrictions on speech are also permissible in a limited open forum as long as they are related to the educational mission of the school.

*Board of Education of Westside Community Schools v. Mergens, 495 U.S. 226, 110 S. Ct. 2356 (1990)*

Supreme Court upheld Equal Access Act that most high school students could understand that a religious club was not an endorsement of religion by the schools. Students have a right to organize their own groups in public schools, whether these groups be religious, political, or philosophical. (Here it is important that teachers are not perceived to be leading prayer or leading the meeting)
If school has a limited open forum – the Supreme Court decided that a Christian Club could not be denied facilities.

**Higher Education (more recent)**

On June 28, 2010, the United States Supreme Court rendered its long-awaited decision in Christian Legal Society v. Martinez, concluding that the Hastings Law School, a public California institution, did not violate a student group’s constitutional rights when it denied the Christian Legal Society (CLS) official recognition because it discriminated on the basis of religion. (CLS sought to exclude potential members who did not share their religious beliefs, particularly with regard to pre-marital sexual activity and homosexuality.)

**Prayer at School Events and Graduation**

Public prayer before a sporting event was disallowed. Outlawed was a situation in which the state affirmatively sponsored the particular religious practice of prayer. The court felt that allowing students to include invocations did not remove school sponsorship and ruled that the school district’s policy permitting student-led, student-initiated prayer at football games violated the Establishment Clause.

Ruled that public school graduation ceremonies involving prayer cannot be in harmony with the First Amendments Command for neutrality.

U.S. Supreme Court remanded case to the Fifth Circuit which ruled and allowed student-initiated, student led prayer at the graduation ceremonies in Texas (this was in the school board policy).

No Child Left Behind (2002)
Requires schools that receive federal funds to certify that they have no policies that either deny or prevent participation in constitutionally protected prayer in the schools.

Ruling stated that prayer by teachers is not permissible during school hours – teachers cannot be perceived to be leading prayer.
Case Study II

Bible openly displayed on teacher's desk: Bible is consistently open on teacher's desk during instructional time. Principal has not observed the teacher reading silently nor reading aloud to students. The teacher is not instructing a class that would include Bible as literature or comparative religion. Does the mere display of a religious text/Bible promote a specific religion or any religion? Solution: in this case this was the least of the principal's worries about this teacher so principal dealt with issues that lead to "not recommending for rehire", rather than those of a religious nature – it could make a difference if the teacher was tenured.

Court Decisions

While this is not the best judgment, if the teacher is not proselytizing (and the action is not against specific board/school policies), this most probably could not be called to question, as the teacher has a right to have a ‘book’ open on her desk.


State enforced Bible reading and prayer in the public schools are unconstitutional.
(This case did not mandate any reading)


State statute requiring posting of copy of Ten Commandments in walls of each public classroom is violative of Establishment Clause.
(This case did not involve statute, only teacher’s decision)

*Roberts v. Madigan, 921 F. 2d. 1047, (10th Cir. 1990).*

Teacher had an open Bible on desk (and chose to read from it during silent reading) and on bookshelves (during open house). Ruling – for teacher. There was no indication that any statement of any kind was being made to the students, and the Court felt that the teacher had a right to read the Bible.
(The opposition stated – ‘It is unrealistic to think that bright energetic students are oblivious to what their teacher reads.’)

Minimally Related

*Cooper v. Eugene School District No. 4J, 301 Or. 358, 723 P. 2d, 298 (1986).*

Tenured teachers can have certificate revoked for violating state statute prohibiting the wearing of religious garb in school.
Case Study III

Removal of Webster’s Collegiate Dictionary from library: Parent of middle school student demanded this book be removed from middle school library as it included two definitions of oral sex and she thought this information was not age appropriate. This is not a clean religious issue except that 'family values/morals' come into the conversations which draw out the fundamentalists, i.e. Four Square Church. Solution: rely on Board Policy that spells out the process for reviewing a demand to remove. While the committee is reviewing the parent’s demand, we continued to have the book on the reference shelf in the library; cannot be checked out.

Court Decisions

“A local school board may not remove books from school libraries simply because it dislikes the ideas contained in the books.”

School Board restriction of access to Harry Potter violates the Constitution.

Virgil v. School Board of Columbia City, Florida, 862 F. 2d 1517 (11th Cir. 1989).
School Board’s removal of works by Aristophanes and Chaucer from Curriculum is reasonably related to legitimate pedagogical concerns. (Note: here it is the school board, not the parent who made the action)

Mozert v. Hawkins County Board of Education, 827 F. 2d 1058 (6th Cir. 1987).
Requirement that students study basic reader series does not violate the Free Exercise Clause.

Parent does not have a fundamental right to mandate school curriculum.

Case Study IV

"Little Preacher", an eight year old, third grade student, began to bring religious tracts from his church and distribute them to classmates during recess/lunchtime. He also urged them to attend church and accept God as their personal savior so they would have eternal life, quoting John 3:16. He was assertive and annoyed/alarmed students. Parents began to complain that their children were bringing home religious literature. The principal’s first step was to contact the boy's parents re. concerns. Parents were insistent that son had the right and religious obligation to continue to do the Lord's work at school. Solution: student could hand out literature to students who willingly accepted the pamphlet, but this was limited to before and after school. Fortunately, after a few weeks, his interest waned.
Court Decisions


Students do not leave their rights at ‘the school house gate’ and the material/incident needs to materially or substantially disrupt the school operation or infringe on the rights of others.

*Child Evangelism v. Montgomery County Public Schools*, 373 F. 3d 589 (4th Cir. 2004).

“We note that our holding accords with that of most other courts which have held that a public elementary school does not violate the Establishment Clause by similar distributions of flyers from private/religious organizations.” (However, the case above does not have the school distributing the flyers, so the issue in question would be if it is the perception of the students/parents that the school is endorsing it – by allowing the boy to distribute) Therefore, the decision of the school to allow literature to be handed out at a place of their choosing, outside of school time was the correct one.


and


“If defendants manipulated the facially neutral party so as to give preferential access to religious literature or certain religious literature, then an Establishment Clause violation might be declared.” (Here there were two teachers present at the flagpole at the beginning of the day – the Court of Appeals asked for reconsideration as they were not leading, but only present.)

The issue here is one of ‘infringing on the rights of others’ more than anything – as the case states “he was assertive and annoyed/alarmed students”.

Case Study V

Volunteers on campus: in our community we have a mega church that attracts many young families and teens. The attraction includes "Friday Night Out", teens gather at the church for music, games, food and religious instruction. Young adults who work at the church volunteer to assist at middle schools i.e. noon supervisors, playground supervisors. While supervising at lunch or PE, they invite students to the activities at the church and give them flyers to take home and inform parents of the activity. It progressed to the Friday Night Out event becoming a competition between schools, and the school with the most students present would be acknowledged and given a trophy to take to school on Monday. Solution: Board Policy re. volunteers on campus was amended. Each volunteer must now read/sign an agreement re. the role of a volunteer and the “Don't List” which includes a discussion of religion.

Here, the decision to amend the school board policy was an important one as it could be perceived that the decision was ENDORSING a religious viewpoint. As with the case above, the administrator can choose WHERE AND WHEN flyers are distributed.
Case Study VI

The December Dilemmas: term used for the quandaries and anxieties in December when dealing with religious and non-religious holidays in public schools. Prime examples include Christmas trees in district and school's offices, concerts and programs that are dominated by religious music and symbols, i.e. Nativity scene, miracle of Hanukkah, menorah. Solution: refer to the recommendations of Charles Haynes and Oliver Thomas and enlist the support of clergy and parents when writing your district's policies. These are dilemmas that escalate quickly and appear to be insensitive to both the Christians and non-Christian communities. The "plastic reindeer test" that is predominance of non-religious symbols, driedels, and Frosty the Snowman can be offensive to those who want Christmas in public schools to be Christian in message. The line must be that our role is not to observe a religious holiday or honor one religion over another. We can display symbols for a limited time and discuss in context of the holiday.

Court Decisions


This is a case regarding the celebration of public holidays, which has cultural significance and often religious significance as well. The Court upheld the inclusion of a nativity scene in a holiday display that also included other non-Christian symbols.

Supreme Court indicated, in 1984, that there was not an issue with religious significance, but this was a court divided.


Supreme Court ruled that a nativity scene in the county courthouse violated the Establishment Clause because it had the effect of endorsing religion.

The issue of the proper role of religion in the public schools continues to be the subject of great controversy. School officials, board members, parents and students grapple with these complex questions every day. Decision makers must address many competing demands, consistently looking to balance the dual constitutional mandates of separation of church and state and the right to freely exercise religion. Decision makers must include in their thinking the needs and rights of both the religious and the non-religious.

The role of religion in public schools does not have to be divisive. Boards of Education must adopt clear policies and administrative regulations regarding religion in the public schools that meet the letter and intent of the First Amendment. Parents, students, clergy and staff should become involved in the process of discussing these policies with the common goal to ensure that the vision of religious liberty upon which this nation was founded is preserved. All leaders – as an imperative – need to continue to be informed.
References

Board of Education of Westside Community Schools v. Mergens, 495 U.S. 226, 110 S. Ct. 2356 (1990)
Child Evangelism v. Montgomery County Public Schools, 373 F. 3d 589 (4th Cir. 2004).
Mozert v. Hawkins County Board of Education, 827 F. 2d 1058 (6th Cir. 1987).
Roberts v. Madigan, 921 F. 2d. 1047, (10th Cir. 1990).
Virgil v. School Board of Columbia City, Florida, 862 F. 2d 1517 (11th Cir. 1989).
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Second Language Pragmatic Development through Technology Mediated Strategic Interaction

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Abstract

In this proceedings paper, I report on an ongoing research project, focusing on data collection and analysis frameworks, to design and implement an effective approach to teaching interlanguage pragmatics in an EFL context. The pedagogy is organized through strategic interaction (SI) (Di Pietro, 1987), and is mediated by use of model conversations, online wiki space, and digital video technologies. Participants at a Japanese university engaged in an SI routine within the context of learning politeness strategies for a Business English course. Transcripts from spoken performance are compared longitudinally with data from pre and posttest written discourse completion tasks. A functional perspective on language use (Luria, 1992; Ahmed, 1994; Frawley and Lantolf, 1985; Frawley, 1987) provides insight into shifts in learner development from object and other regulation, towards more independent and creative language use, defined as self-regulation, as the participants engage with the teaching/learning cycle.

Key words: Mediation; Strategic Interaction; Pragmatics; Technology; Sociocultural; Wiki
Introduction

Teaching English in a Japanese university context has constraints that have been well documented. Cultural concerns have been cited to explain low learner motivation (Yashima, 2002), classroom anxiety, and general lack of confidence in communicating (Kitano, 2001). Building a classroom curriculum that accounts for these issues is challenging. In this paper, I describe one possible approach to solving these issues, strategic interaction (SI), and highlight a procedure that is in the process of being developed at two university programs in Japan. The nature of SI, as detailed below, mean that it is ideally suited to dealing with pragmatic issues in the classroom, an area of particular concern for business communication, that has been described as a difficult area to teach. Specifically, I am interested here in detailing the research design and data analysis aspect of this ongoing teaching/research program, which is important to establish the learning outcomes and overall efficacy of this approach.

Teaching Pragmatics

Pragmatics is usefully defined by Kasper and Rose (2001) as “the study of communicative action in its sociocultural context” (p.2) which places linguistic choice in a particular social context with specific interpersonal meanings governing those choices. The importance of interlanguage pragmatics in language education was underlined by its explicit inclusion in influential models of communicative competence (Canale and Swain, 1980; Bachman, 1990). Though pragmatic awareness and deployment of pragmatically sensitive language has been deemed an important element of what it means
to communicate effectively, questions have arisen about how, and indeed, if, pragmatics can be effectively taught and learnt in a classroom setting (Kasper and Rose, 2001). This concern is of course particularly salient in an EFL context where learners may have limited exposure to native speakers of the target language. As Kondo (2008) helpfully reminds us, simply providing learners with scripts and examples of use related to particular situations, and asking them to memorize them, is hardly likely to produce a functional pragmatic understanding.

Much work in teaching pragmatics has focused on understanding and production of speech acts (Cohen, 1996), including refusals, apologies, requests, and complaining (Rose and Kasper, 2001). Generally, the approach taken has been a cognitive one where developing pragmatic competence is seen as an individual mental process (Soler and Martinez-Flor, 2008). In this research, we take a sociocultural perspective in which development of pragmatic competence is essentially a social undertaking involving the gradual internalization and control over socially constructed forms of mediation. As Lantolf and Thorne (2005) explain: “…schooling is the fundamental site where conceptual knowledge is brought into conscious awareness and appropriated as a means of enhancing our self-regulatory capacity” (p.148).
Strategic Interaction 2.0

Our work in two university contexts in Japan (see deHaan et al, 2012) draws upon the teaching and research paradigm outlined by Di Pietro (1987). In short, the basic notion of SI revolves around the dramatic tension of completing a scenario in which each participant plays a different and often conflicting role. Dramatic tension arises through the uncertainty of the role that each participant is playing, as well as the exact nature of the situation that emerges much like the unfolding interactions of everyday life. The suggested routine of activity to enact a scenario, as detailed in the original text (p. 2), is as follows:

Pre-class Preparation:
In this initial stage, a scenario is selected and role cards created for each of the participants. These cards outline the basic premise of the interaction and suggest a goal and desired outcome for that learner.
Phase 1: (Rehearsal)
In rehearsal, students form groups and prepare “agendas” to fulfil the requirements that have been suggested for their roles in the scenario. The instructor guides the learners wherever necessary.
Phase 2: (Performance)
Students perform their roles while the remainder of the class observe.
Phase 3: (Debriefing)
Teacher leads the entire class in a discussion of the student performance.

To fully appreciate the proposal made by Di Pietro (1987), it is necessary to reflect upon his understanding of language. Firstly, Di Pietro was concerned with placing the learner and learner identity at the heart of second language learning and teaching. As Lantolf (1993) explains: “Di Pietro’s fundamental concern is with how language serves to construct a self and with helping learners develop that linguistically configured self in a second language “ (p.221). It is this feature of his approach that makes it particularly
suitable for the teaching of pragmatics, where linguistic choice is so clearly related to personal and interpersonal factors, as mentioned above. Di Pietro (1987) considered the following three dimensions to language as important to consider when designing second language instruction:

1. Information exchange (focus on grammatical orientation)
2. Transaction (negotiation and expression of speaker intentions)
3. Interaction (how language works to portray roles and speaker identities)

Di Pietro (1987) suggested that in many communicatively oriented language classrooms, where “authentic” communication is the stated purpose of the classroom activity, in reality learners exchange linguistic tokens according to rigid criteria. While these exchanges may illicit production of target forms, because they are removed from the reality of life outside of the classroom, the tokens are not animated by genuine speaker intention. There is therefore, no real communicative act, or sense of self, at stake. As described above it is this self and the interpersonal aspects of communication that make SI particularly attractive in a Business English context where intercultural communication is key. This personal engagement was felt by Di Pietro to be crucial for language development.

Developments in classroom technology and their widespread availability in many educational settings means that we are able to adapt Di Pietro’s (1987) pedagogy to fit our own purposes and provide our learners with staged and efficacious learning affordances (van Lier, 2008). As detailed in de Haan et al (2012), we employ digital video technology and an online wiki to create a cycle of interaction and activity,
specifically designed to provide learners with preparation, performance, instruction related to performance, and further performance (see Figure 1). A particular feature of this cycle is the learner transcription and reflection phase in which the learners own language becomes an artifact to mediate awareness and development. Using learner language in this way has been shown to be beneficial to language development (Swain and Lapkin, 2008).

Figure 1.

*Performance and Data Collection Routine*

The 2.0 version of SI then follows the following sequence. In the teaching situation detailed in this paper, the teaching goal is firstly the grammatical structures (e.g. modal plus main verb) related to the speech acts of request and refusal in a business context.
How and why different kinds of apology and refusal may be meaningfully and appropriately deployed then becomes central.

1. Discussion of business meeting setting and related speech acts. How might Japan and the US off cultural differences?
2. Study model conversation of a business meeting that features intercultural communication and target speech acts.
3. In groups, learners are given one of two roles to play in a business meeting.
4. After preparation and focus on key vocabulary and the details of their task, the learners are randomly assigned a partner from the different group to come together and perform the SI.
5. Performance is recorded and uploaded into the class wiki. The pair then review their own performance and transcribe it. The transcription is placed below the video on the wiki page.
6. The instructor reviews the performance with the learners and answers questions and offers guidance for improvement wherever appropriate.
7. The second performance takes place. This involves a slight change to the scenario to maintain the dramatic tension and may also involve switching the pairings at the discretion of the instructor.
8. Second performance is recorded and placed in the class wiki. Learners comment and reflect on the changes. An instructor led, full-class debriefing may also take place.

Data Collection and Analysis

In order to better understand the impact of the pedagogical design outlined above, we have implemented a pre- and posttest data collection procedure using written discourse completion tasks (WDCT), following Cohen (1996). This type of assessment has been widely used in speech act research, including apologies, refusals and requests (e.g. Cohen et al, 1986; Kondo, 2008), and these written tasks have been found to be a reliable and consistent means of assessing pragmatic ability (Rose, 1994; Brown, 2008). The instrument was designed to test appropriate response on a range of functions across
the different aspects of pragmatic communication, as outlined by Levinson (1983); and is based upon previous research in testing pragmatic ability (Hudson et al, 1995).

Table 1
Design of Items for WDC

<table>
<thead>
<tr>
<th>Two functions</th>
<th>Eight item types</th>
</tr>
</thead>
<tbody>
<tr>
<td>+I+P+D</td>
<td>+I+P-D</td>
</tr>
<tr>
<td>+I-P+D</td>
<td>+I-P-D</td>
</tr>
<tr>
<td>-I+P+D</td>
<td>-I+P-D</td>
</tr>
<tr>
<td>-I-P+D</td>
<td>-I-P-D</td>
</tr>
<tr>
<td>Requests</td>
<td>Item 1</td>
</tr>
<tr>
<td></td>
<td>Item 3</td>
</tr>
<tr>
<td></td>
<td>Item 5</td>
</tr>
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<td></td>
<td>Item 7</td>
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<td>Item 9</td>
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<td></td>
<td>Item 11</td>
</tr>
<tr>
<td></td>
<td>Item 13</td>
</tr>
<tr>
<td></td>
<td>Item 15</td>
</tr>
<tr>
<td>Refusals</td>
<td>Item 2</td>
</tr>
<tr>
<td></td>
<td>Item 4</td>
</tr>
<tr>
<td></td>
<td>Item 6</td>
</tr>
<tr>
<td></td>
<td>Item 8</td>
</tr>
<tr>
<td></td>
<td>Item 10</td>
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<tr>
<td></td>
<td>Item 12</td>
</tr>
<tr>
<td></td>
<td>Item 14</td>
</tr>
<tr>
<td></td>
<td>Item 16</td>
</tr>
</tbody>
</table>

+- I, P and D = +- Imposition, Power, Distance

*Power*: is the relative difference between the listener and speaker due to rank, professional status, etc.

*Distance*: is the social distance between the listener and speaker due to familiarity or shared solidarity due to group membership.

*Imposition*: is the degree of imposition imposed by the speech act within the cultural context based on expenditure or obligation.

This scheme then guided the creation of the test items, written with a business context in mind, so that a broad spectrum of pragmatic understanding and use could be assessed.

The items were written and then the contextual information was translated into Japanese so that there would be no misunderstanding about the details of the situation. This created 16 items in total and in both pre and posttest, the respondents were given 2 minutes to read the item and give their response to each one. An example item with assessment rubric was as follows:
**Item 1 (+I+P+D) - Apology for late project**

You are in a meeting with a manager from Head Office. He has set you a deadline to complete an important advertising project. However, you have not yet completed the project and you will need one more week to finish. Request more time from your manager:

**Manager: So I wanted the work on the advertising to be finished by today.**

**You:**

<table>
<thead>
<tr>
<th>Request</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very unsatisfactory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Completely appropriate</td>
</tr>
</tbody>
</table>

The data from both pre and posttest, given just before and just after the SI procedure, was rated according to appropriateness, and the two performances compared. This data is used then to trace and assess the impact of the teaching cycle. For each study participant, it is possible to compare the written and spoken data longitudinally and for this purpose, an analysis protocol was designed (Table 2). Taking a functional view of language (Luria, 1982; Ahmed, 1994) we are interested in changes in regulation from object, through other and towards self-regulation. As Ahmed (1994) explains:

“The task of the researcher is to discover if the speech of the interlocuters shows evidence of object regulation, other regulation or self regulation. This is achieved through careful analysis of the relationship between task factors and specific linguistic forms manifested in the speech of the interlocuters” (p. 160)

At the outset, we expect to find the participants relying upon external means found in the learning ecology, such as the model dialogue, the instructor, and/or their peers, to
complete the communicative tasks. Evidence revealed in microgenetic analysis (see Lantolf and Thorne, 2005) of learner discourse will reveal shifts in operation towards increasing self-reliance and control over the meaning making resources of the language.

Table 2.

*Analysis Protocol for Speech Act Development*

<table>
<thead>
<tr>
<th>Category</th>
<th>Speech Act</th>
<th>Pre-test</th>
<th>Transcript 1</th>
<th>Student Corrections</th>
<th>Transcript 2</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis of Learner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulation</td>
<td></td>
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</tr>
</tbody>
</table>

The protocol for analysis provides insight into development across the semester, as performance changes over time can be seen in different stages of mediation.

**Conclusion**

The teaching of intercultural pragmatics is an important aspect of Business English, due to the importance of cross-cultural interaction. Strategic Interaction, enhanced through application of digital technology, has the potential to provide learners with powerful and effective learning affordances. In a Japanese context, where there may be several constraining factors such as large class size and shyness, involving learners in a cycle of activity where they interact and reflect on their own language performances may prove beneficial (Oda, 1993). As well as improving motivation and having the
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learners become active participants in their own classrooms, SI provides experience with the real world drama and tension of daily interaction. In order to assess the effectiveness of this approach, however, it is also important to collect and analyze performance data in a meaningful and appropriate way. By comparing data from written discourse completion tasks with transcripts of learner performance and correction, within the context of the mediational means provided through instruction, we hope to gain further insight into the impact of our pedagogical design.
Bibliography


Open Online Forum: The New Channel of Communication
Between Students, Teachers and School Management

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**Introduction:**

In the past, education was merely to transmit knowledge from an individual or an entity, i.e. the teacher or the school, to a general population of receivers, the students. No longer is this definition sufficient for the modern society. Education must encompass much more than just knowledge. It must instill other aspects of life such as character, value and leadership in the students.\[^1\] These intangible aspects require more than just the classroom experience.

With the turn of the millennium well behind us already, we are indeed venturing into the information era. Technologies are matured enough that every aspect of our daily lives relies, to some extent, on the computer and the computer network.\[^2\] Education is no different. In fact, higher-level education has been on the forefront of information technology and much of the knowledge we know originates from universities and institutes.\[^3\] With the help of the Internet and Intranet, people are able to share their experience and point of view on platforms and chatrooms that incubate ideas and policies. Open Forum is exactly such platform in which people can publicly and anonymously post thoughts and comments to certain subjects that are being discussed by members of the forum.

On the secondary-level education, however, information technology is still mostly limited to classroom lecturing and teacher research. There are very few school-sponsored open forums encouraging students to express their opinions like most universities have. Students usually have to go to commercial websites to create and organize such forums. Should middle schools take over these...
forums then? Should schools allocate resources to monitor and administer them? What will be the benefit of such forums in terms of pedagogy, learning, information sharing and policy making? What will be the pitfalls and drawbacks if these forums are not properly managed? How do schools take advantage of this new trend by making learning more efficient through the use of open forum? How can schools optimize communication by encouraging ideas and views from both students and teachers in these forums? These are answers that schools would like to have answers to before they can proceed to embrace this new wave of learning method.

This research aims to investigate the application of the open forum technology in the education realm and how it can help schools to adapt to this new phenomenon.

**Proposed benefits of open forums:**

a) *An environment of open atmosphere:* Open forums create an environment of open atmosphere in the schools. They show that the schools care about what the students think and are willing to hear what the students have to say about regulations and policies. Commercial websites do offer such forums to students from different schools but their target is usually limited. It is not hard to notice that only a few specific users frequently visit these forums. Thus, the opinions expressed there are usually very narrow and subjective. If schools offer their own forums, they can promote them to their students and encourage students to take part in them. With more students participating, the views gathered will be more objective and representative.
b) **Collect constructive suggestions from students:** Students need to learn how to express themselves. It is not an easy task. Natural instincts do not necessarily include the ability to clearly put into words what is in one's mind. It takes practice. Most of the time, it also takes courage. That is why not every student is willing to speak out in class. The open forums provide a very convenient platform for students to practice how to effectively organize their thoughts and let everyone know what they actually feel and think. They can raise questions; they can answer other people's questions; they can agree with some people's opinion but they can definitely disagree with some others. It will not be an overnight job though. However, through constant questioning and answering and constructive arguing, they will be more comfortable expressing their views. They will find that when they go to universities, it will not be so difficult for them to quickly adapt to the new openness of college life.

c) **Feedbacks on school policies and activities:** School policies are not necessarily always correct, especially new policies. However, policy makers do not always see from the students’ angle. Sometimes it is because they are not willing, but most of the time it is because they are not able to. Students usually do not express negative feelings to school policies in front of their teachers. Sometimes these negative feelings are legitimate. Students are not always wrong. The open forums can let them air their feelings and suggestions. These suggestions may turn into constructive modifications to school policies. Also, there are many school activities and events throughout the school year. Students may not tell teachers face-to-face what they think about these events but they will most likely say
their words in the forums. Schools can then collect these feedbacks and make improvements to subsequent activities and events.

d) **A platform to acquire information for students:** Most schools have websites and they usually make announcements on the school websites. However, these announcements are usually important notifications and target all students in the school. However, students have many small questions about school affairs and they cannot find all the answers on the school website. Alternatively, they can ask their questions in the forums. As one may observe, questions in forums are always answered, usually with the right information. Some people out there always have the right information and they are usually eager to answer. Thus, it reduces the chance for students to miss out on a meeting or to be late on an activity or to forget about a test date, etc.

e) **Sub-forums: English/Science/Math etc:** There are many extra-curriculum clubs in a school, English Club, Math Club, Science Club, etc. They meet regularly and conduct workshops or seminars from time to time. They may or may not otherwise see or communicate with each other. A sub-forum for each of these clubs may help bond them together better. Someone from the English Club may post a digest on a novel he just read. A Math Club student may show an alternative answer to a very hard question. A Dance Club member may post a video clip of her dancing a move that she invented. Over time, if this culture of open forum is propagated throughout the schools, it will greatly enhance the performance of these special interest clubs.
Potential pitfalls:

a) *Postings can turn into hostile attacks:* As with any other societies, freedom to express opinions usually comes with disparity in opinions. This disparity is healthy and is the very essence of open forums. However, if left unchecked, the difference in views may turn into extremities. Very often, posts in the forum may turn into hostile attacks on posters. Since the posters are all students, they may not be matured enough to control what they have to say. Many users will attack on other users' suggestions. They might degrade other people's character. They might even use vulgar on other users.

b) *Teachers will feel ‘insecure’:* Occasionally, students will use the forum to discuss about their teachers. Sometimes the discussion may be about their discontent towards certain teachers. As a result, teachers may feel 'insecure' due to this vulnerability of potentially being attacked by students. One may view this vulnerability as incentives for teachers to constantly improve themselves. Others may view this insecurity as interference with teachers' regular duties and may cause teachers to work under constant fear. Whichever stand one may take, schools should take extreme precaution to maintain a positive atmosphere in these forums to encourage constructive inputs from students rather than just trash talk.

c) *School policies will meet ‘resistance’:* Just as with teachers, students may also dislike school policies. School policies usually appear to be on the
opposite side of students' preferences. Therefore, it is easy for students to generate resonance in the forums if they oppose certain school policies. Thus, every time a school tries to insert a new regulation or modify an old rule, it might meet some resistance from the students.

**Implication at various dimensions of the open forum in schools:**

The effect of adapting the open forum in schools may go well beyond academic. It is going to change the sociological relationships between students and teachers, teachers and management, students and students, and even students and management. The power struggle between each party in the school will take a new form. The very anonymity of the open forum will expose everything in front of everybody. Teachers can no longer afford to ignore student demands. Management can no longer afford to ignore teacher demands. Everything is up for praise or scrutiny. Everybody is linked together by an invisible, yet more powerful bond. Management hierarchy will be enhanced or shaken depending on the generation and distribution of information over the network.

The open forum will also have an impact on the traditional curriculum development. Curriculum theory describes itself as in four domains: the content, the product, the process and the praxis. Schools typically follow the content or the product approach. However, the content and product approaches usually neglect the learning experience of the students. Curriculum is rigidly set out by school management and usually has little room for evolvement. The process approach of curriculum theory suggests that curriculum be dynamic and
adaptive.\[5\] Through the learning experience of the students, schools should improve and shape their curriculum to reflect the needs of the students as well. The open forum is exactly the vehicle for schools and students to exchange this vital information on the optimization of their curriculum.

**Conclusion:**

Open forums are platforms for people to share views and express opinions. When they are applied to middle schools, one must weight the advantages and disadvantages of such forums. These forums promote freedom of speech, generate constructive suggestions, collect feedbacks on policies, provide information for students and create space for special interest clubs. On the other hand, they may turn into hotbeds for battleground; arouse insecurity in teachers and raise resistance to rules and regulations. Schools need to exercise extreme caution and utilize considerable resources to maintain these forums. When operated effectively, open forums can be a great tool to enhance student quality and school reputation. However, if managed poorly and incorrectly, open forums can also be the source of unrest and dissatisfaction.
References:


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First Year Teachers’ Experiences Directing the Work of an Educational Assistant in the Classroom

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First Year Teachers’ Experiences Directing the Work of Educational Assistants in the Classroom

Rosemary Vogt, University of Manitoba

Abstract: Educational Assistants (EA’s) are persons hired by school divisions to provide support for classroom teachers, or students with special needs. It is often noted that the supervision of EA’s falls on the shoulders of classroom teachers who are relatively unprepared for supervising and directing the work of another adult in the classroom. Additionally, many teachers are uncertain about the fundamental roles and responsibilities of EA’s. The current study helps to fill some gaps in the literature regarding first year teacher preparedness to direct the work of a paraprofessional in the classroom. Better understanding of the issue can lead to improving pre-service teacher education as well as provide a rational for on-going in-service teacher training.

Educational assistants (EA’s, paraeducators, paraprofessionals) are persons hired by school divisions to provide support for classroom teachers, or students with special needs. “A paraprofessional may be assigned as an assistant to the whole class or to help support a subset of students that have learning, personal care, or behavioral needs” (Causton-Theoharis et al., 2007). It is often noted that the supervision of educational assistants falls on the shoulders of classroom teachers who are relatively unprepared for supervising and directing the work of another adult in the classroom. Additionally, many teachers are uncertain about the fundamental roles and responsibilities of educational assistants and may have questions about how best to direct the work of paraprofessionals (Causton-Theoharis et al., 2007). The literature draws attention to training requirements and initiatives for educational assistants (Carroll, 2001, Riggs, 2001, Cobb, 2007, Christie, 2002), yet little attention has been paid in the research to the competencies required by first year teachers to supervise and direct the work of educational assistants (Morgan et al, 1998).

In her thesis, Jennifer Ramsey (2007) examines the relationship between an educational assistant and a classroom teacher and how that relationship impacts student success. She agrees that many teachers are unprepared to direct the work of another adult in the classroom and the majority of her research derived from interviews and classroom data focuses on paraeducator preparedness. The four themes that emerged from her data were;

1) The importance of shared beliefs about working together;
2) A responsive student centered practice, although together, yet in distinct roles;
3) A supportive working environment, and

4) An inclusive school culture.

Ramsey’s findings support the importance of creating and maintaining effective working relationships between educational assistants and classroom teachers. Yet, more research is needed about first year teacher’s preparedness and experiences directing the work of an educational assistant in the classroom.

A study by Marie Tejero Hughes, and Diana Martinez Valle-Riestra (2008) investigates the perceptions of paraprofessionals working with young children who have disabilities as well as teacher’s perceptions of the roles and responsibilities and level of preparedness of paraprofessionals. Identifying that many professional development opportunities were available to both teachers and paraprofessionals in the survey group, the degree of support was particularly valuable to teachers because:

Few teacher preparation programs at institutions of higher education in the USA offer segments or courses that equip teachers to manage another adult’s activities or design experiences or opportunities for teachers to have hands-on experience with paraprofessionals prior to program completion. Thus, most teachers are not adequately prepared to work with the paraprofessional in the class. (Tejero Hughes & Martinez Valle-Riestra, 2008)

In order for teacher and paraprofessional teams to better meet the individual needs of students with disabilities, “teachers need to be provided with preparation on how to consult and supervise another adult in the classroom” (Tejero Hughes & Martinez Valle-Riestra, 2008).

John Rosales (2002) examines teacher and paraprofessional partnerships in “What’s the Secret Behind Successful Teacher-Para Relationships”. From data he collected through interviews with three experienced paraeducators on what makes the relationship between the teacher and the paraeducator click, Rosales identifies mutual respect, teamwork and common goals. Not knowing the role of the paraeducator was identified as the most common error made by new teachers regarding the supervision of paraeducators. Paraeducators commented, “They sometimes think para’s are there for clerical purposes – copying, correcting papers – instead of working directly with students as support” (Rosales, 2002). Rosales’ (2002) work is one-sided and biased stemming entirely from paraeducator interviews. The teachers’ voice about their experiences directing the work of paraeducators has been overlooked entirely.

The current study helps to fill in some of the gaps in the literature regarding first year teacher preparedness to direct the work of a paraprofessional in the classroom. Better understanding of the issue can lead to improving pre-service teacher education as well as provide a rational for on-
going in-service teacher training. As leaders in an educational team, it is essential that classroom teachers are adequately prepared to direct the work of paraprofessionals in the classroom. That they have a clear understanding of what is expected of them in directing a paraprofessional, as well as awareness and understanding of paraeducator roles and responsibilities. Whereas, most of the previous studies have examined preparing and managing paraprofessionals (Trautman, 2004) and creating effective teacher paraprofessional teams (Devlin, 2009), there has been little focus, if any on teacher preparedness to direct the work of a paraeducator in the classroom.

The present study investigates the perceptions of three first year teachers who direct the work of paraeducators in their classroom using the following overarching research questions:

1) In what capacity do you currently work with an educational assistant?
2) What are your experiences with directing the work of educational assistants?
3) How did your university education prepare you for directing the work of educational assistants?
4) What questions do you have about directing the work of educational assistants?
5) Does your school have a document which addresses the roles and responsibilities of educational assistants?
6) Do you know if Manitoba Education and training has a document that addresses the roles and responsibilities of educational assistants?

Method

Design

This study employed a descriptive, qualitative design. Data were collected through face-to-face interviews between March and April 2010 with participants from a sample of schools from a school division where administrators had granted permission for exploring first year teacher’s experiences directing the work of an educational assistant in the classroom.

Recruitment and Selection of Participants

Participants for the study were recruited with the assistance of a school board administrator from the school board that granted permission to conduct the study with teachers from within the school division. All three participants were caucasian females in their first year of teaching having graduated from university with the appropriate qualifications required for their position.
Settings

The three classroom teachers that participated in this study work in rural community settings. They span grade levels from Kindergarten to Grade 9. All participants were graduates from a university in the same province.

Procedure

The school district provided the names of first year teachers who worked with educational assistants. One of the participants was recruited through word of mouth. The teachers were initially contacted through email and telephone during which time the purpose and procedure of the study was explained and a mutually agreed upon location for the interview was determined.

Findings

Current Capacity Working with an Educational Assistant

First year classroom teachers reported various capacities in which they currently work with an educational assistant in the classroom.

Participant #1 stated:

I have an EA that comes in for part of the morning. I will have her help me out with starting the day, generally with the morning tasks. She/he will help me with either going through some agenda’s or check homework. Then, if we do something like math, I have him/her working with a group of students or sometimes one on one with just one student either helping them catch up on something or giving them the one on one help that they may need that I can’t possibly give at that time. In the afternoon I have a different EA and she/he helps me with jobs that need to be done. During the last hour of the day we generally have guided reading and she/he will help keep the class quiet, or help out again with a small group of students to get some writing down, talk through something they have read and just kind of keep the classroom management under control while I’m busy doing something else.

Participant #2 stated:

I have two funded children in my classroom so I have an EA that’s with me until 1:45 and then another one comes in from 1:45 until the end of the day. So I have two EA’s in my classroom all day long. I shouldn’t say that both of them are with me all day long. I have an EA in the classroom all day long. You know this is my first year. I haven’t worked with EA’s before. During my student teaching I worked with one EA, and that was for only half the day, and then the classroom teacher was directing the EA. So now, in my first year of teaching, I don’t have this experience working with EA’s, and it’s been a learning curve for me. I’ve been working with the resource teacher to figure it out. I
feel so young, and the EA’s are a lot older than I am. I’ve had to step up and say, “O.K., I am the teacher” and I just need to gain confidence in talking to an older adult.

Participant #3 stated:

I don’t have an EA that’s assigned to me personally, but I have them come in with particular groups of students [junior high]. So this term, I have probably worked with three different EA’s and last term I also worked with three. I find it really difficult. I’m not really sure what is o.k to ask and what isn’t o.k to ask and I’m not sure what their primary responsibilities are. When they come with one student, I know that their primary responsibility is that one student, but when they’re assigned to a class, I find it hard to figure out what’s o.k. to ask them to do. I know that the ones that come in with specific students, like if they’re attached to a student, they’re responsibility is that student and sort of helping them get through, so I’m not too worried about them.

Participant responses indicate that classroom teachers work with educational assistants in various capacities in the classroom. They may assist with:

- Starting out the day
- Morning tasks
- Homework and agenda checks
- Provide one on one assistance to struggling students while the teacher is engaged elsewhere in the classroom
- Assist with classroom management, and
- Assist with reading comprehension, discussion and writing.

An emerging theme indicates that all of the teachers work with two or more educational assistants through the course of the day. Two teachers stated that they had not worked with EA’s prior to their first year of teaching. One teacher stated they did not bring any experience to directing the work of an EA as they had only worked with an EA once before during their student practicum and that EA had only been present for half of the day, and then the cooperating teacher was directing the work of the EA. One teacher identified the learning process as a “learning curve”, involving collaboration with the resource teacher, feeling young compared to older EA’S and the need to develop confidence. Another respondent identified not being sure what’s o.k and what is not o.k to ask the EA to do.

**Personal Experiences Directing the Work of an Educational Assistant**

When asked about personal experiences directing the work of educational assistants, participants replied as follows:

Participant #1:
What I do is if there is something that they can quickly help me with right away, then I’ll direct them to that, sometimes it’s photocopying something quickly, or if I know a student is struggling, then they can go to that student. I have a bin in the classroom of just kind of odd jobs that if there is nothing to do, they can go to that bin and just help me out that way. At the end of the day during our guided reading time, I talk to him/her about something new that I want him/her to do. Sometimes he/she takes one student specifically and helps them, either guiding through something they have just read, or helping them write down something. Students really appreciate just having him/her around to talk through what they have read.

Participant #2:

My experience has been learned. Like I noticed that one of the EA’s that I work with just did not take a lot of initiative to do anything. So I just mentioned this to the resource teacher because the school that I work at, the resource teacher is the supervisor for all the EA’S. If there are issues or difficulties, we just talk to the resource teacher, and she sort of gives us strategies, or tells us how to work with the EA. So the resource teacher just said, “You know, you are the teacher, and if something is bothering you, you need to be able to go and talk to him/her. At that time I also told the resource teacher that I struggle with confidence because the EA is a lot older that I am. The resource teacher gave me a boost of confidence to go and talk to the EA and I just approached it in such a way that it was more casual in conversation, like, “Oh, by the way, just make sure you’re always checking over the schedule I gave you. That’s one of the ways I helped the EA take more initiative, because I made a schedule for him/her on the six day cycle. When EA’s stay in my classroom, they are both specifically assigned to two students. That is their first job. They look after the two students to see if they need help with their assignments, behaviorally, or if they need any reminders. Near the beginning of the year, the one EA that I work with would check on the student he/she was assigned to, and if that student wasn’t needing any help, sometimes I would see him/her sitting down on a chair, and that’s where initiative comes in. So I said, “You know, walk around the class, see if anyone else needs help because it’s really a classroom job. I don’t view it as just a one student job. Yes, you’re in the classroom to help this one student, but if that student doesn’t need help, then take initiative and go help others, because we know that all students need help, and they’re not all assigned to EA’s. She’s better now about monitoring and going around to see if anyone else needs help.

Participant #3:

Like I said, I find it really difficult to know what’s o.k. to ask them to do and what isn’t. For example, when the class is working on an activity or a project the EA’s wander around to make sure all the kids are o.k., especially the kids that they know will have more trouble with very specific instructions. Sometimes they’ll help the kids take notes but beyond that I find it really hard to know what’s o.k to ask them to do, and I feel uncomfortable about that. I know that the ones that come in with specific students, like if they’re attached to “A” student, they’re responsibility is that student.
Participant responses indicate that classroom teachers have varied experiences directing the work of educational assistants. Directing may mean having the EA:

- Help with immediate needs, sometimes photocopying, sometimes odd jobs
- Assisting a struggling student, talking through a task
- Guiding a student through reading
- Guiding a student through writing
- Guiding a student through an assignment
- Following a classroom schedule
- Learning to take more initiative in the classroom
- Participating in student behavior coaching

Each of the respondents identified different experiences directing the work on an EA. While Respondent #1, focused on directing the EA to assist with immediate needs of students in the classroom, or the class as a whole with a focus on one on one assistance, guided reading and writing, Respondent #2, identified challenges in directing the work of an EA who lacks initiative, and developing confidence in speaking to an older adult. Respondent #3 identified struggles with knowing what is acceptable to ask of the EA in the classroom.

**University Preparedness**

When asked how their university education prepared them for directing the work of an educational assistant, the responses were:

Participant #1:

Good question. Very little. I would say very little, very little. The most experience that I got was in my practicum. In my last year of practicum in the classroom. The teacher told me, “Use your EA, she/he is there.” And I was so caught up in trying to teach, being that I was still learning, that I didn’t know how to use the EA, so it was hands on learning. Right there.”Use y our EA” that’s what I was told, so I tried.

Participant #2:

I’m trying to think back on where I heard about working with an EA, and I don’t think I did other than in the practicum, my student teaching practicum. It was only in my second year of practicum that I had an EA in the classroom. I don’t remember hearing about it in university. Although, we had a class on development – and the different exceptionalities that students could have in your classroom, like ADD, and then I think I heard that we might have an EA in the classroom, but we didn’t learn how to work with them, no.
Participant #3:

In my final year we took one course and learned a little about adaptations and modifications, but no talk about EA’s. I don’t even think it entered our minds. It was part of our professional role to be able to plan programs for students, but then to not only plan programs for students, but also plan for whoever comes with them and to know what their role is [the EA] – I don’t think any of us ever thought about that. I don’t think it was ever mentioned – I don’t have any concept of being trained or educated for this. I never even saw one [an EA] in my first year of practicum, I saw one in my second year but had very little contact with him/her. He/she was mostly dealing with the cooperating teacher, and I just never thought about what that interaction was. I guess the cooperating teacher also just never thought to highlight that information. Then in my final year, there was one that I saw but he/she was the English as an Additional Language EA, and because they ran their own program, I had very little to do with it. The experience was so little and so brief, it didn’t seem to me at the time that it would ever apply to the big picture of things. Whereas now in my job, I probably spend half of the day with an EA in some capacity in the classroom.

The common theme running through all the participant responses indicate that classroom teachers have very little, if any university training or preparation on how to direct the work of an educational assistant in the classroom. Additionally, participants indicate giving very little, if any thought to how directing the work of an educational assistant in the classroom would ever apply to them in their careers.

**Current Questions**

When asked what questions they currently have about directing the work of an educational assistant in the classroom, participants replied:

Participant #1:

Yes, now almost having done a year, I feel good about how it’s going in my class. I think it would be different if I had a funded student in my class – always having to go back and look at the programs of that funded student. And, then perhaps changing the roles of my EA as that student improved academically. Not currently having a funded student, I am privileged to have someone just be that extra hand in the classroom.

Participant #2:

Do resource teachers supervise the EA’s in all the schools? Cause that would be one thing, about directing them. Do you go to the resource teacher and ask for strategies, or do you go right to your EA?
Participant #3:

I would like to know what you can and cannot ask them [the EA]. But I also think that differs by school, and will differ by school division, and will differ by student, and will differ by EA. So it’s almost like you need some sort of workshop at the beginning of the school year as to who all the EA’s are, who they will be working with and what their schedule is – and what the needs of the students are. I would also like to know what to do when it’s a relationship that’s not working. I would like to know what my role is in that especially when they’re old enough to be my mom. How do you deal with that? I don’t know what makes that easier, but I would like to know.

The first participant avoided directly answering the question instead focusing on current accomplishments although identifying how different the situation may be if there were a funded student in the classroom. The second participant is interested in the supervision of EA’s and how the role of the resource teacher affects the EA teacher relationship. The third participant has since the onset been addressing the need to know about the roles and responsibilities of the educational assistant, speculating those roles and responsibilities may differ from school to school, between school divisions, from student to student and also by individual EA’s.

Do Schools have Handbooks Addressing the Roles & Responsibilities of Educational Assistants?

When asked whether or not their school had a handbook addressing the roles and responsibilities of educational assistants, responses were:

Participant #1: Yes, they do.

Interviewer: Have you seen the document?

Participant #1: Yes.

Participant #2: You know, I don’t know. Nothing that I have ever read or been asked to read.

Participant #3: I don’t know.

Manitoba Education & Training

When asked about knowledge of Manitoba Education and Training documents identifying the roles and responsibilities of educational assistants in Manitoba schools participants stated:

Participant #1: I’m not aware. I haven’t really looked into that.

Participant #2: I don’t know.

Participant #3:
I would say “no” because I don’t think that EAs are required to have formal training to be an EA. So, because they don’t have to have formal training, my guess is that there are no formal guidelines.

In the Fall of 2009, Manitoba Education and Training issued a document titled “Educational Assistants in Manitoba Schools”. The purpose of the document was to provide educators, school administrators, and school division administrators with a resource to support the work of educational assistants in Manitoba Schools. Educators at the university level should be the first to provide pre-service teachers with an introduction to the roles and responsibilities of educational assistants in the province. With pre-service discussion about the various disabilities teachers might encounter in the classroom, familiarization with Individual Education Plans, Behavior Intervention Plans, program adaptations and modifications, consideration about how to direct the work of an educational assistant in the classroom is pragmatic. During student teaching practicum’s, pre-service teachers should be required to demonstrate competencies in the directing the work of a paraprofessional in the classroom. Finally, school administrators have an obligation to provide first year teachers with a school and/or division document outlining the roles and responsibilities of educational assistants within the school division.

The results of this study add to our understanding of first year teacher preparedness to direct the work of another adult in the classroom, specifically, an educational assistant. It encourages university teacher training programs to incorporate both theory and hands on training for pre-service teachers on how to direct the work of an educational assistant in the classroom. It reminds school administrators to make certain that first year teachers are aware of the roles and responsibilities of educational assistants from the provincial level as well as specific school division level.

Interviewing first year teachers who direct the work of an educational assistant in the classroom gave me the opportunity to hear from teachers’ first-hand as opposed to speculating on other first year teacher’s experiences based on my own. I heard from three remarkable young women about their challenges to focus on teaching, become familiar with curriculum, manage student behavior, and figure out how best to direct the work of an educational assistant in the classroom. More substantial pre-service training and on-going in-service training on how to supervise another adult in the classroom would more effectively prepare classroom teachers for their roles.
References


Running head: HISPANEIC AMERICAN TEACHERS AND MARGINAL SCHOOLS

Title V: Preparing Hispanic American Teachers for Marginal Schools (PPOHA)

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Abstract

The presentation will introduce participants to Title V PPOHA grant, awarded to the University of St. Thomas in Houston, Texas to offer on-line Master of Education degrees for primarily Hispanic American teachers. Graduate studies will focus on Educational Leadership, Special Education, and Dual Language. A Graduate Success Center serves as a resource to support the students in technology, research and writing.

Keywords: distance education, online learning, grant, masters in education, principal, dual language, special education, Hispanic
HISPANIC AMERICAN TEACHERS AND MARGINAL SCHOOLS

Title V: Preparing Hispanic American Teachers for Marginal Schools (PPOHA)

The main goal of the title V grant at the University of St. Thomas (UST) is to implement an on-line Master of Education program designed primarily for Hispanic American teachers to assist them in providing high-quality education for their students in marginal schools. This graduate program will help to fill the critical shortages of P-12 masters-level educators in the areas of dual language, special education and educational leadership.

The greater Houston area contains one of the most diverse student populations in the entire nation. The student population in the Houston Independent School District (HISD), the seventh largest school district in the nation, is largely culturally and linguistically diverse. African American students make up close to close 28%, and Hispanic American Students make up over 61% of the total student population (HISD Facts and Figures, 2009). In 2009, 55 out of 222 schools missed making Adequate Yearly Progress (AYP). Urban students bring various complex problems to school. Challenges arising from poverty, language differences, and social needs must be addressed. A majority of HISD students have special needs that present many challenges. School leaders must be equipped to provide interdisciplinary leadership with their staff to improve outcomes for children.

The Title V Promoting Post Baccalaureate Opportunities for Hispanic Americans (PPOHA Program) was developed to initially offer a Master of Education degree with emphasis on Educational Leadership that will lead to Principalship certification. The number of master’s-trained educators in Texas is far below the national average. Nationally, 45% of P-12 teachers have a master’s degree (National Center for Educ. Statistics, 2009); in Texas the number is 21% and in the Houston school district the number is 27.4%. Master’s-level teachers assume leadership roles in the schools and are prepared to “train the trainers” in up-to-date technology-rich solutions. They provide professional development for the school and district and thus are responsible for introducing and supporting state-of-the-art research-based teaching practices. Their influence extends far beyond a single classroom.

Among special education teachers, the attrition rate has remained high, at approximately 14% (Boe, Cook & Sunderland, 2006). The primary reason for this attrition is lack of support from building-level administrators (Hansen, 2007; DeMik, 2008). In a national study, practicing special educators reported being hampered by unmanageable caseloads, ambiguous and competing responsibilities, job fragmentation, and conflict caused by ill-defined and often contradictory expectations on the part of parents and administrators (Hansen, 2007). A recent Texas study of special education personnel needs supports this concern. One in three special education teachers surveyed indicated they were planning to leave their jobs. Nearly 75% indicated they were planning to leave the field of special education entirely (Texas Education Agency, 2007). Administrators in Special Education are expected to support the induction of new teachers, and view results for students with disabilities and cultural diversity as an integral part of the school’s accountability system. These responsibilities together with demands on special educators to meet the complex needs of diverse learners increase the need for administrator who can support and reduce attrition of special education teachers (Washburn-Moses 2009).

The Need for Dual Language Instruction is critical. In the Houston Independent School District, the number of English language learners (ELLs) doubled from 29,112 in 1988 to 59,055 in 2008 (Window on State Gov’t.; 09), and by far the vast majority of ELLs are Hispanic. While the appropriate educational strategy for ELLs was at first unclear, research confirms that the best approach is unquestionably dual-language learning – an approach in which instruction proceeds in both English and the student’s native language. In several studies, ELLs were randomly assigned to groups in which students were taught either in English only or in English and Spanish. Students taught in both languages consistently outperformed students taught only in English (Goldenberg, 2008). A formidable problem remains in implementing these promising findings – a critical shortage of appropriately trained dual-language teachers. The situation is particularly bleak in Texas: “Elementary bilingual and ESL positions are the most critical teacher shortage area in Texas” (Lara-Alecio & Galloway, 2009). According to the Texas Coalition for Bilingual Education, at least one out of three new teachers hired to work in bilingual or ESL classrooms are not certified to teach in those areas; the highest incidence occurs in elementary school (2005). The Texas Education Agency reports that 2165 elementary and middle school ESL/dual language teachers are teaching without certification (2009). These “out-of-field” teachers provide an opportunity for UST to increase its graduate enrollment; UST is poised to provide master’s-level training to these dual language teachers so that they may
become certified in their field. These master’s-trained education leaders are poised to make significant improvements in P-12 special education and dual language education throughout the Houston area.

UST will improve access to the master’s in education program by developing a significant portion of the graduate programs in educational leadership, special education, dual language for online delivery. The students will have an option of registering for a fully online or a blended program. Revising graduate course content for online delivery will provide a welcome opportunity to revisit best practices and incorporate them into the curriculum as appropriate. UST will design institution-wide graduate fellowships and scholarships for low-income students to defray costs of tuition, research, and professional travel. Hispanic students who are classified as low-income and other low-income students will be offered a $5,000 annual scholarship based on their undergraduate GPA.

When one considers the total Hispanic population of the state of Texas and the United States, it is evident that this program will reach far beyond the perimeters of the city of Houston. For this reason, a fully online program is imperative. According to the 2010 Census Bureau, 36.5% of Texans and 15.5% of USA citizens are of Hispanic or Latino origin. Texas is one of 16 states that has at least one half million Hispanic residents. In fact, 97% of Starr County’s residents are Hispanic. (US Census Bureau) Where will the dual-language specialists and principals come from to fulfill the needs of that county? They need to come from within the district’s teacher population. Reaching out to other states will also prepare teachers for the growing Hispanic populations in their communities. For example, North Carolina, South Carolina, Georgia, and Tennessee’s Hispanic population has grown exponentially over the past three decades. (See figures below.) By offering a completely online program, the University of St. Thomas desires to reach out to teachers in areas such as these to prepare them to accommodate population changes in their classrooms.

UST developed an Institution-wide Graduate Student Success Center (GSSC) to improve retention and graduation of master’s students, including Hispanic students. The GSSC incorporates both face-to-face and virtual services. It includes three development activities. First, an advising/mentoring component to assist students with barriers such as acculturation to graduate school, balance of family and academic responsibilities, financial aid, career planning, and to connect students with mentors who can provide support throughout the student’s graduate career. Second, a writing support component was developed. As noted previously, the majority of graduate students are unprepared for the rigors of writing at the graduate level and struggle with writing throughout their program. Writing software, writing workshops, and writing tutors/mentors will be provided. Third, a research support component to assist in overcoming a major barrier to graduate student success is a research-oriented thesis. This component will include access to up-to-date research databases and statistical software, workshops and tutoring/mentoring services. Assistance with research methodology and human subjects’ protocols is also available.

The participants of the presentation will be introduced to the PPOHA program development at the University of St. Thomas. This program will serve time and place-bound students who need a graduate degree to further their career. It will particularly focus on educators who need a graduate degree in educational leadership, special education or dual language to improve their skills, their credentials, their school and their district. The project will serve graduate students who are faced with daunting challenges, including demographic and socioeconomic issues and almost overwhelming financial issues.
Figure 1: US Hispanic Population 1980 (US Census Bureau, 2008)

Figure 2: US Hispanic Population 1990 (US Census Bureau, 2008)
Figure 3: US Hispanic Population 2000 (US Census Bureau, 2008)

Figure 4: US Hispanic Population 2006 (US Census Bureau, 2008)
Figure 5: US Changes in Hispanic Population (US Census Bureau, 2008)

Figure 6: Percent of Hispanic Population Change by Region (US Census Bureau, 2008)
### Top 10 Counties

<table>
<thead>
<tr>
<th>Rank</th>
<th>County</th>
<th>Population</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Los Angeles, CA</td>
<td>4,702,705</td>
</tr>
<tr>
<td>2</td>
<td>Harris, TX</td>
<td>1,584,565</td>
</tr>
<tr>
<td>3</td>
<td>Miami-Dade, FL</td>
<td>1,406,855</td>
</tr>
<tr>
<td>4</td>
<td>Cook, IL</td>
<td>1,229,564</td>
</tr>
<tr>
<td>5</td>
<td>Maricopa, AZ</td>
<td>1,224,005</td>
</tr>
<tr>
<td>6</td>
<td>Orange, CA</td>
<td>1,049,464</td>
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<tr>
<td>7</td>
<td>San Bernardino, CA</td>
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<td>8</td>
<td>Bexar, TX</td>
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<tr>
<td>9</td>
<td>Dallas, TX</td>
<td>938,672</td>
</tr>
<tr>
<td>10</td>
<td>San Diego, CA</td>
<td>925,526</td>
</tr>
</tbody>
</table>


**Figure 7: US Counties with Highest Hispanic Populations 2008 (Pew Hispanic Center, 2008)**
Figure 8: Education Degrees of US Hispanic Americans (Anna M. Owens, Ethnicity and Ancestry Branch Population Division, US Census Bureau, 2006)

Dr. Rita Richardson has brought a wealth of experience to the University of St. Thomas from teaching special education in Louisiana to serving as a faculty member of Old Dominion University, Southeastern Louisiana University and University of Texas at Brownsville. She has authored four volumes of a social skills program, *Connecting with Others: Lessons for Teaching Social and Emotional Competence*, and a text book on behavior management. She is presently developing on-line graduate courses with Mrs. Kelly Gideon.

Kelly Gideon has worked in the field of online education for the past ten years with a variety of experience in corporate and university settings. In addition, she has taught from elementary to university students both in the United States and in Central and South America, which gives her a unique perspective as a course designer for this grant. She has an intense dedication to the success of this UST program.
References


Proceedings Submission

1. **Title of Submission**: Exploring University Students’ Development of Emotional Intelligence Skills for Leadership

2. **Name(s) of the author(s)**:
   - Dr. Joseph Ramos-Villarreal
   - Dr. Glenda Holland

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ABSTRACT

Exploring University Students’ Development of Emotional Intelligence Skills for Leadership

Dr. Joseph Ramos-Villarreal
Dr. Glenda Holland

The study was conducted to add to the knowledge base and further the understanding of Emotional Intelligence and leadership theory. Leadership has been a matter of much debate, since its broad definition still leaves much to be defined about measurement and what constitutes good leadership. Numerous theories have emerged from scholarly research and observation in studying Emotional Intelligence, human behavior, characteristics, traits, roles, and social status. Leadership assessments, instruments, and tools have been used by researchers and scholars in studying good leadership and the well-being of people. Some theories that emerged from research on leadership were The Great Man Theory of Leadership, Trait Theory, Behavioral Theory, Contingency Theory, Transactional Theory, and Transformational Theory of Leadership. These theories helped to reinforce how the perception of leadership has been identified and has changed throughout the years to reflect organizational development. Studies in the area of leadership helped to identify relationships between leadership theory and other factors that promote success for understanding human behavior and achievement. Successful Intelligence, Emotional Intelligence, organizational excellence, and career field development areas are examples of Leadership relationships with other field areas.

The study added to the research knowledge base of Emotional Intelligence and leadership though the development of student profiles of both First-year freshmen and graduating senior
business students. The Personal Excellence Map (PEM) (Nelson, Low, & Hammett, 2007) was used in developing the student profiles. This study developed benchmarks of development and a rationale for initiating development of Personal Excellence skills for university students in business.
Building Relationships and Developing Excellence in the Classroom

Topic Area(s): Teacher Education and Cross-disciplinary areas of Education

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Abstract:
As we focus on the future of education, two major themes come to the forefront – school reform and student success. It doesn’t make a difference if we are dealing with “no child left behind” or we are “racing to the top” we must remember that our major concern must be the students in our classroom. The relationship developed between a student and the teacher is the greatest predictor of success. It is paramount that each teacher learn to build positive relationships and models excellence in their teaching. This workshop will provide teachers with a fun and interactive way to develop effective strategies and provide them with a “new bag of tricks” for building those relationships necessary for excellence in the classroom (successful students). Using “True Colors”, participants will learn about their own personality color style as well as those of their students. This workshop will demonstrate how to create lessons to increase learning by providing for every student. Participants will leave with research based strategies that will foster positive attitudes, increase communication and team building skills and improve personal relationships amongst their students.
In 2006 the State of Massachusetts issued five-year continuation grants to help local school systems adopt strategies to better serve the needs of students who had experienced trauma. Since then, 23 school systems have been funded. These schools have established committees of parents, noted trauma experts, educators, community mental health centers and advocates to address the educational and psycho-social needs of children in the regular education classroom whose behavior interferes with learning, particularly those who are suffering from the traumatic effects of exposure to violence.

The Problem

Schools are seeing more and more children in the classrooms who are trauma survivors and attempting to meet their needs. Many schools are learning to identify children who are trauma survivors and understand how their trauma experiences impact their learning and the educational community. The following statistics reveal the magnitude of the problem.

- Between 3 and 10 million children witness violence in their home every year
- 1 in 25 homes has an adopted child residing there
- One out of four children in the United States will experience a traumatic event before the age of 16
- More than 500,000 children in foster care
- More than 50,000 are adopted from foster care annually
- More than 20,000 are adopted from other countries
- More families are adopting post-institutionalized children from orphanages overseas and from foster care.

Trauma has been found to impact the child’s ability to learn and the long-term consequences of trauma are just now being recognized. Just looking at adoption status of students suggests that children who have been adopted are at higher risk for learning problems. It is estimated that 30-40% of all adopted children qualify for special education (only 9% of biological children require Sped). Adopted children are 2-5 times more likely to require psychological treatment.

This Workshop will review the literature on the effects of trauma on learning including both the effects by function (Attachment, Biology, Affect Regulation, Cognition, Behavioral Control and Self Concept) and by the child’s age. A brief description of the cycle of violence and how it impacts the students ability to learn will be presented with implications for educators. Different types of trauma will be reviewed and the implications on the child’s learning will be identified. The broader effects of a student’s trauma on the school community will be reviewed and individual case examples will be presented to illustrate the impact of that child’s trauma on the school community.
**Intervention**

The schools participating in the Massachusetts Trauma Sensitive Schools Grant Program have taken a number of steps to improve the educational environment of children who have suffered trauma. These include:

- Comprehensive professional development for teachers and other staff
- A team of school/district personnel to assess individual student cases
- Expanded counseling services
- Referrals to outside support services
- Parent and family workshops on the effects of trauma
- Conflict resolution training for both teachers and students
- Consultation with local hospitals, mental health facilities, women's shelters, and other community based organizations
- School/district administrative support for establishing a trauma sensitive environment
- Academic instruction techniques for teaching traumatized students
- Development or revision of school policies to be more trauma sensitive

These interventions will be reviewed with some guidelines offered on how a school system could implement such programs. Implications for individual classroom teachers who are not currently working in a trauma sensitive school will be presented.

**Outcomes**

Schools that have been involved with the Massachusetts Trauma Sensitive Schools Grant Program have experienced a number of positive outcomes including:

- Significant decrease in the number of school suspensions and expulsions
- Reduced incidents of students sent out of the classroom for disciplinary action
- Reduced incidents of school bullying
- Reduced incidents of student violence toward other students
- Increased classroom time spent in instructional activities and reduced time spent in student correction for behavioral problems

The Workshop will outline methods of measuring outcomes and tying these outcomes to interventions will be reviewed so that systems can measure the effectiveness of programs.

Finally, funding options will be briefly reviewed citing Federal sources for grant monies and available foundation supports.
Title: Psychosocial Predictors of Adjustment and Well-Being during the First Semester of College

Topic: Higher Education

Format: Paper session

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Psychosocial Predictors of Adjustment and Well-being during the First Semester of College

Abstract

Previous research (Hardin & Witcher, 2005; 2007) examined how college adjustment and psychological and physical well-being were predicted by college choice variables such as the attitude toward college and the influence of important others (e.g., parents, high school counselors). Our previous research focused primarily on variables related to the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), and individual differences variables such as coping styles (as described by Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999). Our findings in 2005 and 2007 were fairly consistent. To determine whether these results are valid and reliable, they need to be replicated using additional samples and alternative measures of the variables. Therefore, the present research was commenced to determine the reliability and validity of previous findings and to examine any other factors from the College Choice Influences Scale (Dixon & Martin, 1991) that were previously unexamined.

Dixon and Martin (1991) identified internal and external influences on the decision of whether to attend college rather than pursuing some other goal. Their five factors include (1) the influence of important others such as high school guidance counselors and teachers; (2) a family tradition of attending college and perhaps even a specific institution; (3) the opportunity to use college as a life and career planning resource; (4) the opportunity to experience new social environments or to gain independence from home and parents; and (5) the student’s own attitude toward a particular university or college. Previous models (Hossler & Gallagher, 1987; Litten, 1982; Trusty, Robinson, Plata, & Ng, 2000) treat college choice as an outcome variable. Hardin and Witcher (2005, 2007) examined what predictive powers the college choice influences might possess.

Hardin and Witcher (2005) found that the student’s attitude toward attending college was a predictor of several adjustment and well-being variables. Positive attitudes toward college were associated with less depression and more positive well-being. Also, the attitude toward college was positively related to adjustment to college, and specifically optimism about being in college. Active coping styles were associated with positive well-being and a positive outlook toward the future. These results indicated that the factors behind the decision to attend college, rather than pursuing some other goal, and individual differences variables such as coping styles, do predict students’ adjustment and well-being during the first semester of college.
Hardin and Witcher (2007) also demonstrated that the attitude toward college was related to levels of overall psychological adjustment, including optimism, general negative affect, and homesickness. The attitude toward college also predicted well-being variables such as positivity, depression, and anxiety. The influence of others also served as a predictor of psychological adjustment. Therefore, the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) could be applied to predict psychological well-being and adjustment after the college choice behavior had been performed.

This current research sought to replicate the previous findings and to validate them using an alternative measure for well-being. Doing so will increase the confidence in the results and provide a firm basis on which to develop interventions utilizing them in the college environment. We used college choice influences as predictor variables and examined how they were related to adjustment to college and psychological well-being. The College Choice Influences Scale (Dixon & Martin, 1991) measures five factors: Attitude, Life Planning, Others’ Influence, Independence, and Family Tradition. The College Adjustment Test (Pennebaker, Colder, & Sharp, 1990) measures the psychological adjustment to college on three subscales: optimism, homesickness, and general negative affect. These subscales can be combined into an overall adjustment score. Finally, the General Health Questionnaire (Goldberg, 1972; GHQ) measures psychological and psychosocial symptoms. This measure was chosen because it is intended for use in community samples rather than clinical samples. The GHQ has five subscales (Huppert, Walters, Day, & Elliott, 1989), utilizing 24 items of the original 30, to measure anxiety, incompetence, depression, difficulty in coping, and social dysfunction.

Method

Participants

Participants were 24 students at a women’s college and 44 students from a co-educational, private university. These participants were 18.2 years old on average, and the majority of participants were Caucasian (77%). Students enrolled in the first-year seminar class received an invitation to complete the questionnaires and participated in exchange for the chance to win a gift certificate in a lottery.

Questionnaires

College Choice Influences Scale (Dixon & Martin, 1991).

This scale assessed the influences that students considered when deciding to attend college. The questionnaire contained 26 items, and students rated their agreement using a 1 (disagree strongly) to 6 (agree strongly) Likert-type scale. The five subscales measure (1) the student’s attitudes toward the chosen college (seven items; e.g., “I came to [college/university] because it has a friendly reputation”; \( \alpha = .76 \)); (2) the degree to which the student is attending college to clarify career and academic goals (five items; e.g., “I am going to college while I figure out what I really want to do with my life.”; \( \alpha = .31 \)); (3) the degree that other individuals influenced the student’s decision to attend college (five items; e.g., “In my family, going to college is encouraged”; \( \alpha = .40 \)); (4) the student’s desire to escape parental influence and
have new social experiences (six items; e.g., “I am attending college to get away from my hometown.” \( \alpha = .61 \)); and (5) the influence of family tradition of attending the chosen institution (three items; e.g., “Other members of my immediate family attend or have attended [college/university]”; \( \alpha = .60 \)).

**College Adjustment Test (Pennebaker, Colder, & Sharp, 1990)**

This scale measured the psychological adjustment to the new college environment. This questionnaire contained 19 items that students rated on a 1 (not at all) to 7 (a great deal) Likert-type scale. Students indicated how often they had certain experiences over the past week. The three subscales measure the degree of optimism, homesickness, and general negative affect and can be combined for an overall adjustment score. Homesickness was assessed with six items (e.g., “Missed your parents and other family members”; \( \alpha = .64 \)). Optimism was assessed with six items (e.g., “Liked college in general”; \( \alpha = .69 \)). Negative affect was assessed with nine items (e.g., “Worried about how you will perform academically at college”; \( \alpha = .84 \)). A composite score of overall adjustment was created by reverse scoring homesickness and negative affect items and averaging those items with the optimism items so that higher numbers indicate better adjustment.

**General Health Questionnaire (Goldberg, 1972).**

This scale measured psychological and psychosocial symptoms that students could be experiencing over the previous few weeks. The scale contained 24 items with 4-point Likert-type responses ranging from Not at all or Much less than usual to Much more than usual or Better than usual. The five subscales (Huppert, Walters, Day, & Elliott, 1989) measured anxiety, incompetence, depression, difficulty in coping, and social dysfunction. Anxiety was assessed with eight items (e.g., “Lost much sleep over worry”; \( \alpha = .88 \)). Incompetence was assessed with three items (e.g., “Been managing to keep yourself busy and occupied”; \( \alpha = .57 \)). Depression was assessed with five items (e.g., “Felt that life is entirely hopeless”; \( \alpha = .68 \)). Difficulty in coping was assessed with five items (e.g., “Been getting scared and panicky for no good reason”; \( \alpha = .76 \)). Social dysfunction was assessed with three items (e.g., “Been finding it easy to get along with other people” \( \alpha = .49 \)).

**Results and Discussion**

Correlations were computed between the measures of the college choice influences, psychological adjustment, and well-being (see Table 1). Attitude toward college was positively correlated with overall adjustment (\( r = .32, p < .01 \)). The attitude toward college was also significantly correlated with two subscales of adjustment—optimism and general negative affect—and all five measures of well-being—anxiety, incompetence, depression, difficulty coping, and social dysfunction. Life Planning was significantly correlated with anxiety and depression. Others’ Influence was significantly correlated with difficulty in coping.

Multiple regression analyses were then performed to examine the extent to which the college choice factors were associated with adjustment and well-being.
Adjustment
When Attitude, Life Planning, Others' Influence, Independence, and Family Tradition were simultaneously regressed onto adjustment, the overall model was marginally significant ($F(5, 65) = 2.02, p = .09$). Attitude was the strongest predictor when controlling for the influence of the other four factors ($\beta = .30, p = .02$).

To examine adjustment in greater detail, the five factors were regressed onto the subscales of the College Adjustment Test (Pennebaker, Colder, & Sharp, 1990). When Attitude, Life Planning, Others' Influence, Independence, and Family Tradition were simultaneously regressed onto optimism the overall model was significant ($F(5, 65) = 4.00, p = .003$). Once again, Attitude was the strongest predictor when controlling for the influence of the other four factors ($\beta = .42, p = .001$). When the five factors were simultaneously regressed onto general negative affect the overall model was significant ($F(5, 62) = 2.77, p = .03$). Once again, Attitude was a significant predictor when controlling for the influence of the other factors ($\beta = -.26, p = .04$). In addition, Others' Influence was a significant predictor when controlling for the influence of the other factors ($\beta = -.28, p = .02$).

The findings of previous research (Hardin & Witcher, 2005; 2007) were replicated with these results. A more positive attitude toward the chosen school somewhat predicted overall adjustment, but significantly predicted the subscales of optimism and general negative affect. When the student’s attitude toward the school was more positive, they adapted to the new environment more successfully.

Well-being
Attitude, Life Planning, Others' Influence, Independence, and Family Tradition were simultaneously regressed onto the subscales of the General Health Questionnaire (Goldberg, 1972). For anxiety, the overall model was marginally significant ($F(5, 62) = 2.26, p = .06$). Attitude was the strongest predictor of anxiety when controlling for the influence of the other four college choice factors ($\beta = -.28, p = .03$). For depression, the overall model was significant ($F(5, 62) = 2.61, p = .03$). Life Planning was the strongest predictor when controlling for the influence of the other four factors ($\beta = .30, p = .02$). For difficulty in coping, the overall model was significant ($F(5, 62) = 3.94, p = .004$). Attitude and Others’ Influence were significant predictors when controlling for the influence of the other factors ($\beta = -.36, p = .003$ and $\beta = -.30, p = .021$, respectively). For social dysfunction, the overall model was significant ($F(5, 62) = 2.59, p = .03$). Attitude was the strongest predictor when controlling for the influence of the other four factors ($\beta = -.42, p = .001$).

The general findings of previous research (Hardin & Witcher, 2005; 2007) were replicated with this new measure of psychological and psychosocial well-being. As with previous research, a more positive attitude predicted better well-being. In addition, the new measure of well-being allowed for the examination of the influence of college choice factors on the ability to cope and operate socially. A more positive attitude predicted less difficulty in coping and better social functioning. Interestingly, using college to explore life and career options may be beneficial to the student when compared to not going to college, but doing so was related to increased levels of depression for this sample.
One limitation of these analyses is the low scale alphas for some of the variables. Because these variables were included in previous research (Hardin & Witcher, 2005; 2007), we believed it was important to include them here, even though the accepted standard for alpha is .70 (Nunnaly, 1978). It is possible that the influence of Attitude as a predictor is a result of its scale strength. However, it is also possible that this is not a statistical artifact, as research has demonstrated that in individualistic cultures, attitude toward the behavior is sometimes the stronger predictor of behavioral intention, more so than subjective norms (Trafimow & Finlay, 1996). It would be premature to conclude that with the weak scale strengths, some of these variables do not warrant attention in the future. For example, Life Planning was a significant predictor of a well-being variable, even with its weak alpha value. Larger, and perhaps more diverse, samples and additional refinement of the scales should be pursued.

Conclusion

This research replicates and validates previous research findings (Hardin & Witcher, 2005; 2007) regarding the importance of college choice influences as predictors of first-semester adjustment and well-being. For higher education professionals, this research provides evidence that all stakeholders need to work collectively to promote the health and success of first-year students. This research confirms the importance of academic and administrative areas working collectively to protect positive attitudes toward the college. The positive attitude may contribute to a better campus environment, but also seems to contribute to better psychological and social health of the students.

This research also demonstrated influence of college choice factors on psychological well-being. Studies demonstrate that college students have significant mental health and well-being challenges. For example, the National College Health Assessment, compiling data from more than 16,000 students throughout the United States, found that 10 percent had been diagnosed with depression and experienced mental health problems between 1 and 10 times during the previous academic year (American College Health Association, 2000 as cited by Arehart-Treichel, 2002). Additionally, other research has shown that college students are twice as likely to be clinically depressed as compared to individuals of similar ages and backgrounds who are in the workforce (Dixon & Reid, 2000). With these challenges already existing, it is especially important that attention is paid to the college choice factors and that resources are made available on campus to assist students with the well-being struggles that they encounter.

Finally, this research serves as a useful resource for admissions personnel, campus mental health professionals, parents of high school students, and others who have influence on their decisions. By considering the information provided here, perhaps those involved can assist with making the decision in such a manner to produce the healthiest outcomes for their students in the long run.
References


Table 1

*Intercorrelations between Subscales*

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All values are 2 decimal places.

* p < .05; ** p < .01
Practical experience and the research literature demonstrate that parental involvement in learning and school life has positive effects on student success. Attendance, discipline, retention, higher scores in math and science are all improved as a result of strong school-parent involvement. (Hiatt-Michael 2001). Music students also benefit from consistent and meaningful parental involvement. However, it appears that schools involve music parents by providing information about music programs and through volunteer efforts such as booster clubs. As valuable as these efforts are, the proposed workshop focuses on moving beyond public relations and booster clubs to a teaching approach that involves parents in actively learning content along with their children.

The proposed workshop presents and discusses the Connecting Parents with Learning Project (CPLP). This non-commercial project was created by the workshop presenter as part of his university research interest. As part of a graduate course taught by the presenter, CPLPs were implemented by music educators from public and private schools in Virginia, U.S. The purposes of the CPLP are to strengthen parent-student-teacher relationships while increasing parent and student content knowledge.

The CPLP involves parents in learning what their children are studying through the use of teacher prepared materials. Parents complete assignments and quizzes, and are assessed by their own children on the content. Parents reciprocate by assessing their children on similar content. Upon completion of the project, participating parents, teachers, and students complete surveys that assess the effectiveness of the project. Survey results will be discussed as part of the workshop.

The CPLP involves parents and students from elementary and secondary programs. Each CPLP is tailored by the local music educator to fit the content being studied and the grade level.

In this interactive workshop, session participants learn how to develop strategies to connect parents with learning by implementing a CPLP in their schools. Participants will receive sample CPLPs contained in a packet of information.
Samples include:

- *The Rhythm of Music: Rhythm reading and composition* (middle school beginning band)
- *Haydn’s “Hen” symphony: Composition and form* (seventh grade general music)
- *Making music together: Rhythm and the instruments* (kindergarten and sixth grade)

The session will also include how to present a CPLP program to administrators, how to prepare parent/student/teacher quizzes, and how to conduct parent, student, and teacher surveys. The workshop will provide tips on how to make the whole project positive and fun. The CPLP can be especially effective in connecting with parents of different cultures. It removes the mystery of what the students are studying by engaging parents and students in cooperative learning and by presenting content in manageable portions. The CPLP has also been effective in integrating music learning with other subjects.
Submission #560

1. **Title** - “Indentifying Benefits of Lifetime Fitness Activities on Overall Wellness Suitable for Classroom Participation”

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6. **Abstract and/or full paper.**
   **(ABSTRACT)**
   The latest data from CDC’s National Health and Nutrition Examination Survey show that an estimated 17 percent of children and adolescents ages 2-19 years are obese. The initial results for 2007-2008 survey show obesity increased 5 percent in pre-school age children 2-5 years of age, between 1976-1980 and 2007-2008 and 13 percent among 6-11 year olds. The number of overweight teens ages 12 to 19 increased from 5 to 18 percent in the same time period.

   Obesity in childhood leaves children at risk for health problems both in childhood and throughout to adulthood.

   Therefore it is vital that children learn about and participate in lifelong physical activities that can help combat the effects of obesity. While often times the physical education course tackles this issue, both physical education and classroom core courses can team up to fight the cause. Teachers can expose students to interdisciplinary activities based on lifetime fitness reiterating some of what is learned in physical education, but can keep them active and involved well beyond the classroom.

   The goal of this program is: (1) Identify lifetime fitness activities, (2) Implement instruction of lifetime activities into the curricula, (3) Emphasize enjoyable participation in physical activity for all students across the curriculum, (4) Deemphasize sport activities and competition, (5) Help students developing the knowledge, attitudes, motor skills, behavioral skills, and confidence needed to incorporate and maintain physically active lifestyles.
The lesson assistance system aiming at the increasing motivation by the target setting and evaluation instruction.

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Abstract Nakayama [1] is adding an individual correspondence function to the lesson assistance system, and it was shown clearly that the study opportunity according to an understanding of a student is sponsored, and results improve. However, it became a subject how volition is raised to the student who does not use a system positively. So, in this research, in order to raise the motivation to system use of a student, the system which paid its attention to inside or outside-motivation were developed and practiced. After performing individually a target setup of attendance of a lesson, a small test, comprehensive results, etc. in the stage before having a class, evaluation instruction was able to be individually performed for those results using the cellular phone, and the motivation which uses a system positively was able to be raised by making a target setup reconfirm according to a result. Furthermore, individual positioning in a simultaneous lesson becomes clear, competitive spirit with others, and volition also increases by the ability of rates of achievement, such as results and attendance of themselves and other students, can be compared after the lesson using a system.

Keyword: lesson assistance system, inside and outside-motivation, educational support, a target setup, evaluation instruction, a cellular phone

1. Introduction
1.1 Background
Nakayama and Matsuda [1] developed the decision support system of the teacher for a lesson and the lesson assistance system which enables effective individual correspondence by the simultaneous lesson to the student from whom an understanding differs. It was shown clearly that the student to whom an understanding is progressing is provided with the study opportunity of a development matter, and the results are raised, making all the members understand a basic matter by using the function concerned, as a result of an experiment lesson employing and estimating a system. While the degree of satisfaction to a system was as high as the student who returned the reaction to the teacher positively using the system at that time, even if it showed the student advice with a suitable system, it also became clear that the student for whom does not use a system positively low cannot fully utilize a function. Therefore, it is thought that the motivation for making it care which uses a system is required for such a student in a certain form. "Motivation" is fundamentally divided into inside-motivation and outside-motivation. It is defined as inside-motivation being the motivation which may happen from the intellectual curiosity from an inside, achievement, and a challenge, and outside-motivation being the motivation aiming at the "prize" given from outside [5]. Generally in pedagogy, it has been thought that inside-motivation is important. It is because reducing inside low motivation is reported if study by outside-motivation is continued and used. However, it is said that outside-motivation such as "praises" and "encouragement" have little influence on reducing inside-motivation [6]. That is, it is thought that outside-motivation may change to inside-motivation, and is described that it is effective to perform outside-motivation by the suitable technique for the spiritless student who will not perform the study itself positively [2]. Especially, shifting to an inside-state from an outside-state by promotion of spontaneity and target nature is also reported [6][2]. From the above thing, there are each strong point and demerit in both sides, and it is thought important to use both motivation appropriately. For example, in the stage where the lesson is attended at
first, although acted as whom, I think whether it can use well having the outside-motivation referred to as acquiring a credit. Wanting to take a credit is having applied the credit to mind. That is, it is surmised from the outside-motivation referred to as wanting to receive evaluation suitable for credit acquisition that it is possible to make it shift to inside-motivation. The evaluation method is devised, as the example of the systems development aiming at improvement in study volition, in order that Takamoto[3] might make study volition maintain, in the study support system, he made high the degree of individual adaptation of the study teaching materials spontaneously used for review of a student of after school or a home, and built the study support system which took in the self-valuation of the rate of achievement by the student. And study volition was strengthened with using a system and it is said that validity becomes high. Moreover, using the lesson assistance system of a Web base, the student has solved the problem on a system, and with the group review system, Takagi[4] urged activation and has reported the effect of the system in which competition and cooperative problem creation are possible. Consequently, the theme in question turned equally, the interaction between students improved, and by stimulating a student's sense of rivalry has described that validity becomes high. Moreover, using the lesson assistance system of a Web base, the student has solved the problem on a system, and with the group review system, Takagi[4] urged activation and has reported the effect of the system in which competition and cooperative problem creation are possible. Consequently, the theme in question turned equally, the interaction between students improved, and by stimulating a student's sense of rivalry has described that it is useful to improvement in the study volition using a system. In addition, Matsubara[10][11] and Hiraki[2] say that it is effective when performing motivation with effective adding a message generation mechanism to an intellectual educational system based on a student's study history and study condition by lesson at each time. These researches are performing motivation by message generation functions (praise, encouragement, etc.) to the contents of a lesson, and it is thought that these are effective in performing motivation. However, in the above research, it is a premise that a student uses the system and the correspondence to the student for whom participating volition is low and does not use a system positively is not taken into consideration. Moreover, the self-target to results, such as an attendance situation and a small test, is set up, and it is not investigating about the motivation at the time of comparing a target value with an achievement value. Then, it is thought that the student for whom participating volition does not use a system positively low needs to perform a certain motivation for using a system positively in the stage of the beginning of study. Taking attendance first in the stage which participated in the lesson estimates it the motivation considered concretely. Next, it is possible about evaluate how many which portions of whether he wants what kind of evaluation to obtain through the whole lesson, and the contents of a lesson to carry out a target setup clearly. These work is that it is shown from the stage of the beginning of a lesson that it is the process of an scholastic evaluation that a teacher uses a system, and let it be the causes to which outside-motivation is urged. Furthermore, it guides to inside-motivation attachment by showing a student the result to which the system totaled all students' data automatically, and making one's target value compare with other students' target value after one's target setup. Although it is thought that the target value of the student for whom participating volition does not use a system positively low is also low, education is urged by seeing other students have set up the target value highly. Moreover, the self-target and attendance situation for every contents of a lesson at each time, and the rate of achievement of a small test are shown through a system. Furthermore, an opportunity to compare a self-target with the rate of achievement for other target values and rates of achievement of a student is given. It is surmised by the above that inside-motivation attachment is urged. It carries out by instruction of the information and teacher who are shown the above work by the system.

1.2 Purpose
Then, this investigation performs evaluation instruction with a target setting through a lesson at each time from the stage of the beginning of the lesson by a relative outside-motivation and a relative inside-motivation, in order to materialize the above contents. By doing so, participating volition offers the realization and evaluation using the system of the student who does not use a system positively low of a lesson assistance system aiming at the upswing in a motivation. It is surmised that the cause involved in the lesson using a system can specifically be made from it being shown from the stage of the beginning of a lesson that it is the process of a scholastic evaluation that a teacher uses a system through a target setup. Next, it is made to educate through comparison of one's desired value, an achievement value and one's achievement value, others' achievement value, etc., and it is thought possible to make it migrate to an inside-motivation (Fig. 1). In addition, it is thought appropriate also to an ARCS model[12][13] to carry out motivation to the stage of the beginning of a lecture, to check an achievement situation by lesson at each time, and to raise motivation.
Fig. 1: The conceptual diagram involved in an inside-motivation from an outside-motivation

2 System Outline

2.1 Feature and Whole Composition of System

The stage where a student works by this system is divided roughly into use by "the time of using a system by the first lesson", and "a lesson at each time." The former takes attendance in the stage which participated in the lesson. And a comprehensive target including the merit of the percentage of attendance, the small test achievement quotient, and a final test into and is carried out through the whole lesson from the 1st time to the last round. Furthermore, a target setting is clearly carried out to evaluate how many achievement targets for every contents of study of a lesson at each time. At this time, it clarifies that it is the process of a scholastic evaluation to use a system. In order to materialize the above, the function (a target setting function is called henceforth) to perform a target setup is prepared. The latter carries out evaluation instruction and makes the rate of comprehensive achievement and the rate of achievement for every contents of a lesson including its percentage of attendance accumulated for every lesson, the rate of small test achievement, and the results of a final test and compare through the lesson which used the system at each time. Furthermore, their rate of achievement (the percentage of attendance, the rate of small test achievement, the rate of comprehensive achievement, rate of achievement for every contents of a lesson), others' rate of achievement, and a target value are made to show and compare. In order to materialize the above function (an evaluation instruction function is called henceforth) in which mark show the rate of achievement in a lesson at each time is prepared in a system. The above two functions are the features of this system.

In addition, an attendance registration function, a small test facility, and attendance registration and a smallness test check function also accompany, and this system is constituted as a whole. In addition, while, for this system, a teacher uses PC, lesson support is carried out, and a student makes it premise environment to receive a lesson, using a cellular phone.

2.2 Outline and Employment Procedure of Each Function Which Should Be Realized

Fig. 2: The outline and application procedure of a system

The outline of this system and the procedure of application are shown in Fig.2. And a serial number (from (1) to (10)) is met, and it explains. Moreover, it supplements with the operation screen of Fig. 3 to the figure 9 as explanation. A system has two, an information input function and a lesson support function, as a whole, the former is a function for a teacher to prepare before a lesson, and the latter is a function which a teacher and a student use during session.

(1) A teacher draws up a lesson plan before a lesson and prepares teaching materials.

(2) An information input required in order that a teacher may perform lesson advance using this system performs a setup of the school register number and individual password which are used as an input ID of the student who participates. Furthermore, they are three kinds of the answer the lesson password shown for every lesson at each time, and for a small test, and the password for a small test. Details of a password are given below. In addition, in the cellular phone, since there were restrictions on a display, the problem decided that a teacher shows with paintings-and-calligraphic-works equipment or printed matter.
At the time of the 1st lesson start, a teacher performs explanation and directions of the employment method of a system. If it accesses to the system which the student specified using the cellular phone, the main menu (Fig. 3) of this system will be displayed.

**Lesson proceeding assistance system**

**Main menu**

- A target-setting function
- An attendance registration function
- Small test facility
- Attendance & small test confirmation function
- Evaluation teaching function

Fig. 3: Main menu screen

A student chooses a "target setting function" (Fig. 4) from a main menu (Fig. 3), and sets up the target value of a lesson. This function mainly has the following three setup.

In addition, it is told to a student that it is one of the processes of the scholastic evaluation of this lesson to perform a target setup by this function.

- Enter the school register number and individual password for using as ID stated by (1). An individual password can be changed at this time.
- A student sets up a comprehensive target, an attendance target, and a small test target. Moreover, these three achievement targets set the whole lesson as the target which leads.
- The achievement target according to contents of study is possible (15 times is possible) in a setup the whole lesson of each time.

After setting up the above, a teacher makes it the reference for attaining a lesson plan by grasping the outline of a student's target value and grasping a student's motivation based on the total result of the target value by the system.

A student performs attendance registration in entering the "lesson password" presented by the teacher for every lesson of a school register number and each time by the "attendance registration function" (Fig. 5).

![**Target-setting function**](image)

(4) A student chooses a "target setting function" (Fig. 4) from a main menu (Fig. 3), and sets up the target value of a lesson. This function mainly has the following three setup.

(5) A teacher checks the attendance situation by the system after registration of attendance.

(6) A student carries out a small test by this function based on the shown information (Fig. 6). A small test is a selection type (4 selections), the reply made enforcement possible to 2 times, and if it is a correct answer at once, get 1 point, if it is a correct answer at the second time, get 0.75 points, and 3rd henceforth are made into zero point. The reason for having made the reply possible to 2 times was setup based on the result of having investigated the number of replies out of which a motivation comes most, by the questionnaire from a student. Moreover, by this experiment lesson, since it set up as one item of contents of a lesson by one lesson, the small test was taken as one setting a problem by one lesson.
A student transmits a result after small test implementation. Then, a school register number and an individual password are entered using "attendance and a smallness test check function" (Fig. 7), and it checks as a result of the small test currently carried out now. Simultaneously, it is possible to check the situation of attendance registration of each lesson. In addition, since middle and a final test were carried out with a paper base, after grading, it presupposed that a teacher inputs a test result into a database directly, and it was made different from grading of attendance and a smallness test.

(7)' From the total result of the small test transmitted by the system, a teacher checks a student's achievement situation and makes a judgment required for lesson advance.

(8) A teacher directs to check evaluation instruction by the "evaluation instruction function" (Fig. 8) to a student based on the total result of the small test of (7)'.

(8)' A student performs self-evaluation by the "evaluation instruction function." An evaluation instruction function is mainly divided roughly into...
two, results achievement information and the achievement information classified by contents of study. Motivation is performed by checking the following information by lesson at each time. First, a small test target, the rate of small test achievement and an attendance target, the percentage of attendance and the comprehensive target which summarized them further, and a rate of comprehensive achievement are consisted of by results achievement information. In addition, although these three target values are values set up by themselves, three rates of achievement are the values automatically calculated by computer. Moreover, there is information (a total of 12 kinds) of itself's and other students in the above six values, respectively. The rate of comprehensive achievement in this experiment lesson (R) is calculated by the sum of four values. For dignity attachment, the percentage of attendance (S) and the rate of small test achievement (T) are set up to 10\% (W1, W2), and the midterm exam (CK1) and the final exam (CK2) are set up to 40\% (W3, W4).

If expressed with a formula, it will become like this. (Show Fig.9)

\[
R(\text{Comprehensive achievement quotient} : \%) = \frac{S \times W_1 + T \times W_2 + \frac{CK_1}{2} \times W_3 + \frac{CK_2}{2} \times W_4}{\text{Total number of grades}}
\]

Moreover, in this experiment, the achievement target classified by contents of study was set up in one lesson. If expressed with a formula, it will become like this. (Show Fig.9)

\[
X(\text{the rate classified by contents of achievement} : \%) = \frac{S_{n-2} + T_{n-2} \times 50}{n}
\]

(9) A teacher performs directions required for a student, and advice presentation orally based on the information on (7)'.

(10) Simultaneously, carry out judgment required for lesson advance and carry out explanation of the contents of a lesson and a small test for the second time, if needed.

(10)' A student changes a target value through the advice from the contents and the teacher of evaluation instruction if needed.

### 3. Evaluation Experiment of System

#### 3.1 Purpose

The purpose of this experiment is evaluating whether an effect being in the improvement in motivation whose target setting function's and evaluation instruction function's use a student's system by which participating volition's does not use a system positively low. It is made to convert into the motivation of "setting up a target by oneself and attaining it" from the motivation of "wanting to acquire a unit" at first in this system. Furthermore, it has the intention of raising to the motivation of "setting up a higher target and attaining it" by comparing with others. Then, it is necessary to investigate how (1) When system is used first, (2) When its achievement situation is checked, and (3) When it compares with others, influence motivation as a viewpoint of evaluation.

Concrete evaluation criteria and a concrete procedure (Fig. 10) were carried out as follows.

(1) Verify whether a difference is looked at by

---

**Fig.9: The calculation technique of score achievement information**

Next, there is a target which met the item (this experiment has six items) for every contents of a lesson in the achievement information classified by contents of study, and each is shown its target value, the rate of achievement and others' target value, and the rate of achievement. These information are referred to by lesson at each time, is checked and judged synthetically, and self-valuation is performed. In addition, the rate classified by contents of achievement for every lesson by which calculation of the rate of achievement of the achievement information classified by contents of study is matched according to contents (X) is displayed. It set up so that the sum total as a result of the percentage of attendance (S) and the rate of small test achievement (T) might become a display 100\%.

The purpose of this experiment is evaluating whether an effect being in the improvement in motivation whose target setting function's and evaluation instruction function's use a student's system by which participating volition's does not use a system positively low. It is made to convert into the motivation of "setting up a target by oneself and attaining it" from the motivation of "wanting to acquire a unit" at first in this system. Furthermore, it has the intention of raising to the motivation of "setting up a higher target and attaining it" by comparing with others. Then, it is necessary to investigate how (1) When system is used first, (2) When its achievement situation is checked, and (3) When it compares with others, influence motivation as a viewpoint of evaluation.

Concrete evaluation criteria and a concrete procedure (Fig. 10) were carried out as follows.

(1) Verify whether a difference is looked at by

---

**Fig.9: The calculation technique of score achievement information**

Next, there is a target which met the item (this experiment has six items) for every contents of a lesson in the achievement information classified by contents of study, and each is shown its target value, the rate of achievement and others' target value, and the rate of achievement. These information are referred to by lesson at each time, is checked and judged synthetically, and self-valuation is performed. In addition, the rate classified by contents of achievement for every lesson by which calculation of the rate of achievement of the achievement information classified by contents of study is matched according to contents (X) is displayed. It set up so that the sum total as a result of the percentage of attendance (S) and the rate of small test achievement (T) might become a display 100\%. Moreover, in this experiment, the achievement target classified by contents of study was set up in one lesson. If expressed with a formula, it will become like this. (Show Fig.9)

\[
X(\text{the rate classified by contents of achievement} : \%) = \frac{S_{n-2} + T_{n-2} \times 50}{n}
\]

(9) A teacher performs directions required for a student, and advice presentation orally based on the information on (7)'.

(10) Simultaneously, carry out judgment required for lesson advance and carry out explanation of the contents of a lesson and a small test for the second time, if needed.

(10)' A student changes a target value through the advice from the contents and the teacher of evaluation instruction if needed.
motivation before and after making a target setup carry out to the stage of the beginning of a lecture. In that case, participating volition divides into the student (it is henceforth described as low rank group) who does not use a system positively low, and the student (it is henceforth described as a high rank group) who is not so, and performs comparison before and after. In addition, as a result of performing volition to low rank group using a system for the stage of the beginning of a lecture by the five-affair method (5: Very eager -1 : it is completely unwilling.), it considered as the student who estimated it as 1 or 2, and other students were taken as the high rank group.

Fig.10: A system-evaluation item and a procedure

* (1), (2), and (3) correspond with the serial number of 3.1.

(2)-A, The lesson using a system and the lesson which is not so are made to experience, and it verifies whether a difference is looked at by the motivation in low and the high rank group in the case where the results achievement information of the evaluation instruction functions (Fig. 8) is checked, and the case where that is not right.

(3)-A, It verifies whether a difference is looked at by the motivation in low and high rank group by the case where the results achievement information in an evaluation instruction function compares target value and rate of achievement of itself's and others simultaneously, and the case where that is not right.

(2)-B and (3)-B
Although an overall achievement situation does not change rapidly reflecting the result of the past lesson, if the achievement situation according to contents for every time does its best in the time, the high rate of achievement will be obtained. Then, the influence on motivation is simultaneously grasped by the case where it checks for the achievement information classified by contents of study in an evaluation instruction function, the case ((2)-A) where that is not right, the case where target value and rate of achievement of themselves and others are compared, and the case ((3)-A) where that is not right.

3.2 Experiment Method
81 students who study the subject of a "management information system theory" at the science-and-engineering system universities are divided into two classes (a following A group, B group) of 45 persons and 36 persons, and carried them out. Both sides carried out 12 lessons, and each group divides the case (6 times) where a system is utilized, and the case (6 times) where that is not right, in the second half in the first half, and experienced the experiment. However, A group utilized the system in the first half, and B group utilized the system in the second half (Fig. 10). In addition, the procedure which utilized and employed the system met the procedure of Fig. 2, and was performed.

3.3 Result and Consideration
(1) Volition before and after a target setup
Table1:Comparison of volition before and after target setting

<table>
<thead>
<tr>
<th>Target-setting</th>
<th>Low rank group</th>
<th>High rank group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1.89</td>
<td>3.46</td>
</tr>
<tr>
<td></td>
<td>0.33</td>
<td>0.65</td>
</tr>
<tr>
<td>After</td>
<td>3.33</td>
<td>3.72</td>
</tr>
<tr>
<td></td>
<td>1.12</td>
<td>0.83</td>
</tr>
</tbody>
</table>

* By the case where a significant difference is in an average by the T test, ** showed significance 1%.
** S.D.: Standard Deviation, Sig.Dif: Significant Difference

In order to evaluate the portion of (1) of 3.1, the reply was calculated by the five-affair method ("5 : It became motivation very much." ~ "1: It did not become motivation at all") from the question "Please answer about the volition using a system before and after performing a target setup." As a result (Table 1), both the groups of the direction after a target setup were intentionally high.
Moreover, in the opinion by free description of the student of low rank group, the reply "it got used to participating to a lecture by setting up a concrete target positively although target achievement was not vaguely considered before participating in a lecture" was obtained. It was suggested that motivation for which low and high rank group use a system is performed by making a concrete target setup perform before beginning a lesson.

(2) Study volition after an experiment

Table 2: Appraisal of serviceability of score achievement information to motivation

<table>
<thead>
<tr>
<th>Question Item</th>
<th>Low rank group</th>
<th>High rank group</th>
</tr>
</thead>
<tbody>
<tr>
<td>One's attendance achievement quotient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2.11 0.93</td>
<td>2.85 0.98</td>
</tr>
<tr>
<td>Yes</td>
<td>3.67 0.50</td>
<td>3.99 0.87</td>
</tr>
</tbody>
</table>

| One's test achievement quotient | | |
| No | 2.00 0.71 | 2.92 0.82 |
| Yes | 3.56 0.53 | 4.00 0.96 |

| One's score achievement quotient | | |
| No | 2.22 0.83 | 2.90 0.91 |
| Yes | 3.67 0.87 | 4.17 0.89 |

* By the case where a significant difference is in an average by the T test, ** showed significance 1%.
** Avg.: Average, S.D.:Standard Deviation, Sig.Dif: Significant Difference

After the lesson implementation using a system, in order to evaluate the portion of (2)-A of 3.1, the reply was calculated by the five-affair method: "It became motivation very much" ~ "it did not become motivation at all "from the question "answer about the motive to use a system before and after checking one's rate of achievement for the achievement information classified by contents of study." As a result (Table 3), the evaluation after both groups check their rate of achievement for the achievement information classified by contents of study was intentionally high. From these things, it was suggested by checking one's rate of achievement that motivation for which low and a high rank group use a system is performed.

Table 3: Appraisal of serviceability of achievement information classified by contents of study to motivation

<table>
<thead>
<tr>
<th></th>
<th>Low rank group</th>
<th>High rank group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg.</td>
<td>S.D.</td>
</tr>
<tr>
<td>Before</td>
<td>2.75 0.46</td>
<td>**</td>
</tr>
<tr>
<td>After</td>
<td>3.50 0.76</td>
<td>**</td>
</tr>
</tbody>
</table>

* By the case where a significant difference is in an average by the T test, * showed significance 5%, ** showed significance 1%.
** Avg.: Average, S.D.:Standard Deviation, Sig.Dif: Significant Difference

In the lesson using a system, in order to evaluate the portion of (2)-B of 3.1, the reply was calculated by the five-affair method: "It became motivation very much" ~ "it did not become motivation at all "from the question "answer about the motive to use a system before and after checking one's rate of achievement for the achievement information classified by contents of study." As a result (Table 3), the evaluation after both groups check their rate of achievement for the achievement information classified by contents of study was intentionally high. From these things, it was suggested by checking one's rate of achievement that motivation for which low and a high rank group use a system is performed.

Table 4: Appraisal of serviceability which compared two or more score achievement information that motivation was received

<table>
<thead>
<tr>
<th>Question Item</th>
<th>System Using</th>
<th>Low rank group</th>
<th>High rank group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg.</td>
<td>S.D.</td>
<td>Sig. Dif.</td>
</tr>
<tr>
<td>My target compared with my achievement quotient</td>
<td>Before</td>
<td>2.89 0.60</td>
<td>**</td>
</tr>
<tr>
<td>after</td>
<td>4.11 0.60</td>
<td>**</td>
<td>3.90 0.84</td>
</tr>
<tr>
<td>MY rate of achievement is compared with others’ rate of achievement</td>
<td>Before</td>
<td>2.78 0.83</td>
<td>**</td>
</tr>
<tr>
<td>after</td>
<td>4.11 0.93</td>
<td>**</td>
<td>3.61 1.03</td>
</tr>
<tr>
<td>My target is</td>
<td>Before</td>
<td>2.78 0.44</td>
<td>**</td>
</tr>
</tbody>
</table>

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compared with others' target

Others’ target is compared with others’ rate of achievement

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.00</td>
<td>3.56</td>
<td>0.00</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>2.72</td>
<td>2.94</td>
<td>0.83</td>
<td>1.01</td>
</tr>
</tbody>
</table>

* By the case where a significant difference is in an average by the T test, * showed significance 5%, ** showed significance 1%.

** Avg.:S.D.: Average, Standard Deviation, Sig.Dif.: Significant Difference

In the lesson using a system, in order to evaluate the portion of (3)-A of 3.1, the questionnaire was carried out to four items in the question item of Table 4 as a candidate for comparison of evaluation instruction. The reply was evaluated by the five-affair method " 5: it became motivation very much " ~ " 1: it did not become motivation at all". As a result (Table 4), in the items "When my target is compared with my achievement quotient” “When my rate of achievement is compared with others' rate of achievement" and "When my target is compared with others' target", both the groups of the direction after enforcement were intentionally high. From the above result,” When my target is compared with my achievement quotient". "When my rate of achievement is compared with others' rate of achievement" and "When my target is compared with others' target", it was suggested that motivation for which low and a high rank group use a system is performed.

Table 5: Appraisal of serviceability which compared two or more achievement information classified by contents of study that motivation was received

<table>
<thead>
<tr>
<th>Question Item</th>
<th>System Using</th>
<th>Low rank group</th>
<th>High rank group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Avg.</td>
<td>S.D.</td>
</tr>
<tr>
<td>My target compared with my</td>
<td>Before</td>
<td>2.88</td>
<td>0.64</td>
</tr>
<tr>
<td>achievement quotient</td>
<td>After</td>
<td>3.63</td>
<td>0.74</td>
</tr>
<tr>
<td>MY rate of achievement is</td>
<td>Before</td>
<td>2.88</td>
<td>0.64</td>
</tr>
<tr>
<td>compared with others' rate of</td>
<td>After</td>
<td>3.13</td>
<td>0.83</td>
</tr>
<tr>
<td>achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My target is compared with others'</td>
<td>Before</td>
<td>2.63</td>
<td>0.92</td>
</tr>
<tr>
<td>target</td>
<td>After</td>
<td>3.13</td>
<td>0.99</td>
</tr>
<tr>
<td>Others' target is compared with</td>
<td>Before</td>
<td>2.50</td>
<td>0.76</td>
</tr>
<tr>
<td>others' rate of achievement</td>
<td>After</td>
<td>2.75</td>
<td>0.71</td>
</tr>
</tbody>
</table>

* By the case where a significant difference is in an average by the T test, * showed significance 5%, ** showed significance 1%.

** Avg.:S.D.: Average, Standard Deviation, Sig.Dif.: Significant Difference

In the lesson using a system, in order to evaluate the portion of (3)-B of 3.1, the questionnaire was carried out to four items in the question item of Table 5 as a candidate for comparison of evaluation instruction. The reply was evaluated by the five-affair method " 5: it became motivation very much " ~ " 1: it did not become motivation at all". As a result (Table 5) in the "When my target is compared with my achievement quotient" at which it is based on the achievement information classified by contents of study, both the groups of the direction after enforcement were intentionally high. Moreover, when the contents of the reply by free description of low rank group were judged synthetically, these opinions such as "the item good at them and the
poor item having become clear” and “I can study effectively about a poor item” were seen. Judging synthetically from the above result, it was suggested that motivation for which low and a high rank group use a system is performed, “When my target is compared with my achievement quotient” based on the achievement information classified by contents of study.

4. Subject of Conclusion and Future

It is that this experiment performs spontaneous motivation attachment with an inside and an outside-motive by the target setting function and the evaluation instruction function, and verified whether the improvement in motivation to system use of the student who does not use a system positively would be possible. Consequently, the following things became clear.

(1) Motivation for which low and high rank group use a system is performed by a target setup is made to carry out to the stage of the beginning of a lecture.

(2) Motivation for which low and high rank group use a system is performed by checking the rate of achievement of one's results for the results achievement information in an evaluation instruction function, and the achievement information classified by contents of study.

(3) Although the effect was in motivation on the whole about comparing an achievement situation with one's setting target, or comparing with others, it turned out that comparing according to a contents item with others the case of low rank especially is not necessarily connected with motivation.

It is thought that improvement in volition of a student whose participating volition does not use a system positively low can be performed by the above by performing spontaneous motivation attachment with suitable an outside-motive by the target setting function and the evaluation instruction function as far as this experiment lesson is concerned. As a future subject, when a lecture cannot be attended by the reason such as practice teaching, it is thought that it is necessary to perform supplementary study by remote education. It is also considered that it is necessary to inquire how it is reflected in the rate of achievement in the time, and motivation is maintained. Moreover, although this system performed target setup in a student's position, and instruction evaluation, I want to also consider relation with the teaching plan relevant to a target setup in a teacher's position, or the rate of achievement.

References

(1) Kazunori KIKUIKE(1991),”The relationship between parents, a teacher and a friend, and a child” KAIRUIDO, Vol.27,pp91-206

(2) Hiroshi ANKOU(1980)”Social pathology of the school education in Japan”, KANEHARA


(6) A private Kobe Gakuin University attached high school, (2001), ”positive practical use of the Internet by all school staffs and all students in school life at large “, The 5th time Internet practical use educational practice contest account of the Ministry of Education, Culture, Sports, Science and Technology
MENTORING POSTSECONDARY TENURE-TRACK FACULTY: A THEORY

BUILDING CASE STUDY WITH IMPLICATIONS FOR INSTITUTIONAL POLICY

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Mentoring Postsecondary Tenure-track Faculty: A Theory Building Case Study with Implications for Institutional Policy

Abstract

The featured research uses theory building case study to understand the experiences of junior faculty in a mentoring program. Findings suggest the importance of professional interaction on faculty members’ integration into their campus communities. An explanatory model illustrates the findings and supplements discussion of the implications for administrators in terms of retention of new faculty members in postsecondary settings.

Keywords: faculty, mentoring, tenure-track, theory
Leading Edge Technologies in a Community College Library Setting: Identifying
Disconnects of Academic Libraries and Their Users

by

Theresa C. Stanley
August 2010
The intent of this research was to discover, what if, any disconnect exists between community college students’ library perceptions and technology use. I replicated a recent study done by Char Booth at Ohio University. Her research was presented at the 2009 Association of College and Research Libraries (ACRL) conference in March 2009. ACRL also published the entire study, *Informing Innovation: Tracking Student Interest in Emerging Library Technologies at Ohio University*, in May 2009.

The research questions represent six of the seven questions used in the original study, with changes only to reflect the community college student profile.

1. What are the technology profiles (defined as technology ownership, use, skill, and adoption status) of students at a very-large size southwestern community college?
2. What are the library profiles (defined as library use, skill, awareness, and emerging technology receptivity) of students at a mid-size southwestern community college?
3. How do the library and technology profiles of students of disparate demographic factors such as age, digital status, gender, and academic status differ?
4. How can student receptiveness to and awareness of emerging technology library services be characterized?
5. How do students of disparate library and technology profiles compare in their awareness of, assessment of, and receptivity to traditional emerging technology-based library services?
6. What is the relationship between student use and awareness of library services and self-perception of technological competency, and receptivity to emerging technologies?

The data collection instrument consisted of a survey containing a mixture of multiple choice (single answer as well as ‘all that apply’ choices), Likert scale questions and three open
ended questions. The original survey consisted of 35 questions. To narrow the focus of the study, the researcher decided to concentrate on discovering what, if any, disconnects between community college library perceptions and technology used in their academic achievements, removing the research component. In an attempt to shorten the survey, the researcher consolidated some of the questions that were identified as being very similar to other questions, as well as the questions regarding research, which were no longer needed. This resulted in a survey consisting of 25 questions, including the three open-ended questions.

The survey was presented in five sections. In the first section of the survey instrument the participants read the disclaimer and identified themselves as over 18 and agreeing to the conditions of the survey when they clicked to continue with the survey. Section two was aimed at collecting demographic information regarding their age, gender, the reason they are attending classes at this institution, the number of credits completed at this institution at the time of the survey, how they found out about the survey, and the campus they primarily attend. Section three consisted of six questions and was aimed at evaluating the respondents’ library use. Section four aimed to evaluate technology and library technology use. This section had ten questions. The questions in section three and four were in multiple choice and Likert scale format. The fifth section had three open-ended questions. The open-ended questions allowed the respondents to provide some personal insight by giving them a chance to describe their own individual library experience. See Appendix B for copy of the survey questions.

The researcher invited students from a very-large southwestern community college to participate in the survey via announcements and handouts distributed to all student life centers, libraries, on bulletin boards and in cafeterias on all campuses. Students working in computer commons or through bibliographic instruction were also personally asked to participate by
librarians. Instructors invited students to participate either with flyers passed out in class or were provided a link in their course management system. It was determined that the best tool should be an online survey, as the students attend classes face-to-face, online or a mix of the two (hybrid). It also met the eight considerations noted in Sue and Ritter’s *Conducting Online Surveys* (2007). The survey was open for two weeks and 257 students entered the survey and 248 answered at least one question.

Findings

**Research Question 1**

What are the technology profiles (defined as technology ownership, use, skill, and adoption status) of students at a very-large southwestern community college? Students at this institution appear to have incorporated some of the more popular technologies in their lives. Their technology ownership appears to be in line with what is reported in national studies. The majority of students own a computer (laptop, desktop or both), spending more than ten hours online each week. At home, they are likely to have high-speed wireless Internet connection. The majority of them also own a mobile phone of some kind, which is used for text messaging, social networking, and accessing the Internet. This data dispels the notion that many instructors at this institution have about their students, believing they have little access to technology outside the school. However, the students while capable of using text messaging, social networking and access the Internet do not always have the technical skills to complete an assignment. This is probably due to the fact that skills needed for digital entertainment applications do not always transfer to skills required for education driven applications.

The most popular activity on their mobile phones is also their most popular activity on a computer. It would not be atypical for a student to use text messaging and using social
networking applications such as Facebook and MySpace several times during a day. Watching videos on YouTube, and reading Wikipedia articles are done on a regular basis. Focusing on social applications, Facebook and MySpace are the most used, however it appears MySpace popularity is decreasing. Google Maps is also a popular social application.

Students were aware of many more applications than they were using, as was the case with Twitter and Skype. One social application which about one third of the students never heard of was Google Docs, which this researcher found interesting as the institution has recently rolled out Google Docs to be accessed through the student portal, promoting it with announcements and training. This appears to be a disconnect between an unexploited opportunity with this technology and student use. Even though the college rolled out Google docs last spring with heavy advertising through the student portal and introductory sessions with faculty, it was a one-time effort (starting just before it rolled it out with the google email system lasting until a couple of weeks after). This leads the researcher to suggest additional marketing and training sessions with both students and faculty, not only to make them more aware and show its relevancy, but also comfortable in using it.

Most self-identified with the statement that they adopted new technologies about the same time as others, with very, very few identifying with the statement that they avoid new technologies. The top technologies used are Facebook, text messaging, YouTube videos which most used daily. Online applications that could have a relationship to their studies were used by very few, and were not known by very many. However, the students indicated that instructors were not incorporating much technology in their classes. The instructors do not appear to be posting content they created for their classes, nor asking students to create online content either. In fact, most students are not creating content for their classes or for entertainment purposes. The
instructors are taking advantage of the library resources, with those applications identified as the most used technology in classes. The instructors’ lack of content creation may be a disconnect that the college could remedy with additional support in both training, but perhaps more importantly, providing a learning content platform that could easily integrate content creation, helping to alleviate the disconnect between technology use and instructors. Currently instructors interested in content creation must go out onto the web, find various tools, evaluate them, and then set them up for their classes. It could be a case of the instructors “don’t know what they don’t know” as they have not been encouraged by the institution to learn and incorporate emerging technologies into their classes. The institution does not mandate or push the use of those technologies, nor provide support for them. Providing the platform would help to alleviate some of that work, and assist those instructors who may have a lower comfort level with new technology.

Research Question 2

What are the library profiles (defined as library use, skill, awareness, and emerging technology receptivity) of students at a mid-size southwestern community college? The libraries on the campuses, or the online library, are used often by students, with students using either one at least once per month. More students access the virtual library in a semester than the physical libraries, however the physical libraries are used more frequently in a semester. This could be explained as students using the virtual library to access some of their resources, but they are still making multiple visits to the physical library either for hard copies of research items or for assistance from the librarians.

Although the majority of students own a computer and have Internet access at home, they also use a computer in the library. They indicated they use these computers to work on their
academics, as they are accessing their student portal, using the word processor and checking email. This supports one of the more frequent comments from the open-ended questions: when asked what they liked most about the library, students responded with computers. (Not having enough computers was also noted in the least appreciative thing about the library.) Activities that are considered less academic, such as instant messaging, watching online videos/DVDs, and playing games are not used very often. This leads the researcher to believe that students are choosing to work on coursework while on campus, perhaps working in the library because the resources are readily available and where they can obtain (librarian) assistance while working. Further research is warranted to understand the research process of students at this institution to better meet their research and study needs.

The students revealed that while they are aware of the wide variety of resources the library offers but they choose to focus more on the research driven services, rather than the service driven ones. They do not use services such as push notifications, or renewing items online. Students are using research driven services such as accessing citation information, using the online databases, and using the research guides to assist them in their studies. These are things that are also focused on by librarians during bibliographic instruction for a class. To eliminate this disconnect between the student and the service driven (or convenience-oriented) technology the library as to offer, additional education and marketing should be done by the libraries. In focusing on features that push information and resources, the libraries can assist them in being more efficient students and help to eliminate two of the disconnects McDonald and Thomas noted (unexploited opportunities and technology) must be addressed in order for libraries to “retain and expand their usefulness for online users in the next decade” (2006, p. 4).
Research Question 3

How do the library and technology profiles of students of disparate demographic factors such as age, gender, digital status, and academic status differ? When it comes to age, this researcher found that it is not a factor in determining library use. The under-30 age group and the over-30 age group indicated very similar frequency regarding their physical and virtual library use (library profile) throughout the semester. However, age is a factor when it comes to technology use (technology profiles). While both groups use social networking applications and text messaging the most, more in the under-30 age group use them, and use them more frequently. This could be because they are more comfortable with technology or perhaps, if we use the thought presented earlier, that more in the older-30 age group have families, it could be the under-30 age group has more time to use those technologies. Additional information would be needed to be conclusive.

Gender plays a role in library use only when determining daily use: males are more likely to use the physical library on a daily basis, whereas females are more likely to use the virtual library. In looking at those who indicated they never used the library, both males and females were represented nearly equally. As in the age comparison, the two most popular technologies of males and females are social networking applications and text messaging. This researcher found the biggest discrepancy between the genders to be the differences in daily use of Wikipedia and YouTube with males being the primary daily users of those two technologies.

Digital status was determined by computer ownership, and those that indicated they owned a computer used the library (physical or virtual) more often. In fact, all but one of the virtual daily users owns a computer, which makes sense as they have the ability to access the library website more off campus. Those who do not own a computer used the physical library
twice as often as those who owned a computer. Interestingly, those who indicated they never used either the physical or virtual library were those that own a computer, indicating they found their research resources elsewhere. Technology profiles using the students’ digital status indicated the majority of daily users for all four applications (social networking, text messaging, Wikipedia and YouTube) were by those who owned computers. Again, this is not surprising to this researcher, as they are the ones with easier access to computers. However, when looking at total number of users, it was the non-computer owners who used those four applications more than computer owners. The researcher also found it interesting that the majority of those indicating they never used any of the applications were also from the computer ownership group. This researcher is recommending additional research to determine how best to reduce the disconnect between the students who own a computer, but do not use the library.

    Academic status appears to be a good indicator of library use. First year students do not use the library regularly as, in all but one category, the majority of daily and weekly, physical and virtual, library users were second year students. First year students indicated they were infrequent users of the library and more than twice as many first year students than second year students indicated they never use the physical library. This could be attributed to the type of research papers and projects being assigned to first year students. Additional research on the type of assignments and source of resources first year students used would help to determine how the library needs to address these issues to first year students.

    Academic status is also is an indicator of students’ technology use regarding social networking and text messaging. First year students use social networking applications and text messaging more frequently, while second year students indicated more often they never used social networking applications or text messaging. Weekly users of Wikipedia and YouTube tend
to be second year students, while daily users of YouTube tend to be first year students. Overall, more second year students are using Wikipedia. Second year students’ greater use of Wikipedia could be explained that, even though most instructors will not allow it as a primary source, students are accessing it for papers and projects perhaps for background information or to be used in some other way. Further research to understand the research process of students at this institution may reveal their determination in how and what resources are used.

Research Question 4

How can student receptiveness to and awareness of emerging technology library services be characterized? The vast majority of students indicated they would be interested in the library offering a virtual chat reference service and in offering a space for online collaboration. These two technologies fall in line with what was found regarding their technology profiles; that students are more interested in research driven services. It also corroborates with the open-ended comments under what the students least appreciated about the libraries or library website: there are no interactive or collaborative features. This disconnect could be remedied with technology added to the library website of a collaborative tool.

Accessing library services were the least popular applications students’ do on their mobile phones. The students’ top two uses on their mobile phones are text messaging and using social networking applications. Following along those lines, students’ awareness of social sites and web tools had some very familiar responses. The students have indicated openness to some emerging technologies, such as Facebook, MySpace and Google Maps, and while they know about others (Skype and Twitter), the majority has chosen not to use them at this time. It could be that they have tried them but not found them relevant to their life at this time or that they are not confident enough with the technologies to try them. The libraries at this institution have been
the catalyst for new technologies in the classroom. This is supported by the students’ response to
the question inquiring about what technology is used in the classroom: web-based library
applications were the primary ones. This also indicates the majority of instructors’ lack of
confidence in using emerging technologies in the classroom. The library needs to be aware of
this attitude when introducing new technologies, in order to include training and marketing that
will not only show relevancy but also instill confidence to the user, whether they be a student or
faculty member. Further study is recommended to better understand the students’ and
instructors’ reluctance to use emerging technologies to reduce this disconnect.

Technology in the classroom appeared to be primarily library resources, with library
online databases, the online catalog, research guides and the library’s campus transfer service
used most often in the respondents’ courses. Wikis, blogs and online renewal of items (another
library service) were in the second tier of used most often. Most students have taken an online
course, either as a hybrid or completely online.

Research Question 5

How do students of disparate library and technology profiles compare in their awareness
of, assessment of, and receptivity to traditional and emerging technology-based library services?
Library use does not appear to be an indicator of awareness of traditional library services
currently offered. Students using the physical library were able to identify all but two library
services currently being offered (online renewals and full-text books online). The virtual use
students fared slightly better, indentifying all but one (online renewals.) Students’ technology
profiles provided similar results, with most students identifying current library services. This is
very good news, as the libraries have always tried to play an active role in students’ learning.
This has been done through campus library contacts with instructors for the library to come into
the classroom for information literacy and research instruction. On several of the campuses, the computer commons are near or in the library so students find it easy to access. The library also has a presence on the student portal. Recently, one campus library piloted an embedded librarian service to allow the library to have more class time with online courses. This program will be expanded to other campuses in the fall 2010 semester. Based on these results, the library should continue promoting their services, going to where the students are in the classroom and putting a little more emphasis on directing students to their online services.

Both the library profiles and the technology profiles indicate that students’ would be receptive to emerging library technologies (virtual chat reference and collaboration), with the vast majority indicating the library should offer those services.

Research Question 6

What is the relationship between student use and awareness of library services and self-perception of emerging technological competency, and receptivity to emerging technologies? There does not appear to be a relationship between self-perception of adoption of technology and the awareness of library services. It was just as likely that someone who identifies with the statement “I usually use technologies before anyone else” is not aware of current library offerings, as someone who indicated they avoided using new technologies. Virtual reference is the only service not currently offered and it was correctly identified as such more often by those identifying with the statement “I tend to use new technologies somewhat before others do.”

Major Findings and Conclusions

Based on the information found, these conclusions were drawn:

1. Community college students at this very-large southwestern school appear to be in line with other college students when it comes to technology, including ownership and use of
different technologies. Over 82% of this institution’s students reported ownership of a computer (laptop or desktop), which is in line with the 85% (p. 2) reported by The Pew Internet & American Life 2002 report, *The Internet Goes to College*. The OCLC’s *College Students' Perceptions of Libraries and Information Resources* (2006) reported that 20% college students in their survey were reading blogs and accessing e-books. Comparing those to the students in this study, we find 52% using reading blogs and 44% accessing e-books.

The students are also in line with national students regarding downloading music. The 2002 Pew Internet & American Life reports 60% of students download music while 68% of the students in this survey reported downloading music or videos. Some technologies did indicate a gap, such as instant messaging. Only 57% of the students reported using this technology, which the OCLC’s 2006 nationwide report indicated a 70% use by students. (The 57% is greater than the Pew Internet & American Life 2002 report that reported only a 26% use.)

There seems to be a discrepancy between this local group and the national group when it comes to creating content. In *Teens and Social Media the Use of Social Media Gains a Greater Foothold in Teen Life as They Embrace the Conversational Nature of Interactive Online Media*, a Pew Internet and American Life Project report (2007), 64% of online teens identify themselves as content creators (p. 2) but the majority of the students at this institution indicated they did not, with only 17% editing a Wikipedia entry and less than 40% reporting they posted to a blog or even commented on a blog. This is in line with other emerging technology responses of the survey, not only with their self-identification of adoption of new technology but indicates a pattern that students are not comfortable using emerging technologies. This researcher is recommending further research to better understand this indifference, which could be due to several factors, such as students do not find it relevant in their lives, lack of knowledge or
understanding of the new technology, or an apprehension in trying new technology. The answer could be revealed in the research and steps taken to resolve this disconnect.

2. Students at this very-large southwestern community college indicate they use the library, either the physical library or the library website, more often than students in national studies reported. Only 18% of the students at this institution indicated they did not use the physical library and 14% did not use the library website in a semester, whereas 91% of students in a national study indicated they choose the Internet over their library. In looking at the responses of those who indicated they never used the physical library or the library’s website, it was those who owned a computer who selected that answer more often. The researcher speculates that because this institution’s library promotes, and provides instruction on using their services and resources, that students are using those resources more. Speculating further on those who do not use the library, it could be that those who own a computer are more adept (or feel they are) and chose to use the Internet, thus by-passing the library.

This study found that second year students used the library, physical and virtual, more than first year students, which at this institution is when more students are exposed to more complex research projects in which instructors require academic, cited sources, translating into peer-reviewed articles. Peer-reviewed articles typically are not found on the web but in subscription based databases which the library at this institution subscribes to and promotes to their instructors. This is probably true at other institutions, where the work becomes more rigorous at each level as it proceeds to the graduate level. Students at this level are more likely to come to the library for assistance in locating items, and are more likely to be required to use library resources for their papers and projects.
The use of library computers does not appear to be an indication of computer ownership, as 81% of the respondents indicated they own a computer, but only 26 indicate they don’t use a computer in the library to access their student portal account. This would also be true at other higher education institutions, as the computers on campus offer many advantages that cannot be replicated at home, such as readily available assistance (via librarians, tutors or instructors).

3. Collaboration would be a welcome tool on the library website. This application would allow students to have more opportunities to create and exchange content. Detlor and Lewis (2006) indicated academic libraries needed to provide collaborative space to allow students the ability to interact with others to enhance their learning experience, thus changing a library’s focus from accessing information to using information. Collaborating with others would allow students to build on collective knowledge, which Gee (2003) defines as building on one’s knowledge while sharing their knowledge with others. In several courses at this institution, online collaboration is being introduced. Providing collaborative space on the library website would allow students to share thoughts and discern new concepts with students across other campuses. This distributive learning would allow the students to reinforce and expand their knowledge.

4. Students are more likely to use applications that are required for a class or demonstrated in class. Librarians focus on library resources that students can use for their papers and projects, such as formatting citations, online databases and using research guides, which students indicated were used most often. Library services that focus on user convenience such as push notifications and renewing items on line are not discussed much and are used very little during library sessions with a class. The libraries should promote these convenience-oriented applications more, indicating to students that these features can not only save them time, but
make them more efficient students as the information will come to them, versus them hunting for it.

In the same way, students indicated that most instructors did not use much content-creation technology in their classes, and the students also indicated they were not content creators. As a way to introduce these technologies, the libraries could incorporate user-generated content in their regular services to faculty. For instance, a blog could be used for the library newsletter. Or a wiki could be used for collaboration on a research guide. Or a faculty member invited to be a guest speaker for a podcast. Each of these would require the library to take the first step and to assist, or walk the faculty member through the process to help them become more comfortable with the technology. It is expected that over time and with encouragement, the faculty members would become comfortable enough to use it on their own. Additional direction may be needed to demonstrate how it could be used in their classroom. The institution’s instructional designers could help in this endeavor.

5. Students’ receptiveness could be characterized in two ways: they have identified certain activities that they do on certain devices, and they are open to some emerging technologies. For example, they use their mobile phones for activities that allow them to stay connected to others (text messaging and Facebook/MySpace). However, they do not use their mobile phones for the class assignments, such as to access library services. The fact that more emerging technologies are not used in the classroom could be more of a reflection on not only the student’s but also the instructors’ relationship, or comfortableness, with technology.

Limitations

This study had two limitations. First, as the researcher was not allowed to advertise the survey on the student portal or to the students directly via email, other routes were taken, such
as: to contact instructors, student life coordinators, tutor centers, libraries and to advertise on bulletin boards, in an attempt to reach as many students as possible. The researcher had no way of acknowledging that the survey information was passed on unless the instructor indicated they had posted it to their class. This researcher believes that the inability to personally encourage the students to participate and to send a follow up invitation resulted in a small percentage of students at this institution participating in the survey. Second, while the survey could have been printed up on request, the primary way students found out about the survey was through an email or a handout with a link posted. This may have led those students who are not technology savvy to disregard participating.

Recommendations for Future Study

This institution could expand this research by focusing on the students’ use of technology in their research. This would better indicate where and how the library fits in. The more local data that is collected, the better the library can respond in both their physical space, the library website, but also in their bibliographic instruction to better meet the needs of their students. The additional data would also help in resolving the disconnects between what students’ are not using regarding certain library technologies. Some of the questions regarding the research component could be: to inquire into the steps students take in planning their research; where they start their research and why; and the process of their research.

Additional research is recommended for this institution to focus on the instructors’ comfort level with technology, the technology currently used during a semester, research project requirements, and any interest in incorporating more/different technology into the course. Additional research is recommended by this institution to more fully understand the technology needs of the community and the technology expectations for those who will be transferring to a
four-year institution, to learn what the local needs are. This research may assist the institution in creating mandates or incentives to instructors to incorporate emerging technologies in their courses, thus removing the disconnect between instructors and classroom technology. In doing so, the institution could be more active in persuading instructors to incorporate those skills that would transfer into the workplace or their higher education goals. As this institution serves not only those that are transferring to a four-year institution, but also entering the workplace or increasing workplace skills, it is important to look at not only traditional technology skills but also emerging technology skills, as emerging technology could one day be the norm in the workplace. Marketing by the libraries should continue being sure to direct students to their online services, which assist the students in being more efficient as a student.

This institution’s library could expand this research by focusing on the instructors’ perception of online resources. The instructors make the decision on the technology that is used in the classroom and in the course. They also make the requirement as to where the student obtains information for a research project. It is not unusual for an instructor to dictate to the students that only library resources, or peer-review resources can be used in a paper or assignment. Unfortunately there are some instructors who require print only resources, or allow one or two “online resources.” These instructors do not differentiate between resources found on the web and those provided by the library. The library has put much effort into educating these instructors but to no avail. Many times this is a disservice to the student as many resources are available to the student only through the library’s online subscriptions. This is the case for scholarly journals, where the vast majority is purchased through subscriptions with database vendors such as EBSCO and ProQuest. Focusing on the instructor’s perception of different resources regarding their validity and value in their classes would reveal a direction the library
could take to educate instructors that may not have been tried. Other institution’s libraries may benefit from this kind of research if they have a similar situation.

A recommendation for organizations wishing to do similar research would be to find a way to attract more responses. This researcher was not permitted to use the student portal to post a link to this survey, as this was not an official college study. The researcher contacted instructors, student life coordinators, and libraries, to not only advertise the survey but also to promote it. Many instructors posted it to their course portal. While each institution has their own policies regarding research, every effort should be made to use the college resources in an attempt to place the survey tool in the students’ realm. Researchers may also want to have survey available longer than two weeks, as with advertising and contacting instructors, a large portion of the first week was taken.
REFERENCES


Teaching Foreign Language and Foreign Culture to Young Learners

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The study will mainly focus on the teaching of foreign languages (mostly English) and foreign culture to young learners in Turkey. After reviewing the relevant literature, the study will investigate how Turkish children get introduced to foreign language and foreign culture and learn them at different social settings: at home (by their parents, siblings and etc.), in certain social occasions (e.g. birthday parties, other celebrations), through media and technology (e.g. TV, computer, computer games), in social and educational institutions such as kindergarten and primary school (by their teacher and their class-mates, through the coursebooks etc.).

The research is qualitative in nature. The participants of the study mostly consist of young learners, their parents and their teachers. An interview, observations and material analysis will be used as data collection instruments. The collected data will be analyzed and possible ways of teaching foreign language and foreign culture to young learners will be discussed by the help of clear and efficient examples and explanations. Real life situations and applications will be presented and discussed throughout the paper.

Keywords: Teaching foreign language, teaching foreign culture, young learners,
“WRITING COMPETENCIES OF TARLAC STATE UNIVERSITY CAMPUS WRITERS: BASIS FOR AN INTERVENTION PROGRAM”

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ABSTRACT

Rationale/ Background:

Learning institutions from high school to tertiary levels in the country continuously provide co-curricular activities to promote and harness the skills of students on different categories.

One of these activities is editorial writing, an important part of campus journalism. It provides students with an arena where they could practice their writing competencies.

Therefore, this study determined the writing competencies of the Tarlac State University campus writers for academic year 2005-2006. The writing competencies of the writers were based on the following criteria: organization, context, language, vocabulary and mechanics.

The campus writers constructed two editorials to determine their writing competencies. The first editorials were written before the writing workshop and the second editorials were written after the writing workshop. After finding out the writing competencies of the campus writers, the researcher proposed an intervention program to improve the writing competencies of students.

Statement of the problem

The study aimed to determine the writing competencies of Tarlac State University campus writers as basis for an intervention program.

Specifically, it sought to answer the following questions:
1. How may the writing competencies of Tarlac State University campus writers be described before the writing workshop in terms of the following:
   a. Content;
   b. Organization;
   c. Vocabulary;
   d. Language; and
   e. Mechanics?

2. How may the writing competencies of Tarlac State University campus writers be described after the writing workshop?

3. Is there a significant difference in the writing competencies of the Tarlac State University campus writers before and after the writing workshop?

4. What intervention program may be proposed to improve the writing competencies of campus writers/students?

The conclusions of the study are:

1. The writing competencies of the Tarlac State University campus writers before the writing workshop on content and organization of the first editorials were generally fair to poor. Moreover, the writing competencies of the campus writers in terms of vocabulary and language were good to average. The mechanics used by the campus writers were excellent to very good.

2. The writing competencies of the campus writers on content and organization after the writing workshop based on their editorials were generally fair to poor. Based on vocabulary and language, the writing competencies of the campus writers were generally good to average while the mechanics used by the campus writers in their final editorials were excellent to very good.

3. The statistical analysis and interpretation used to determine the writing competencies of the campus writers showed a significant improvement in the writing competencies of the campus based on content, organization, vocabulary and mechanics.

4. An intervention program which focuses on organization and content is proposed to help improve the writing competencies of campus writers and students in the tertiary level.
1. Title of the submission.

An evaluation of the Project Learning Tree Secondary Module “Forests of the World

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6. Abstract and/or full paper

Project Learning Tree® (PLT) is an award winning, multi-disciplinary environmental education program for educators and students in PreK-grade 12. PLT is a program of the American Forest Foundation and is one of the most widely used environmental education programs in the United States and abroad, and continues to set the standard for environmental education excellence. PLT helps students learn how to think, not what to think, about the environment. PLT meets state and national education standards and the curriculum materials provide the tools educators need to bring the environment into the classroom and their students into the environment. Project Learning Tree and the World Forestry Center have joined forces to create a secondary module that provides a framework for exploring forests around the world. *Forests of the World* provides formal and nonformal educators with a series of activities to help students and educators gain an increased understanding and appreciation of the diversity of world forest environments, with an emphasis on the human interaction with and dependence on those environments. The module activities provide students with opportunities to apply scientific processes and higher order thinking skills while investigating world forestry issues and conducting service learning action projects. The evaluation of the effectiveness of this secondary module as a curriculum is the basis for this study. Teachers from across the country, all of whom have been trained in PLT, taught the module activities to their students. Data were collected in the form of pretests and posttests and the analysis is ongoing. Preliminary results from data collected will be shared.
Title: “THE DESIGN AND DEVELOPMENT OF A PROPOSED ORGANIZATIONAL MANAGEMENT MODEL FOR STUDENT AFFAIRS OFFICES”

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ABSTRACT

Rationale Background:

The study focused on the Student Affairs practice of Higher Education Institutions in the Philippines particularly in Central Luzon - Region III. It examined the various components and services of the student affairs office of selected State Universities and Colleges, and, Private Higher Education Institutions which are considered Centers of Excellence and Development in various academic fields.

Based on management models and theories, an Organizational Management Model was designed for the implementation and use of student affairs offices. It was validated by authorities in the field of student affairs and education based on a set of criteria. The Organizational Management Model comprises
of six components namely: Strategic Framework, Yardsticks and Key Success Indicators, Structure, Teams and Human Resources, Environmental Culture and Management Practice (SYSTEM).

The respondents for the study consisted of heads of offices and the heads of the departments under the student affairs offices. The model was used to describe the management systems utilized by the respondents in their respective places of work.

**Statement of the Problem**

This study aimed to design an organizational management model for Student Affairs Offices of higher education institutions (HEI).

Specifically, it sought to answer the following sub-problems:

1. How may a proposed organizational management model be designed?
2. How may the proposed organizational management model be validated in terms of:
   a. Clarity
   b. Applicability
   c. Comprehensiveness
   d. Functionality
3. How may the proposed organizational management model be utilized in describing the management systems of student affairs offices of selected state universities and colleges (SUCs) and private higher education institutions (PHEIs)?

4. What are the implications of the results of the study for educational management?

The conclusions of the study are:

1. The organizational management model was validated and rated as excellent.

2. There is no uniformity as to the titles and names of offices used to indicate student services and affairs.

3. The respondents' statements of their VGMOs are aligned to their student services.

4. The respondents' focus of OSA programs is centered on students' welfare, growth and holistic development.

5. SUCs utilize a plan-per-unit strategy while PHEIs make use of Management by Objectives.
6. SUCs' top three most important are the OSA staff, Administration and students respectively.

7. PHEIs rated the Administration OSA staff and support systems / groups as the top three collaborators in activity planning and implementation.

8. PHEIs utilize success or performance indicators for their programs.

9. PHEIs confirm the presence of Standard Operating Procedures in the performance of work.

10. PHEIs indicate the presence of manuals per unit to guide their activities.

11. PHEIs show clear explanations of instructions regarding jobs and roles of employees.

12. The respondents use a per-activity-evaluation system.

13. The common key performance measure used by respondents is quantitative in nature.

14. The services stated in the CHED memorandum are handled by the respondents except for cultural programs in the case of PHEIs and multi-faith services and safety and security for SUCs.
15. PHEIs practice consultation and approval of programs by the administration and the presence of student leaders in the organizational structure.

16. Detailed job descriptions are provided for the OSA personnel.

17. The OSA personnel are able to manage conflicts and build positive relationships.

18. SUCs believe in the qualifications of their personnel and the possession of appropriate skills and competencies are fit to their line of work.

19. SUC unit heads and heads of Student Affairs possess Master’s Degrees and Doctorate Degrees.

20. PHEI unit heads and heads of Student Affairs possess Bachelor’s degrees and Master’s degrees.

21. The respondents give extraordinary effort, enthusiasm, and motivation in conducting activities and achieving goals.

22. Student affairs offices have different position titles for their heads.

23. OSA unit heads handle more than one student service
24. Both groups of respondents agree on the characteristic environment of OSA as to togetherness and harmony.

25. PHEI respondents encourage insights and ideas, continual challenges in setting goals, OSA culture as a guide in staff behavior, good OSA working atmosphere, the presence of OSA core values and a sense of family and unit at OSA.

26. The description of OSA environment that need improvement are the following: funds are not sufficient for their activities and programs; also, facilities and equipments need to be updated and upgraded,

27. Positive descriptions of OSA environment include: work is financially and emotionally rewarding, and the constant enforcement of monitoring systems.

28. The respondents are still in the development phase of formulating their core values.

29. The most common core values are the following: Integrity, Innovation, Team work, and Social Responsibility.

30. The two groups of respondents agree on the active support of the OSA head in activities and programs.
31. PHEI respondents gave high levels of agreement on the following: staff opinions are considered in making vital decisions, staff motivation is done for setting higher goals, improvement opportunities and research on best practices are done, and monitoring systems and regular reports are done to meet targets.

32. Management model is descriptive of management systems for Private Higher Educational Institutions.
Title: Creating the conditions for professional learning communities: Reconceptualizing the facilitative role

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Abstract:

Professional learning communities provide fertile environments for school improvement, especially when they reach beyond their organizations for external knowledge and lateral capacity building. Yet professional learning communities do not happen by accident. They require facilitation and support. When schools and universities collaborate in support of the development of professional learning communities, they can form powerful connections and new collegial roles. The resulting learning and leadership development can be powerful for all members, school educators and university staff alike. This paper presents a documentary account of a co-constructed model of a school-university partnership. Built around the development of a network of professional learning communities within and amongst the partners, this partnership is grounded in socio-cultural and constructivist theories of learning and knowledge. PLC development was further enhanced with ongoing data gathering using a capacity-building evaluation model. Project findings have identified the following salient and necessary supports for developing and sustaining a PLC network: 1) using research-recognized tools such as logic models to integrate, focus, and improve staff efforts around
understanding and using data, assessing student growth and achievement, and improving instruction and learning; 2) applying a capacity-building model within schools and across schools to design, implement and evaluate effective school improvement strategies within a culturally responsive framework; 3) establishing protocols that engage the wisdom from partners across the entire network rather than rely on external expertise, and serve to flatten the perceived hierarchy; and 4) developing an inter-disciplinary PLC for facilitators. Together, these supports have enabled us to reconceptualize our role as facilitators in ways that create the conditions necessary to deepen and develop collaboration, engagement, and the examination of practice that has led to pedagogical change.
MENTORS AS CHANGE AGENTS: A CASE STUDY OF A LATINA FIRST GENERATION COLLEGE STUDENT

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MENTORS AS CHANGE AGENTS: A CASE STUDY OF A LATINA FIRST GENERATION COLLEGE STUDENT

Abstract

This case study examines the experiences and educational barriers faced by a Mexican-American first generation college student. This study follows the life experiences of a student who was able to overcome significant obstacles in order to become the first in her family to graduate from college. The major findings include the importance of cultural and social capital in the college application and college choice process. Other findings include the impact of teachers and high school counselors as gate keepers that either grant or deny access to higher education. The importance of mentors and college counselors as change agents in breaking the cycle of social reproduction in public schools is discussed. Implications for practice and policy are discussed.
Introduction

Students throughout the United States are told and believe that those who work the hardest will achieve the best results. However, what most working class students often fail to realize is that although they are running the same race as their middle class peers, their peers have begun with a sizeable head start. In looking at college attendance rates, students whose parents have attended college are given a significant advantage by virtue of the cultural capital that is passed on to them by their parents (Bourdieu, 1986; Lareau, 2003). Parents who are college educated know that in order to attend college one must complete certain courses, attain a respectable GPA, and score well on standardized tests. In addition, these parents know about the college application process including how to fill out an application, how to apply for financial aid, and how to prepare for an interview. These skills are in turn passed on to the benefit of their children giving them the head start that gives them an advantage over those who are the first in their families to attend college.

This case study is the result of an interview with a thirty-one year old Mexican-American doctoral student. Although both of her parents never finished school, she was able to graduate as the valedictorian of her high school. She went on to graduate from a highly selective private college in the East Coast with a dual major in Business and Spanish. She later completed a Master’s degree in Educational Administration and is currently pursuing a Ph.D. in Education. Although she was born in the United States, she spent her first years of schooling in Mexico and did not begin school in the United States until the fourth grade.
This interview focuses on how she was able to overcome her family’s limited experiences with formal education to become the first in her family to attend college. I investigated how she was able to use the social capital of college counselors and mentors to navigate her way through high school and the college application process. The interview focused on how her participation in a mentoring program made a significant difference in her decision to apply to and attend a prestigious college that was a great distance from her home. In addition, I studied how the cultural capital she gained through this process is now being passed on to her younger sisters who are both currently pursuing college degrees in Nursing and Psychology (Bettie, 2002). Through this interview I hoped to gain a better understanding of the obstacles that face many first generation college students and how they are able to use their social capital in order to overcome them.

This paper draws on research by Bourdieu (1986) that cultural and social capital play an important role in the educational attainment of students. Bourdieu defined cultural capital as the forms of knowledge, skills, education, and advantages that a person has. This cultural capital gives a person a higher status in society. Parents can provide cultural capital to their children by transmitting the attitudes and knowledge needed to succeed in the educational system.

Bourdieu (1986) defined social capital as the resources available to an individual based on group membership, relationships, networks of influence and support. He went on to say that social capital relationships are useful to us because they allow us to achieve things that we would not be able to achieve without them. He explained that all social groups possess social and cultural capital, but that the capital of lower socioeconomic
groups is not valued by the dominant group. He also found that those who have higher levels of cultural capital are more inclined to maintain it and increase it with time.

In addition to Bourdieu’s (1986) contributions regarding cultural and social capital, this paper also draws on his idea of habitus. Habitus is the accumulation of our everyday activities that become our habits. Our habitus is shaped by our peer reference group, educational experiences, and cultural practices. In this paper I will discuss the habitus of both individuals as well as organizational habitus. Organizational habitus is the habits and practices of organizations that result in certain ambitions and expectations for those who are a part of the organization.

**Born in the U.S.A.**

Lucero* was born in 1978 in Northridge, California. She was the second of four children. Her parents were immigrants from the small town of Degollado, Mexico who had moved to the San Fernando Valley region of Los Angeles one year earlier. Her mother had left school after finishing third grade and her father discontinued his education after completing the sixth grade. Although Lucero was born in the United States, her family returned to Mexico when she was four. They remained in Mexico for the next five years. During this time Lucero and her older brother attended elementary school in Degollado. Her parents had run a successful tienda (family store) in Mexico, but they decided to leave Mexico to return to America. Lucero believes that her parents’ motive for moving back to the U.S. was so that she and her brother would have the opportunity to learn English and so that they would have better opportunities for their future.

* All names used in this case study are pseudonyms.
Upon her return to the United States Lucero enrolled in the local elementary school as a fourth grader. I came to the U.S. when I was in fourth grade, so that’s probably like 9 years old. And I came to Reseda in the Valley. The community was mostly recent immigrants. I would describe it as a low socioeconomic area and it was an apartment and there were four of us kids and my parents and we were living in a two bedroom apartment.

Although she had been born in the U.S., she had spent the last four years living in Mexico and had never previously attended American schools. Lucero remembers finding it difficult to understand what her teachers were saying and often felt left out of the conversation. She reported some negative experiences with classmates as a result of her limited English language abilities and sometimes felt as if they were talking about her in English so that she wouldn’t understand. She remembered participating in a pull out program for English Learners that was taught by a bilingual teacher. She enjoyed participating in this program because she was able to understand the teacher and the teacher could understand her.

I remember at the time when I went to elementary school I didn’t speak any English obviously so it was hard because I didn’t understand anything the teacher was saying and sometimes I would think they were saying things about me not speaking English at my table cause they would blame things on me. Like I remember one time that the teacher would give us like table points for whoever got ready first and um everybody was like getting ready and I remember like specifically they blamed me that I wasn’t ready because I didn’t cross my hands or whatever because that was like what the teacher asked but I didn’t understand that was what she wanted us to do. So I felt bad that they were blaming me that I didn’t get ready and I made them lose a point. Pero the other thing I remember from elementary was that there was a bilingual teacher who used to teach us things in Spanish and she would take us out of the classroom to just teach things to us in Spanish and I remember that I liked going there because I understood what was going on.
“Habitus” Are Hard to Break

Although Lucero experienced some difficulties adjusting to school during her first few years attending an American elementary school she found success despite her limited English skills. Yet, despite her academic success, her parents remained largely uninvolved in her education. She reported that although her parents wanted her to be successful they were not involved in her schooling as much as other parents.

I always felt that my parents wanted the best for us obviously they wanted us to do good. They were not very involved like in school. I don’t remember them being involved or even like asking you know do you have homework or what did you learn in school. So I don’t remember like anything like that. They never went to like parent conferences or open houses. I think like either they didn’t know about them or the information never got to my parents or it was never written in Spanish. The only time I remember they came was one time and it was for my graduation in elementary school.

Research indicates that immigrants and other working class parents often defer to teachers as educational experts and often feel intimidated about talking to teachers about the education of their children (Lareau, 2003). Not only can this be a norm of working class parents, but it is also a cultural norm for many immigrants. This custom is particularly common among immigrants from Latin America. Although working class parents want their children to succeed academically they are often less likely to engage in educational opportunities provided by the school such as parent conferences.

Not only do working class parents view their role in their child’s education differently than middle class parents, they also have different ways of raising their children as well as different educational aspirations for their children. Lareau (2003) calls the way that middle class parents raise their children concerted cultivation. In this
method of child rearing the children are engaged in a variety of structured activities that help train them in the rules of middle class society. They work with adults and learn to address them as equals. Through these interactions they develop a sense of entitlement that stays with them as they mature. In many ways this form of parenting provides children with some advantages that allow them to make the rules work in their favor as they grow up. Although Lareau explains that concerted cultivation has many advantages, she does not claim that it is the best way to raise children. She does however concede that it matches the best with the culture of schools.

In contrast, Lareau (2003) explains that working class parents favor a different method of child rearing which she calls natural growth. This method of child rearing involves allowing children more freedom and less restriction in their development. It is characterized by giving children time for free play and often involves more time spent with members of the extended family than is typically found in middle class families. There is less of an emphasis on structure and children are left to develop in a more natural way. This method of child rearing does not emphasize children interacting as equals with adults and is often characterized by a separation between the adult world and the child world. Although this method of parenting has some advantages, it is less valued by schools and can in some ways put the children of working class parents at a disadvantage when it comes to success in school.

When asked about her parents aspirations for her future, Lucero explained that they would have been happy as long as she found a job in an office. They did not speak to her about college and she felt that they were not very well informed about the application process. College was not a part of her parents’ habitus.
They were not informed about any of that stuff because they didn’t know about college options or that like college was like gonna be an option for me. So they were not informed at all. They never talked to me about college. I don’t think you know they knew about college.

Research on the aspirations of working class parents also indicates that they differ from the aspirations for their children by middle class parents (Lareau, 2003). Middle class parents tend to have little doubt that their children will go to college, while working class parents hope that their children might attend a state college. Lucero communicated that the aspirations of her parents for her did not involve college, but rather her finding an office job after high school.

I remember that when I was like in high school their aspirations were like for me to work in una oficina, like work in an office. My mom used to think that it was nice to have an office job so they used to say don’t be like my dad working in the sun cause my dad works construction and its like a hard job. So she used to say like as long as you work like in an office that would be like a good job for you. So like after high school if I had just worked in an office like as a secretary or a bank teller that would have been like a good job for them.

**Gate Keepers and Change Agents**

Unlike students in many affluent communities, working class students tend to have less interaction with teachers regarding college and college preparation (Lareau, 2003). Although she had many positive relationships with teachers, she had a hard time thinking of many examples when teachers spoke with her about college. She did report one instance when her PE teacher encouraged her to attend college despite her own lack of college knowledge.

I just remember I had one friend Olga and I always said like we wanted to go to UCLA together and I think one of the reasons we kept saying that
was when we were in middle school we had a PE teacher who went to UCLA and she always would wear T-shirts that said UCLA. She would just tell me oh you know you are gonna go to college. I used to tell her oh no I’m not gonna go because my mom would never let me go away to college and she would say well if you want to be the boss you have to go to college. And I would tell her I’m not gonna go to college because I’m gonna get married after high school and she would say if you go to college your gonna meet a nice college educated man over there in college.

Research on working class students has revealed that teachers and guidance counselors do more than just teach and organize class schedules. They are key participants in the social networks of low status students and play a determining role in reproducing or interfering with the reproduction of class, racial, and gendered inequality. In essence they act as gate keepers to higher education by either granting or denying access to students (Stanton-Salazar, 2001). In addition to her limited experiences with teachers regarding college and college preparation, Lucero also reported that her high school counselor did not play a large role in preparing her for college.

In high school I remember meeting my counselor not very often. I feel like her main concern was to make sure that I took classes to finish high school. So she would call me when it was like towards the end of the semester and she would ask me oh how are you doing in your classes. But honestly I don’t remember talking to her about college. I just think its funny that like somehow I was taking the right classes preparing to go to college. I guess like not knowing that I was taking the prerequisite classes that I had to take to get ready for college.

In addition to the fact that teachers and counselors at her high school did not play a significant role in assisting Lucero in the college application process, she also reported a disturbing trend among some of her teachers that resulted in lowered expectations for students in the regular program as opposed to the magnet program at her high school (Gonzalez et al, 2003). Lucero was tracked in the regular program and felt that her counselor was mostly concerned with helping her graduate high school, but that she did
not talk to her about attending college. In addition, some teachers seemed to have lowered expectations for students in the regular program, especially ESL students. This general lowering of expectations became a part of the habitus at her high school that lowered the expectations and aspirations of students (Bourdieu, 1986).

I had another teacher who also taught the magnet students and I always felt like he didn’t make the curriculum as rigorous because he probably thought that we were not going to be able to handle it.

Despite limited support by teachers and counselors from her high school, there was one individual who played a crucial role in helping her prepare for and apply to college. While she was in middle school, Lucero was recognized by her teachers as a student with limited resources but having great potential. She was referred to a local mentoring program that matched up successful professional adults with low income students from groups that were typically underrepresented in college. This program matched her up with a middle class elementary school teacher named Ellen who became an advocate for Lucero as well as a trusted friend. Ellen would play a very important role in encouraging Lucero to attend college and to broaden her aspirations for which college she wanted to attend.

I think who had the biggest role was a mentor I had that I was matched with in this mentoring program. She was the main person who made a difference in helping me with the college application process. I remember staying up late working with her just filling out the applications and just running around to get things for the applications. She was the one who told me to talk to my teacher cause you’re gonna need like recommendation letters. I think that without her I wouldn’t have made all those deadlines. She would just like give me a list of things to do. Sometimes she would even like talk to my counselor. She would be the one like calling her and tell her like Lucero is gonna come and talk to you make sure you provide her with the information. So like by the time I went to talk to my counselor she would be like oh Ellen already talked to
me and she said you were gonna come and pick this up so here this is what you need.

Just as many of Lucero’s teachers and counselors had acted as gate keepers and done little to change the cycle of reproduction that exists in many urban schools, Ellen had become a change agent (Bourdieu, 1973; Stanton-Salazar, 2001). She saw the potential that was in Lucero and took action to break the cycle of social reproduction that would have resulted in Lucero being shut out of the college process and may have lead to her remaining a member of the working class. Ellen took on the role of teacher, counselor, and even parent in providing Lucero with the cultural capital that she lacked in regards to college.

In addition to being provided a mentor, the mentoring program also had a college counselor assigned to Lucero. In contrast to her high school counselor who was only concerned with Lucero graduating from high school, her college counselor at the mentoring program spoke with Lucero exclusively about college. While the habitus of her high school revolved around the concern for helping students to graduate high school, the habitus of the mentoring program was that students would attend college (Bourdieu, 1986). Not only did the mentoring program expect all students to go to college, there was a particular emphasis on attending highly selective colleges and universities. Lucero’s college counselor helped her to identify schools that might be a match for her and assisted her in navigating the college choice process.

Through the mentoring program that I was part of that was the first time that I like had a college counselor or advisor. My mentor would bring me in the office and I would talk to my college advisor. She would ask me like what interests you and I was like I wasn’t sure what interests me so I wasn’t sure like what to say.
Lucero’s college counselor also played a role in exposing her to college options that she did not even know existed. Prior to meeting with her, Lucero had aspired to attend a local state college. However, her college advisor exposed her to a range of colleges that she never even knew about. She encouraged her to consider colleges that were out of state and far from home. She also recommended attending an all women’s college to satisfy her parents’ fears that she would get pregnant if she was living far away from home. Lucero also tapped into the social capital made available to her by her association with the college counselor. The counselor was able to connect Lucero with a relative who had attended Franklin & Marshall College, a small highly selective liberal arts college in Lancaster, Pennsylvania.

I remember that the college counselor there had a niece and the niece went to Franklin & Marshall and she came to talk about Franklin & Marshall to me and how much she loved it. So she was like maybe we should suggest that to Lucero to go to Franklin & Marshall. So that’s how it started. Then like later in the year Franklin & Marshall sent a representative to the mentoring offices and that was a great opportunity for me to go talk to them in person. So the college counselor from the mentoring program set up an interview for me to go talk to the representative from Franklin & Marshall.

Although the mentoring program had helped Lucero by setting up an opportunity for her to meet with a college representative, they did little to assist her in preparing for her interview. Having come from a working class family where college interviews were not a part of their habitus, she did not know what to expect from the interview. Instead of preparing questions ahead of time and thinking of ways to impress the college representative, Lucero showed up to the interview with her whole family with no idea of what the interview would be like.
The funny thing is *de que* I didn’t really know about interviews cause I had never been to no interviews. So I remember that when I went to this interview everybody from my family came. Everybody was looking at us weird because everybody was sitting there from my whole family. At the time I didn’t know anything was wrong with it. The college counselor ran to get a camera to get a picture because we were all just sitting there. Nobody taught me to think of questions ahead of time or to come with some questions ready or told me to kinda like to show interest in the school or say that I really wanted to go there. And now thinking back I came up with like stupid questions like oh do the boys and the girls sleep in the same dorm or are we gonna have food there. But I don’t think that’s like some of the normal questions that people ask.

Lucero’s lack of cultural capital resulted in her showing up to her interview without any preparation or even the realization that she could or that she should prepare. In contrast to Lucero’s experience with the college application process, many middle class and upper middle class students benefit from the cultural capital provided to them by their parents as well as that provided by private college counselors who can help by preparing them for interviews and telling them what to expect (McDonough et al, 1997).

**College Life**

Despite her many obstacles, Lucero finished with a 4.12 GPA and was the valedictorian of her high school class. Despite what she considers a poor score on her SAT’s she applied exclusively to highly selective colleges. Like many working class students, Lucero applied to only a handful of schools (McDonough, 1997). She remembers applying to Pepperdine University, UCLA, Wellesley College, and Franklin & Marshall College. Despite having her choice of schools to attend, she ultimately decided on Franklin & Marshall. Although she knew little of the other colleges and had visited only the F&M campus prior to applying, her decision to attend F&M was largely a financial one. Interviews of college applicants have shown that financial considerations
tend to play a much larger role in the college choice process for working class students compared to middle class applicants (McDonough, 1997).

They gave me a lot of money to be able to go there. A lot of people, especially like my mentor, they told me you know this is like a very expensive school and the package you’re getting is a big deal. And I was like really it’s a big deal? At the time I wasn’t really sure, but coming from them I believed them that it was like a big deal.

Yet despite receiving a great financial aid package, Lucero was faced with the task of convincing her parents that it was a good idea. Once again her mentor and college counselor stepped in to help convince her parents.

One of the main reasons I decided to go there is because um they gave me a big financial aid package. They provided me with um considering that it was, and it still is, a very expensive school they gave me a lot of money to go there. And so I almost said no once again because my parents, especially my mom, would not allow me to go away. And she would say you know I’m gonna die, I’m gonna die, if I don’t know where you are and I don’t know what you’re doing. But my mentor and the college counselor in the mentoring program, you know, wrote letters and they had someone translate them for her to kinda like let her know that she was gonna be okay and that she was not gonna die and those kind of things.

Once she arrived at Franklin & Marshall, Lucero experienced a sort of culture shock. She realized that there were people who did not have to worry about the financial considerations that concerned her and her parents. She found that most students at F&M could rely on their parents to assist them financially rather than having to do work study to pay for expenses.

It was different because like I said there were a lot of rich people and I would just like sit in the cafeteria sometimes and just listen to their conversations and they would say things like oh I have to call my dad and you know get more money in the bank account and I like didn’t even have a bank account. And they just had like a special bank account where they
could just like get money whenever they needed and they would just like say things like that.

In helping Lucero adjust to her new life in college it was not her parents who helped her. Once again her mentor played an important role in helping her navigate the college experience and adjust to college life. She gave her advice that would help her be successful in college classes. She provided the kind of guidance that many middle class children receive from their parents, but is not a part of the habitus of working class parents (McDonough, 1997). In many middle class families, the cultural capital that helps one succeed in college is transferred from parents to their children (Bourdieu, 1986). However, since college is a new experience for most working class students, parents are unable to transmit the cultural capital that will help them succeed.

At the beginning when I first got there my mentor was the one who helped. I mean she even came. She came like my first year and my parents never came to my school till the very last day I was there, pretty much for graduation. But, my mentor came to visit me like on parent weekend and you know she came and she was very interested to know like how the school was. It was the first time that I got like out of the school. She took me to like the Lancaster community and then we went and we visited the Amish and I saw like the wagons and all that. She got me started you know like my first year there. She helped me open my first bank account. She told me you know take notes, ask questions, talk to the professors if you have problems.

Not only did Ellen help her to learn strategies that would assist her in being successful in college, but she also provided emotional support by visiting her when she was so far away from home. In many ways, Ellen played a role that middle class parents play in the lives of their children. Ellen again broadened her experience by showing her places in the college community that she might never have enjoyed if it wasn’t for her.
Looking back on her own experiences, Lucero was able to reflect on the impact that her mentor had on her during high school, throughout the college application process, and during her first year of college. She believes that if it were not for her mentor she would not have gone away to college. She felt that she probably would have followed the habitus established for the students in the regular program at her high school and attended a local state school.

If I had not had a mentor I think I would have still gone to college. I think I would have definitely gone to CSUN cause like the friend that I had who we said we’re gonna got to UCLA she ended up at CSUN. And she ended up you know working part time and I’m pretty sure I would have done the same thing and since you know I was kinda doing that in high school already.

When looking at Lucero’s college journey it was her mentor, Ellen, who took on the roles that are typically played by parents, teachers, and guidance counselors in the lives of middle class students (McDonough, 1997). Ellen saw the obstacles that existed and the potential that was within Lucero and made a decision to act as a change agent to break the cycle of social reproduction that exists in schools (Stanton-Salazar, 2001). It was through her actions that this cycle was broken which allowed Lucero to achieve what is typically beyond those coming from the working class habitus.

By breaking this cycle Ellen created a new path that not only has lead Lucero to achieve, but has now allowed her younger sisters to also benefit from the cultural capital that was gained by this experience. Today Lucero has not lost her hard working nature. She works as a full time teacher at a Los Angeles elementary school while she simultaneously continues to pursue her education as a doctoral student in the field of Education. Lucero’s success has also impacted the lives of others by transmitting the
cultural capital that she gained to her younger siblings who are both currently pursuing college degrees (Bettie, 2002).

Conclusion

This case study sought to explore the experiences of a Mexican-American first generation college student. My conversation with Lucero revealed a hard working woman with a strong commitment to her family. Learning a new language, lack of support from teachers and counselors, low expectations, and lack of parental involvement have all played an important role in her educational process. Yet despite these obstacles, Lucero has achieved what most working class students do not even know is possible. Although her path has been rough and beset with hurdles she has kept pace with her middle class peers and has even surpassed many who had begun with a sizeable head start.

Lucero is a prime example of what is possible when educational players make the decision to be more than just gate keepers and become change agents (Stanton-Salazar, 2001). Had it not been for the intervention of her mentor and college counselor, Lucero would likely have followed the same path taken by her high school peers. Had she decided to attend a state college, it is unlikely that she would be a doctoral student today. Research has shown that not all college degrees are the same. Those who attend third and fourth tier colleges and universities do not gain the knowledge connected with substantial intellectual work including theory, extensive writing, and independent research. Graduates from these schools generally do not receive the prerequisite skills that allow them access to top graduate schools (Aronowitz, 2004).
Although Lucero was able to overcome her class status to achieve tremendous results, what about the thousands of working class students like her who do not have the benefit of being matched with a mentor and college counselor? We should take steps to make sure all students are not shut out of the college of their choice simply for lack of information. One way that we can hope to achieve this result is by increasing the number of college counselors at our nation’s public schools. These counselors should serve the role of providing college access to those students who lack the cultural capital that is supplied by college educated parents (Stanton-Salazar, 1997; Valadez, 2002).

In order to improve American schools, we should seek to improve our urban schools so that students are not the victims of teachers’ low expectations. One way that we can improve our nation’s schools is by making sure that all students are informed about what is required to gain acceptance in selective colleges. We should make sure that all students are given the chance to complete a college track curriculum and have the option of college attendance upon graduation from high school.

In addition, we should be certain to make sure that all youth are given early, frequent, and positive contact with teachers, counselors, and administrators (Padilla & Duran, 1995). This could be accomplished by making sure that adequate numbers of counselors are present in our schools that have large numbers of working class and immigrant students. We should also make sure that every child in every school has an adult at the school who they can go to for support or advice. This can be achieved by allowing students to choose the teacher or counselor they want as their college advisor, similar to the way graduate students are free to select the faculty members they wish to work with. This would help to ensure that those students who are most in need of a role
model or caring adult in their life receive the support that will help them in the
application and college choice process. In this way we can work to break the cycle of
social reproduction that exists in schools and give all students the cultural capital that will
make college an option for all.
References


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1. **Title of the submission:**
Reading to talk: An exploration into the effects of L1 explanatory notes on L2 oral participation

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6. **Abstract:**
This works-in-progress aims to test the hypothesis that text written with L1 (first language) explanatory notes will increase the quality of subjects’ L2 (second language) oral participation. This research will use a quasi-experimental design consisting of a control group and a treatment group. Both groups will take Nation’s (1990) Vocabulary Levels Test to ensure that the subjects’ are operating at a novice level (2000 – 3000 word level). Additional selection criteria for subjects includes their L1 being Korean, being between the ages of 18 - 45, and their strong desire to learn English. All subjects will read a short article on health in the poor and rich worlds (Nassaji, 2006), but only the treatment group will have Korean explanatory notes written above low frequency words (between 1 and 49 occurrences per million words), as determined by Thorndike and Lorge (1944). The reading time of all subjects will be timed in order to calculate their fluency of reading. The subjects will then be asked to orally recall the experiences of the article’s narrator and to include their own experiences/opinions as well. This narration will be audio-recorded and transcribed for analysis. The analysis of the transcript will be exploratory in nature to determine any effects of L1 explanatory notes on L2 oral participation. The following are some of the features of the subjects’ L2 oral production that will be analyzed: comprehension of the article, oral fluency, number of low frequency words used, functionality of grammar used, and operation within Bloom’s Taxonomy (1956). The findings of this research may further refute the claims of the monolingual principle (Howatt, 1984) and encourage a more multilingual approach to language instruction (Cummins, 2009). EAL (English as an Additional Language) students in mainstream classrooms struggle with discussion formats, especially when they are not confident in their understanding, thus utilization of their L1 may be a route for their “legitimate peripheral participation” (Lave & Wenger, 1991).
Student Assistants in Elementary School Physical Education Classes: An Action Research Study

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The purpose of this action research was undertaken to study the experiences of elementary school generalist trained teachers and students when student assistants were used in physical education classes. Using Herr and Anderson’s (2005) outsider in collaboration with insider action research methodology, the study utilized the combined efforts of all participants involved in a grade one/two class and a grade five/six class to implement the use of student assistants into their physical education classes.

Data collection techniques included experiencing (observations and field notes), enquiring (interviews), and examining (journals, videotapes, photographs) (Mills, 2003). All data collected were transcribed and chronologically ordered to facilitate the finding of codes and themes.

Self-esteem, teaching responsibility, active participation, enjoyment, relationships, and teacher practice for the grade five/six teacher only, were positive benefits when student assistants were utilized. Timing and teacher practices for the teachers, and embarrassment and treatment from some assistants were regarded as limitations of utilizing student assistants into the physical education lessons.


Comparative Case Studies of the Development of Third Graders’ Conceptions of Nature of Science: Student Understandings after a Year of Instruction

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This study explored 24 third grade elementary students’ conceptions of nature of science (NOS) over the course of an entire school year as they participated in explicit reflective science instruction. The VNOS-D was administered pre instruction, mid school year, and at the end of the school year to track growth in understanding over time. The Young Children’s Views of Science was used to describe how students conversed about NOS among themselves. All science lessons were videotaped, student work collected, and a researcher log was maintained. Data were analyzed by a team who sorted the students into low, medium, and high achieving levels. Three representative students were selected as case studies to provide an in-depth picture of how instruction worked differentially and how understandings changed for the three levels of students. It was found that all students improved their conceptions of NOS and were able to converse among each other using the NOS terminology they learned without prompting by the teacher. However, those who were at the higher achievement level could provide definitions for NOS terms and examples of where they are illustrated in science that were not provided by the teacher, whereas those at lower levels could not provide examples.
Comparative Case Studies of the Development of Third Graders’ Conceptions of Nature of Science: Student Understandings after a Year of Instruction

Rationale/ Problem

Studies have shown that elementary students do not naturally develop adequate understandings of nature of science (NOS) as a result of inquiry instruction (Author, 2005). However, elementary teachers can positively influence their students’ views of NOS with appropriate instruction (Smith, Maclin, Houghton, & Hennessey, 2000). It seems that people may underestimate the learning capabilities of students, and if they actually receive NOS instruction they can learn the ideas. This study explored the kinds of NOS conceptions students developed as a result of explicit-reflective NOS instruction that took place over an entire school year. The research question became “what NOS conceptions can third graders develop after a full year of participating in explicit reflective NOS instruction?” A second question became “how do students’ NOS conceptions differ depending on whether they are considered low, medium, or high achievers?”

Conceptual Framework

In thinking about the approach to improving students’ NOS conceptions we knew from prior research in informal settings with young children (e.g. Authors 2010) and in traditional classroom settings with older children (e.g. Khishfe & Abd-El-Khalick, 2002) that the explicit reflective approach has been found to be effective. Explicit reflective instruction refers to the notion that the learner’s attention is intentionally drawn to the NOS aspects as well as the learner
is asked to reflect orally and in written form on NOS aspects in the context of science lessons. We therefore elected to use explicit reflective NOS instruction, embedded in the science content, to teach NOS aspects to third grade students. While a review of prior research illustrates that children can indeed improve their conceptions of NOS, we included case studies of low, medium, and high achieving students in order to illustrate how such instruction may differentially improve student conceptions.

_Nature of Science_

NOS refers to the epistemology of science, science as a way of knowing, or the values and beliefs inherent to the development of scientific knowledge (Lederman, 1992). Some important aspects of NOS have been advanced in recent reform documents including _Science for All Americans_ (AAAS, 1990, especially chapter one) and the position statement from National Science Teachers Association ([NSTA], 2000). These aspects include that (a) scientific knowledge is both reliable and tentative, (b) no single scientific method exists, but there are shared characteristics of scientific approaches to science (e.g., scientific explanations are supported by, and testable against, empirical observations of the natural world), (c) creativity plays a role in the development of scientific knowledge, (d) there is a crucial distinction between observations and inferences, (e) though science strives for objectivity, there is always an element of subjectivity (theory-ladeness) and (f) social and cultural contexts play a role in the development of scientific knowledge. These aspects were the target of the current project.

Exploring how elementary students come to know NOS has been the target of research for several years, and we are still studying best practices. Smith et. al. (2000) found that students with a teacher who emphasizes NOS over the course of their elementary science classes improved their NOS conceptions. However, it remains to be seen the nature of those conceptions
for young children particularly given that most teachers of young children do not teach NOS. In research with teachers (Author, 2006) we have explored first graders’ conceptions of NOS as a result of explicit instruction, and noted that these students improved their understandings of several NOS elements. We have (2007; 2009) also found that elementary students of different grade levels improved their understandings of NOS elements, and that children as young as five were able to conceptualize various elements of NOS that are advocated by the NSTA position statement (NSTA, 2000). Khishfe and Abd-El-Khalick’s (2002) study with older students found that elementary students who participated in explicit reflective NOS instruction could conceptualize NOS aspects better than those who participated in scientific inquiry, but without explicit NOS instruction. Common to all of these studies were explicit reflective activities that connected students’ NOS understandings to the science content, as well as provided them with specific activities designed to introduce them to the targeted NOS elements. We believed that elementary students who are unfamiliar with NOS ideas would need to receive explicit instruction in the terms as well as use those terms within their science investigations. Therefore we intended to use contextualized NOS instruction that enabled the students to explore NOS along with their science content (Clough, 2006). Contextualized NOS instruction would mean that NOS would be connected to the science content students were learning, and would be explicitly noted through discussion and reflections. Exploring this instructional approach will shed light on the effect of explicit reflective NOS instruction through an entire school year, and provide an in-depth look at the conceptions held by low, medium, and high achieving students.

Method

This study explored the NOS conceptions held by a third grade class prior to instruction, at mid-year, and after a school year of explicit reflective NOS instruction. It explored overall
NOS conceptions as well as three representative cases (Merriam, 2009; Yin, 2008) that were
developed from students who were high, medium, and low achievers to illustrate the kinds of
changes in conceptions that took place over the year. Creswell (1998) supports the use of case
studies as a way to collect detailed, in-depth data involving multiple sources of information rich
in context. In our current study we purposefully selected cases to show a spectrum of students’
understanding of NOS. We have collected data from variety of sources to develop in-depth
understanding of students’ conceptions. The case study approach allows us to portray students’
understandings and misconceptions in detail over time.

**Context.** There were 24 students in the class at an at-risk school. Eighty percent of the
students in the class were on free or reduced lunches. The class itself was divers, with five
African American and two Latino American students, and one Native American student. The
remaining students were white. There were five students who were identified as ADHD, one of
whose IQ was so low that they were concerned whether he would ever be able to finish school.
There were continually students moving in and out of the classroom as they changed schools
usually within the district. It was an interesting and challenging environment in which to teach.
We selected three students from which to build case studies of NOS learning over time—one
high, one medium, and one low-achieving student. **James John** was our low-achieving student.
Though he was bright, he often missed school due to his mother being ill with cancer. He
claimed to love science and did very well in math. He was from a low socio-economic family.

**Morgan Millie** was our medium achieving student. She was from a high socio economic family
and claimed to hate everything about school except recess and lunch. She stated several times
that she hated science. **Cole Chad** was a Native American student who was very enthusiastic
about school. He loved animals and being involved in all school activities.
**Intervention.** Because explicit reflective NOS instruction has been previously found to be successful in improving learners’ conceptions of NOS, this is the kind of instruction that was used. Contextualized (Clough, 2006) NOS instruction was used to connect the NOS aspects to the science content being taught. The school district used the Full Option Science System (FOSS) curriculum to teach science. FOSS is an excellent curriculum, but does not have an explicit focus on NOS concepts. The teacher incorporated NOS throughout science instruction, and embedded it into the FOSS curriculum. For example, while discussing the topic of ‘states of matter’ with the students, author one focused on concepts of solids and liquid as well as talked explicitly about observation and inference, how students made observations creatively and had drawn inferences creatively. She required students to use their senses (except for taste, generally) to make observations, and then connect these observations to inferences they make. She further asked students to share examples of solids and liquids they encountered in their daily lives and discussed NOS concept of background knowledge (Subjectivity) while associating ideas or interpreting data.

Following each science lesson a discussion ensued that drew the students’ attention toward the NOS aspects, such as the teacher stating “Where do we find scientific tentativeness in our investigation?” or “What NOS aspects do you see in our investigation?” In addition, science notebooks were used in the classroom. These notebooks enabled students to record their scientific data, as well as record their NOS understandings and reflections over time. Children’s literature was also used to teach and emphasize NOS aspects. For example, during an investigation on observation and inference the book *Earthlets As Explained by Professor Xargle* (Willis, 1994) was read. The book was used to emphasize the distinction between observation and inference, as the students were listening to the book they talked observations made by Dr.
Xargle, and the inferences that he made. We talked about why his inferences were funny to us, though they were reasonable to him. One student stated during the story “He is trying to make inferences from the data he is collecting—he is a scientist!” After the story the students engaged in an activity that required them to determine what might be inside a sealed bottle. Students made various observations, and when we came back together as a group they discussed the inferences they made and the observations that lead them to those inferences. We concluded with another story that day, *Seven Blind Mice* (Young, 1997) and students were able to note observations and inferences within the story, as well as the role of subjectivity. For instance, one student (Parvati) said “They bring their data together and compare it. They heard the other mice’s inferences so they had more background knowledge and had different ideas.” Another student agreed, stating “You need background knowledge to make inferences.” See Figure 1 for a listing of science lessons and corresponding NOS conceptions taught through those lessons throughout the school year.

**Data Collection**

To determine students’ NOS conceptions, we administered the VNOS-D2 in pre (August), post (mid year—December), and post-post (end of school year) questionnaires and interviews of all students who had informed consent to participate (Lederman & Khishfe, 2002). The VNOS-D2 is an open-ended instrument that elicits ideas about certainty in scientific knowledge, characteristics that distinguish science from other fields, creativity in science, and scientific subjectivity. These interviews lasted approximately 30 minutes each. We conducted small group interviews in the spring semester using the *Young Children’s Views of Science* (Lederman, 2009) protocol. These interviews allowed us to consider how children think and express ideas about science among themselves and allowed us to elaborate on our understandings.
of their NOS conceptions. We collected student work such as written work and science notebooks to further track changes in student NOS conceptions over time. We videotaped all science lessons and the lead researcher kept a researcher log of each day of instruction in which she recorded impressions of student learning and events each day.

In addition to student responses on the VNOS-D as well as the *Young Children’s Views of Science* instrument, to identify low, medium and high achieving students we collected student work in the form of their science notebooks as well as other written work. We also used videotapes of classroom interactions to note the kinds of responses to teacher questions and statements students made regarding NOS aspects in science.

**Data Analysis**

To formally track student NOS conceptions the VNOS-D2 was analyzed pre (August) post (December), and post-post (May) by two researchers, seeking patterns of individual student responses and then comparing analyses. Discrepancies were resolved through further consultation of the data. We then compared pre, post and post-post data to note change in NOS conceptions over the course of the school year. For example, we determined students’ conceptions of the distinction between observation and inference as being something that scientists directly noticed—no room for inference in the creation of scientific ideas—in the pre data. In the post data, a greater number of students recognized that scientific claims were inferential, and by the end of the school year all students but one recognized the importance of making inferences of observations on scientific claims. We also analyzed the *Young Children’s Views of Science* interviews to enable us to discern how students talked among themselves about science and NOS ideas.
We then identified high, medium, and low achieving students partially by noting their scores on the VNOS-D2 at the conclusion of the school year. From these students we selected one to serve as a case to represent each group. We selected students who were overall classified as “bright” by the teacher, meaning they did not struggle academically and did well in most subjects in general, and for whom we had the most complete sets of data. We reviewed these three students’ notebooks and other class projects, and reviewed the videotaped lessons to determine the kinds of conversations each student had regarding NOS during science lessons. We used their VNOS scores, class work, and videotaped analyses to develop case studies. At least two authors reviewed each set of data and determined the kinds of interactions each student held with the teacher and with peers, as well as the kinds of examples they provide of NOS aspects present in science lessons. We identified Chad as high achieving because he could clearly describe accurate responses to the VNOS questionnaire, including providing examples of ideas that were not previously shared by the teacher. Millie was identified as medium achieving because she could provide accurate descriptions of most NOS aspects as well as provide examples of the ideas, though some examples had been previously provided by the teacher or she struggled with providing examples. John was identified as low achieving because, though he could provide appropriate definitions of most NOS aspects, he often could not provide examples of these ideas.

Results

In this section we provide results regarding the NOS conceptions held and developed overall by students in the class. Pre-conceptions, mid-year understandings, and end of year conceptions will be shared. Following the overall conceptions case studies of a low-achieving, a
mid-achieving, and a high achieving student will be shared, to illustrate how students developed ideas differentially.

**Overall Development of Students’ Conceptions of NOS**

The first author interviewed all students whose parents consented pre instruction, mid-way through the school year, and at the end of the school year. The VNOS-D2 was used for the pre and post interviews, and end of the school year interviews. The second author aided in conducting group interviews of the students using *Young Children’s Views of Science* at the end of the school year. The first author was also the lead teacher in the class, and found it was not easy interviewing students while also being the lead teacher. She decided to interview the students while the other teacher instructed the students in different content areas. Table One shows the number of students in the class who held various conceptions of NOS and how those conceptions changed over time. The analysis of this data was conducted with another research team member who had experience working with the VNOS-D2 and analyzing the data for young children to ensure valid interpretation of student responses. In the sections below we will describe the students’ preconceptions of NOS, mid-year conceptions, and end of school year conceptions. It is clear to see that the students’ conceptions continued to improve over the course of the school year. We will conclude the results section with case studies of the low, medium, and high-achieving student.

**Students’ pre-intervention conceptions of NOS.** At the beginning of the year, four out of sixteen students believed that scientific knowledge is absolute, indicating an inadequate conception of the tentative NOS. For example, when asked to elaborate on their responses, one of students (Danielle) said that, “They [science content] always don’t change.” Moreover, among those students who believed that scientific knowledge is subject to change, five of them (of 12
students) could not elaborate on the idea of how or why it could change. Only three students described that scientific knowledge changes as either new evidence is discovered or scientists try new inventions. However, their responses did not illustrate their informed views. For example, J.T. answered that, “[Scientists] probably [change their ideas] because they learned more stuff.” The other two students simply referred to scientists changing their ideas because of inventions.

Regarding the empirical NOS, student responses indicated that they realized that scientists use empirical data collected from the natural world to form a conclusion. For example, fifteen students out of 16 believed that scientists used dinosaurs’ bones, footprints, and fossils, as evidence to make a conclusion dinosaurs existed in the past. Students recognized that scientists collected data in their investigations and used that data to develop scientific knowledge. However, often they stated “scientists get the data and then they know stuff,” implying that the data “speak for itself” rather than leaving openings for interpretation of the data.

Prior to the intervention, some of the students were not aware of the role of inferences in scientific work. Among the students who believed that scientists use evidence to make inferences about how the natural world works, only 60% of them indicated that scientists make observations to get some empirical data and make inference from this data; therefore, they are not certain about their findings. Russell stated, “[Scientists] have bones and they put them together to make a different creature.” When asked for an explanation for what makes scientist unsure about their conclusion about what dinosaurs look like, the same student said, “[Scientists] only have the bones. They don’t have the skin or the eyes.” Another student (Rupert) also referred to dinosaur skin when asked the same question. These responses indicate that at least some students recognized that scientists need data to make claims, yet do not recognize the role of collecting data in making inferences about missing or difficult to obtain evidence.
Ten out of sixteen students believed that scientists use their creativity and imagination in their scientific work. Most of them elaborated in the interviews that scientists have to think and that is how they used their imagination. However, six participants were not aware of the roles of creativity and imagination in scientific work or had any prior understanding of what do these concepts mean and are associated with science. Some students not only did not understand the role of imagination, but were very against the idea that scientists make use of it. One student (Tom) stated in the interview that “Why [scientists] don’t use their imagination, if they already know something, they just use the answer instead of having to lie.” Another student responded on her questionnaire that “if [scientists] use their imagination, they might get the answer wrong.”

Students held inadequate views of subjective NOS prior to instruction. Five out of sixteen students either provided irrelevant answers or did not provide their responses to the question in relation to this aspect of the NOS. Three students thought that different evidence used by different scientists lead them to disagreement about dinosaurs’ extinction. Only four students were able to relate the disagreement to different ideas or opinions held by different scientists; however, they had difficulty making a connection to the influence of scientists’ background knowledge to their conclusions. One student Rupert stated in his interview that “[a scientist] has heard different stuff and they just think that some stuff is more reasonable and some scientists are about different ideas.”

**Students' post-intervention views of NOS (December).** The results from the interviews showed improvement on students’ conceptions of the tentative NOS. While four students believed in absolute science at the beginning of the year, after one semester, only two of them still held that view. However, the students who changed their beliefs could not elaborate the reason of the change in the responses. Moreover, data from Table One shows that the majority
of students believed that scientific knowledge is tentative because scientists continue
experimenting and discover new evidence. Students still did not conceptualize the idea that
scientists could change their claims in light of looking again at the data.

Responses to the post survey and interviews indicated that students were more aware of
empirical data used in science. At the end of the school year most students understood that
science is different from other subjects because scientists collect data, illustrating an improved
understanding of the empirical NOS. Moreover, when asked what scientist is, one student
illustrated his improved view of the empirical NOS by responding “[scientist is] a person who
has a question they don’t know the answer, he tries to think about it and make observations and
inferences and explore….then they can figure it out.”

All students recognized the role of observation in scientific work. They understood that
scientists use fossils and bones as evidence to show the existence of dinosaurs in the past.
However, some the students still held an incomplete view of the role of inferences. Two students
demonstrated their informed view of this aspect of the NOS. When asked how scientists know
there were dinosaurs in the past, one student said, “[scientists] find those [fossils, rocks, and
bones] and then they study them and figure out that there were huge animals used to live a long
time ago.” He also believed that scientists were not sure about shape of dinosaur because
scientists do not have dinosaurs’ skin and he said, “[scientists] might have mixed up the bones.
The T-Rex might actually look like a long-neck or something.”

The results from the mid-year interviews indicated a huge improvement on students’
view of creativity in science. There is only one student who retained his naive belief that scientist
use only empirical data to make inference. Five students became aware of the critical role of
creativity and imagination in scientific work. Most of the students who held the adequate view of this aspect of the NOS believed that creativity play a big role during interpreting data. Two students were able to explicitly say that scientists imagine what their inference will be. Two students (Parvati and Rupert) developed an informed view of this aspect of NOS. When asked when scientists use their imagination one student (Parvati) responded, “[scientists use their imagination] when they study dinosaurs. They like to use their imagination because they could not really have a dead dinosaur, so they used the bones to imagine what the dinosaurs looked like.” Another student Rupert not only understood that scientists use their imagination when they make inferences and conduct experiments, but he also stated that science differs from other school subjects because science is creative.

Students had difficulty developing their understanding of the subjective NOS. Some students still provided irrelevant responses during the interviews. The results from the mid-year interviews indicated improvement in student participants’ understanding of subjective science as seven out of sixteen students were able to articulate that scientists’ different opinions cause disagreement regarding data interpretation among scientists. However, they were not able to elaborate why these disagreements about data interpretation took place.

**Students’ post-post-intervention views of NOS (May).** The results from the May interviews indicated improvement in students’ conceptions of tentative NOS. All ten students who were interviewed believed that science can be changed. While eight students showed adequate views of tentativeness, two students demonstrated their informed views of this aspect of NOS by stating that science can change when scientists discover more information or if they look at existing evidence differently.
All students understood that empirical data is a crucial part of the development of scientific knowledge by May. When asked how scientists know that dinosaurs existed in the past, they all said that scientists had found bones and fossil. Additionally, when asked how science is different from other school subjects, nine out of ten students referred to the prominent role of empirical data by mentioning that in science they have to collect and record data, but they do not need to do so in other subjects.

Regarding the distinction between observation and inferences, all students recognized that scientists make observations and use evidence to form inferences. One student (Candice) said that science is different from other school subjects “because we make observations and inferences.” Moreover, all students knew that scientists found bones, put them together and inferred the shape of dinosaur.

Nine students out of the ten students believed that scientists are not certain about their inferences. They understood that the bones and fossils found are parts of dinosaur and there are other parts that have not been discovered such as skin, and the unseen parts make inferences uncertain. When asked whether scientists are positive about the shape of dinosaurs, one student Rupert said, “[Scientists] are not positive. They knew what [dinosaur’s] bones look like….but they can’t ever find out what [dinosaur’s] skin is like.”

Nine out of ten students recognized the roles of creativity and imagination in the development of scientific knowledge when scientists form inferences or explanations. Five of out nine demonstrated informed views. When asked when scientists use their imagination, one student (Parvati) responded, “They use their imagination when they try to figure out stuff to see where it fits.” Moreover, the notion of what scientists know about dinosaurs has been frequently
used as an example of how imagination could fit into scientific work. For instance, one student (Candice) said, “[Scientists] use imagination because they don’t know for sure what dinosaur looks like.” Another student (Rob) mentioned that scientists use their imagination when they imagine what kind of skin dinosaurs have. Moreover, the same student explicitly mentioned that scientists are not sure about dinosaurs although they found dinosaur bones. They still have to use their imagination for other characteristics such as skin and eyes.

However, one student (Tom) did not change his conception of the creative and imaginative aspect of NOS. He retained the belief that scientists have to be true to the facts or information that they collect and if they used imagination they would not form reasonable explanations.

By the end of the school year, all of the students realized that scientists could disagree because they are different persons. When asked to elaborate on their responses of what makes scientists have different perspectives, five students demonstrated their informed views of subjective NOS by stating that scientists have different ways of thinking and different prior knowledge. For example, one student (Candice) stated, “[Scientists] have different ideas about [why dinosaur extinct] because they are different scientists and they know different things.” Another student said, “We do not really know what it looks like. We just see bones and use what we already know to help us figure it out.”

During the middle of the second semester we were able to interview small groups of students to enable them to converse about science together. The following examples show students’ perceptions that science is not absolute, and scientists use the empirical data available at that particular time to form the possible inference, which could be wrong:
Interviewer: “Okay. Do you ever learn about science in school?”

Rupert: “We studied dinosaurs with pieces of paper, trying to make observations of the bones, and inferring the animal. We made predictions, and there were no answers! She just made us figure it out.”

J.T.: “The owl pellets were the same way—she just had to figure out what owls might eat from the bones. But we never knew for sure.”

In addition, another student (Rob) illustrated his informed view of tentative NOS during the discussion about the role of creativity in scientific work. He said, “Some scientists think dinosaurs evolved into birds, [and] that is creative. Some think dinosaurs started as sea dinosaurs then became land dinosaurs and then flying dinosaurs.”

The results from the interviews at the end of the school year indicated an improvement of students’ understandings of the empirical NOS. All students differentiated science from other school subjects using this aspect of the NOS. For example, one student Rupert said, “In math you just solve problems, you don’t collect data, you collect data in science. In reading it is just reading, you don’t collect data.” Another student (Candice) responded to the same question that “[we] collect data in science. If you don’t have observations and inferences you are not doing science.” They all said that in science classroom, they learned to collect data, make observations and inferences.

Not only was there evidence of informed understandings of the role of observation and inference found in the post-interview, but the ability to differentiate the two ideas were also evidenced. There were much less confusion between scientific observations and scientific inferences. The transcript below illustrates the improvement:
Interviewer:  “Can you tell me something you know about science?”

Russell:  “In science it is different than everything else because you collect data. “

Millie:  “You find bones and stuff and investigate them to see if they might be from dinosaurs.”

Russell:  “Also, in science you don’t just say what something is if you don’t know what it is, you have to think about it and figure it out.”

Rob:  “And to help you figure it out you make observations.”

Candice:  “In science you have to collect data and figure things out. You have to be creative.”

Russell:  “The difference between observation and inference is that an observation is what it smells, hears, tastes, looks, feels like.”

Candice:  “An inference is what you think about it.”

Case Studies

We now share insights from our case studies. We identified low, medium, and high achieving NOS students by exploring how students explain NOS aspects and whether they can support their understandings with appropriate examples. We provide background regarding their typical school work, personal information, NOS conceptions, and classroom interactions that supported their grown in NOS conceptions.
John. Our low student, John, held improved NOS understandings by the end of the school year. John was a white male student from a low socioeconomic family who had difficulty with spelling and writing, but had no difficulty in mathematics, nor in thinking about ideas, for example, ideas to write about. His mother was hospitalized for breast cancer, and so he missed a substantial amount of school, which certainly inhibited his conceptualization of not only NOS, but other content he would learn in school. He had “gaps” in his understandings due to missing school on occasion. When in class, John was generally on-task, and claimed to “like” science.

From watching videotapes of classroom instruction, it is apparent that John was involved in science investigations when he was there, and was glad to share his ideas during class discussions. For example, during the first unit of the school year on rocks and minerals (from the FOSS curriculum) he shared “it is going to be easy to tell if rocks have calcite in them if they have the same reaction as the calcite itself.” This statement illustrates that John recognized that he would need to make some observations of reactions calcite made, and compare them with the reactions made by other rocks, leading to an inference regarding the absence or presence of calcite in the rock. As the school year progressed, he continued to share ideas regarding observation and inference, stating in a fossil activity (second half of school year) that “we are looking at bones to infer what animal we probably had.”

John had a good understanding that science was empirical, and that scientists need data to support claims. For example, he stated “science is where you get data, put it together and compare it with other data, just to figure something out.” He shared in a science lesson in the second half of the school year “if a scientist came across something that they didn’t understand, they would examine it—look for data.” (mystery samples lesson).
John did not have a good understanding of the tentative NOS. Early in the school year he claimed that “science does not change.” When asked why he thought that, he responded “Because no one would read a book about stuff that was just going to change,” implying that scientists needed to published, and would not publish something that were not “true.” His ideas did not change substantially by the end of the school year, when he noted that scientists would only change their ideas if they found out something was untrue or “weird, like there may still be dinosaurs.”

He similarly retained incomplete understandings of the role of imagination and creativity in the development of scientific knowledge. For example, mid-year he stated that “scientists don’t use their imaginations because they have facts. Why would you have to imagine it if you can use your data?” His statement implies that scientists simply collect the data, and the data speak for itself without the need for imaginative or creative interpretation by the scientist. Indeed, at the end of the school year John had a similar idea, stating “they don’t use their imagination because I’m guessing if you’ve got the facts you most likely don’t need your imagination,” with a similar implication that there is no need for further interpretation of data that presents facts on its own.

Despite the fact that John did not recognize the role of imagination and creativity in the development of scientific knowledge, he did acknowledge the subjective nature of science. For example, in the yeast investigation he stated “well, from other tests we did, we knew certain things would not grow the yeast, like the alcohol. So we had background knowledge that helped us make predictions for what would work.” Indeed, at the end of the school year, he continued to acknowledge that scientists have different kinds of background knowledge and opinions when he stated that scientists don’t always make the same conclusions from similar data sets, stating
“well, you’ve got your opinion, and I’ve got my opinion. I am pretty sure it’s more likely the ice age that caused the dinosaurs to go extinct. That’s what I think of the data.”

It is clear to see that John did have some adequate and developing conceptions of NOS aspects, and that most of his discussions and comments included an emphasis on data and evidence. It seems that John saw science as evidence-based, and that actually, the evidence “spoke for itself” in terms of not needing creativity or imaginative interpretation, yet the scientist’s background knowledge still influenced the claims made about the data. Indeed, John held some incomplete conceptions of NOS.

Millie. Millie was our medium-achieving student and was a white female from an affluent family. She claimed to “hate science” but was an excellent writer and enjoyed writing many stories, and also enjoyed writing in her science notebook. She said the only thing she liked about school was recess and lunch. She struggled with mathematics, having a difficult time finishing her mathematics work in the time allotted. Millie was able to distinguish the differences between observations and inferences in most cases. Early in the school year, Millie was able to state during a lesson “My observation is it is green and blue, and my inference is that it is a solid and a liquid because it acts like a solid sometimes and a liquid sometimes..” (Oobleck activity). Later in the school year she stated that when they were making circuits “we build a bigger circuit and observed and inferred how to make one, we used data to help us.” In her final interview of the school year she stated “scientists can figure out there were dinosaurs by looking at the bones—they might get them underground, they might see feather stripes, or something, or look at the size of the bones, and figure out what size they might have been.”

Indeed, Millie also held good conceptions regarding the empirical NOS. By mid year she was able to state that scientists “found bones and studied them. They looked at the bones and
thought, well, the animal must look something like its bones, and figured out about dinosaurs.”
By the end of the year she also added to her explanation that “scientists figure out about
dinosaurs from their bones, and other stuff they find, like feathers or marks on the bones, and
where they find the bones. But they aren’t sure about how dinosaurs looked or lived because they
never actually saw one.” Through this statement we can see how Millie’s conceptions grew more elaborately, and how she was able to explain her ideas through examples she gave. Similarly,
early in the year during the rocks and minerals unit Millie was able to state that one way to examine rocks is to “observe them—do a scratch test to see if they are hard.” A little later in the year during an electricity unit Millie shared that we were collecting empirical data through “testing ways to light a bulb.” And later in the year, during a story on dinosaurs, Millie stated that “scientists collect empirical data—you can see that they used the feathers’ imprints in the bone as evidence.” She clearly continued to recognize the empirical NOS throughout the school year.

She conceptualized the tentative NOS, but did not describe how those changes in science are based on evidence. Instead, in her final interview of the year (May) she claimed that “scientists use different clues, so they might change their minds if they think about other clues different scientists looked at.” In essence, she thought that scientists may choose to look at certain parts of the data, but when directed to look at other parts by someone else, they may change their minds. For instance, during the electricity unit she stated “we might change our ideas about what lights the bulb when we see what other kids have done.” Therefore, this idea remained solid throughout the school year.

Millie understood that scientists used their creativity and imagination when thinking about the inferences they make of data. For instance, at her midyear interview (December) she
stated “scientists and artists are both creative, but science is different. In science, you are creative with your mind.” This idea carried through the investigations in which Millie was engaged, as was illustrated in the fossils activity when she stated “We were creative like scientists when we thought ideas about bones, when we tried to figure out from the bones what animal it must have been.” It was clear to see that she had a strong conception of scientific creativity, and how it was different from artistic creativity.

She believed that science is subjective and by midyear stated that “Scientists see different things—because there are lots of ways of looking at data, and there are lots of ways that dinosaurs can die. Maybe scientists see something else in some data that others didn’t see.” She was clearly focused on the differences that scientists saw in the data, and by the end of the school year, recognized that scientists had different ideas about the data, as is evidenced by her statement “Even though scientists have the same data to look at, they have different ideas. They look at the data differently.” Her idea clearly is connected to the differences in scientists, as well as emphasizing the connection to empirical data.

Clearly Millie held strong conceptions regarding the NOS aspects that were taught in class. She was able to use the terminology and provide examples of her ideas. She was able to share her ideas verbally and in writing, and was clearly involved in the investigations and with sharing her ideas.

**Chad.** Our high student was a Native American male who enjoyed school and excelled in most subjects. He was high-achieving in mathematics as well as writing, spelling, and reading. He claimed to “enjoy” science, and from viewing videotapes of classroom interactions it was clear that he was active in science investigations as well as in sharing his ideas. He also talked
about what it was like to go to Native American events, and shared with his classmates costumes that he wore and told about events with his family that took place outside of school. He even talked about wearing “skirts” as part of his dress, but was not at all embarrassed about these things he shared; indeed, he seemed proud of them and also proud of his achievements in school.

Chad conceptualized the distinction between observation and inference fairly well, recognizing that scientists make inferences from the data that they observe. For example, during the jumping bean investigation Chad was able to state that he was inferring it is a jumping bean by his observations. The teacher mentioned that we could make even better inferences if we had more information. Chad stated “we could get more information from reading the bag they came in.” This comment led to an interesting discussion regarding increasing our background knowledge to make better interpretations of the data. In fact, the bag was not labeled, but the envelope held a return address, so we read the address and realized that the contents of the envelope had come from Mexico! This new information did lead to a discussion of the kinds of plants and animals that might live there vs. live in the Midwest. In the final interview of the year, Chad stated, “well in science you make observations, then you’ll like guess, or really predict what it is going to be like, and then you figure it out. These are inferences of your observations. You can try it out.” His comment shows that he connects inferences to data, and to making predictions that are not certain (he initially states “guess” which he changes to “prediction”).

Chad conceptualized science as being based on data, noting early in the school year during the rocks and minerals unit that scientists “look for more information” when they are collecting their data. He recognized that scientists collect that data, and make observations of it so they could infer what is happening.
Chad also held an informed understanding of the subjective NOS. When asked how science was different from other subjects he was studying in school, he stated “in science I make observations and inferences, and there is subjectivity,” which certainly does not share his definition of subjectivity, but shares his notion that it is part of science. When thinking about his definition of the role of subjectivity, he notes in his final interview that scientists look at the data in different ways, and that influences how they see the data. He recognizes the role of background knowledge, as he states in the second part of the school year during the fossil investigation that he states “I am making an inference—I am taking this fossil and I have seen pictures of T-Rex before and I am using background knowledge to help me with the inference.” He went on to say “A lot of scientists have different ideas, then they start thinking the same. It ends up they share ideas and discuss, and then sometimes they agree on their new ideas. Sometimes they don’t agree.” He certainly understands that background knowledge and subjectivity influences interpretations of data, as well as the tentative NOS.

Regarding the tentative NOS, he held a fairly good understanding of this aspect. He realized that scientists cannot be 100% sure of the inferences they make of their data. For example, he realized that scientists look at weather patterns to forecast future weather. He stated “They are pretty sure about the weather, but not 100%—they look at other weather, like to see if it is coming our direction. They can’t be sure because it could move around in a different way.”

He held good understandings of the creative and imaginative NOS. For example, in response to the teacher’s question of “What aspects of NOS do we see in this book (dinosaur book)” Chad responded “We can see the creative nature of science. Scientists create ideas about dinosaurs and birds from evidence.” From this statement we can see that he understands scientific creativity as being different from artistic creativity, and that scientific creativity is the
creation of ideas from evidence. In his final interview of the school year he also showed his good understandings of creative and imaginative NOS by stating “When they want to figure out something, they have to figure out a way to study it, like explore some kind of liquid, or mineral or rock. They have to figure out how to study it and how to say what you found out.”

Chad also asked questions that lead to his further understanding, such as when he followed up this statement with “Did they [scientists] use their social and cultural context when creating ideas about dinosaurs?” It is clear that this expressed curiosity helped Chad refine his ideas about the subjective NOS when he discussed how his background knowledge about T-Rex, for instance, influenced how he was interpreting the fossils he was observing. He recognized that scientists’ knowledge influenced how they interpreted data, as it influenced how he interpreted data himself.

After looking at the spectrum of students’ understanding of NOS conceptions in depth, we think students develop better understanding of certain aspect of NOS than others at the elementary level. For example John, Millie and Chad had strong understandings of observation versus inference, creativity and imagination and empirical evidence and lesser understandings of subjectivity. We think at elementary level focusing on concrete aspects of NOS is beneficial for students to develop their understanding of NOS as well as science concepts. John may have struggled with explaining tentativeness because in the course of discussing different science concepts because we did not conduct an experiment where students collected data over time to see changing patterns of data, though we did talk about how scientists may change their ideas with collection of new data and thinking about the old data in new ways. We think if we would have used some activities where students could make observations of differing outcomes of investigations more than once, John may have had a better understanding of tentative NOS.
Millie had difficulty in understanding empirical nature of science. She had a good understanding of the difference between observation and inference but she could not see a bigger picture of how different observational and inferential pieces make evidence based science to create explanations. Throughout the school year we conducted a variety of experiments focusing on observation and inference but again doing one long time project where students would have had the opportunity to see pattern in the data to generate explanations may have helped them to better conceptualize the empirical NOS.

JohnChad showed very good understanding of NOS aspects. Almost at all instances he could provide examples while explaining the meaning of aspects of NOS. We think the reason why JohnChad could develop better understanding of NOS aspects was because associated himself with many of the examples which provided him with strong real life context for making associations with different aspects of NOS. Millie, John and Chad had the opportunity to learn about science and NOS through science and literacy connections, science notebooking activities, hands on activities, class oral discussions at the beginning, during and at the end of the science investigation supported with formative assessment strategies. These different representations helped these students to develop understanding of NOS and provided the teacher with insight into what needed to be further emphasized.

**Discussion**

Our study provides further evidence that NOS instruction can be successfully embedded into science curriculum, and students of varying ability levels will be able to better conceptualize these ideas. The instruction that was successful in improving the NOS understandings of these third graders was a combination of contextualized (Clough, 2006) explicit instruction, that was embedded in inquiry instruction. NOS instruction in this class was embedded in each science
lesson throughout the entire school year. This instruction included the adaptation of *Full Option Science System* (FOSS) curriculum, use of children’s literature, student writing about NOS through science notebooks, and class discussions that debriefed each science lesson with not only science content, but NOS content to emphasize NOS aspects in each lesson. The teacher initially prompted students to discuss NOS aspects as part of each science lesson, but withdrew the prompts as the students began to use the terminology accurately and within each science lesson on their own without prompting.

Indeed, the students began taking more control of their learning of NOS as the year progressed. The teacher did not need to prompt them to debrief lessons with NOS aspects by the second half of the school year because they began to do so in discussions themselves. Additionally, as they were videotaped while engaged in inquiries we noted that students used terms such as “empirical data,” “observation and inference,” and “tentative (e.g. my ‘explanation is tentative until I look at the data more’”) appropriately in conversations during the second half of the year.

Students in this class all improved their understandings of NOS aspects, but did so differentially in terms of the kinds of examples they could provide and the definitions they gave to the various NOS aspects. Young children can learn NOS when taught throughout the year and embedded in science lessons. Contextualized explicit reflective instruction is effective at helping all students conceptualize NOS aspects, though differentially by ability level. John, the low-achieving student, was able to develop several good conceptions of NOS aspects. For example, he realized that scientists need evidence, but also once they made their claims they would not change these ideas. He believed that the data speaks for itself—that scientists understand it better if they have more background knowledge, but there was no room for interpretation through
imagination or creativity. However, he also held good understanding of the distinction between observation and inference, and definitely understood that science is evidence-based. The medium achieving student, Millie, was able to define the NOS aspects that were emphasized in her class, and could write about them in her notebook, providing examples from her investigations of NOS aspects she recognized. She conceptualized thinking and making inferences as scientific creativity, and realized that science was tentative and scientific claims could change, though she could not describe influences on this change. Like John, she recognized the importance of evidence in making scientific claims, but more so recognized the role of the scientist in interpreting that evidence. The high-achieving student, Chad, was able to integrate the ideas surrounding the NOS aspects, as well as raise questions regarding the ideas to further his own understanding. He began using these NOS terms during investigations with other students earlier than others did. He talked about his NOS ideas in terms of doing science himself—how he was undergoing changes in his ideas and interpretations of data. He connected the subjective NOS as a way scientists gain more information that can change their interpretations of existing data, and recognized the role of cultural context in interpretation of data. He recognized the role of creativity and imagination in scientific knowledge, and talked about scientists “creating ideas from evidence.” It is apparent that through participating in scientific investigations in which NOS aspects were connected to content being explored students’ ideas improved.

Implications

Implications from this study reinforce the idea that explicit reflective instruction is an important strategy to use to help young children learn about NOS. Indeed, this study emphasizes that contextualized NOS instruction is effective in improving NOS conceptions of students of varying ability levels. From this study we recommend modifying existing science curricula in
ways that allow the teacher to debrief NOS aspects as part of each science investigation. In
addition, the reading curriculum at this particular school included science topics and enabled
further ways to embed NOS into reading as well. In this particular study we focused on
integrating science and reading to help students understand NOS. In the future we recommend
integrating different subjects such as art and math with science to help students further
understand NOS. Such integration of different subjects would be beneficial for discussing
similarities and differences between science and other subjects as well as show how scientists in
real life merge different subject to develop better understanding of science concepts.

We employed a variety of teaching strategies such as continuous class discussions,
journaling, charts to show NOS aspects and formative assessment strategies. All these strategies
collectively were effective for developing better understanding of NOS concepts. For example,
while discussing different science concepts, author one employed whole class discussions
through out the lesson. The discussion before even starting a lesson acted as leverage for
knowing what students have understood about NOS and science concepts so far. Every lesson
began with whole class discussion, which allowed students either to summarize the previous
day’s discussion or to understand what students know so far. KWL charts were one of the
effective strategies. Author one also made a point to have regular discussions while students are
exploring different science materials. For example, during instruction on the topic of states of
matter author one asked”Can you tell me what do you notice about this cotton? How do you
know it is solid? So now can you tell me when you were making observations and when you
were making inferences?” These kind of prompts used while students were exploring helped
students make connection between science concept and NOS. After exploration further
discussions were conducted with the whole class during this explain/summarize session, author
one again made an attempt to bring science concepts and NOS together through questioning prompts and by drawing students’ attention to NOS chart (See appendix). The use of this NOS chart habituated students to refer to it as a reference when they could not explain the meaning of certain ideas and they used it as resource during discussions.

Science notebooks also were effective strategies especially for noting down observations and inferences. Students recorded their observations in the science notebooks regularly. They also recorded which aspects of NOS were discussed that day in their notebooks. During classroom discussions they referred to their notebooks and answered questions. They also noted the meaning of NOS concepts in their own words. Different productive questioning strategies was another instructional strategy employed to gauge students’ understanding. These different strategies helped students develop NOS understanding.

We used the science as well as reading curriculum to reinforce NOS ideas. Based on our results, we recommend introducing NOS aspects early in the school year and continuing to reinforce these ideas in each science investigation throughout the remainder of the year.

References


<table>
<thead>
<tr>
<th>Date</th>
<th>Science content/ process</th>
<th>NOS aspects taught/ emphasized /mentioned</th>
<th>The use of science notebook or written work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late August to 09/08</td>
<td>Rocks and Minerals</td>
<td>Differentiate between observation and inference</td>
<td>Use FOSS worksheets as provided in curriculum</td>
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</tbody>
</table>
| 09/08              | • Observation  
                       | • Inference                                 |                                                                               |
| 09/09/ to 09/10    | Jumping bean investigation                     | Observation and inference                                                       | Written work on paper.                                                        |
|                    | • Observation  
                       | • Inference  
                       | • Measuring/ average                                                           |                                                                               |
| 09/15              | Reading unit: “Thinking like a scientist”      | Differentiate between observation and inference                                | Begin using observation and inference sentences in morning work activities.    |
| 09/21              | Oobleck (colloidal suspension)                 | • Subjectivity  
                       | Written work on observation and inference chart                                 |
|                    |                                               | • Social and cultural embeddedness  
                       |                                                                               |
|                    |                                               | • Observation  
                       |                                                                               |
|                    |                                               | • Inference  
                       |                                                                               |
|                    |                                               | • Measuring/ average  
<p>| |
|                                                                               |
| 09/29 and 09/30    | Electricity in reading curriculum              | • Background knowledge (subjectivity)                                          | Discuss these ideas orally.                                                   |
|                    |                                               | • Observation and inference                                                       |                                                                               |
|                    |                                               | • Tentativeness (change interpretation or collect new data)                     |                                                                               |
| 10/01              | Reading: scientific method                     | • Make NOS connection with the reading                                          | Students write letter to curriculum writer for why there is no single scientific method. |
|                    | • Measuring                                   |                                                                               |                                                                               |
| 10/02 to 10/04     | Electric-field reading                        | • Background knowledge                                                          |                                                                               |</p>
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<tr>
<th>Date</th>
<th>Activity</th>
<th>Observations/Inferences</th>
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<tbody>
<tr>
<td>10/04</td>
<td>Electricity—science curriculum</td>
<td>• Background knowledge (subjectivity) • Observation and inference • Drew what they thought would work • Drew what actually worked</td>
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<tr>
<td></td>
<td>- Light a bulb</td>
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<td></td>
<td>- Circuit</td>
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<tr>
<td></td>
<td>Reading – Dinosaurs</td>
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<tr>
<td>10/06-10/08</td>
<td>Electricity (using battery holder)</td>
<td>• observation and inference • tentativeness • empirical data • Make a list of items that conduct and do not conduct electricity</td>
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<tr>
<td>10/08</td>
<td>Circuit test</td>
<td>• Background knowledge (subjectivity) • Make inferences for why some things conduct electricity and some do not.</td>
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<tr>
<td></td>
<td>- Conductor</td>
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<td></td>
<td>- Insulator</td>
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<tr>
<td>10/09</td>
<td>Electricity</td>
<td>• Creativity (we found some evidence of the improvement during the debriefing sessions) • Record your ideas for how you think electricity works</td>
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<tr>
<td>10/10</td>
<td>Making a switch</td>
<td>• Observation and inference (infer how a switch works) • Draw your switch • Describe how it completes a circuit</td>
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<td></td>
<td>Emphasize circuits</td>
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<td>10/13</td>
<td>Making a flashlight</td>
<td>• Creativity • Draw your flashlight and describe how it works</td>
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<td>Emphasize circuits</td>
<td>• Subjectivity • Draw your battery and describe its role in a circuit.</td>
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<tr>
<td>10/15</td>
<td>Making a D-cell battery</td>
<td>• Creativity • Draw your battery and describe its role in a circuit.</td>
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<td></td>
<td>Emphasize circuits</td>
<td>• Subjectivity • Draw your battery and describe its role in a circuit.</td>
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<tr>
<td>10/22</td>
<td>Owl pellet</td>
<td>• Observation and inference • Tentativeness • Subjectivity • Wrote the observations of owl pellet • Some questions that</td>
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<tr>
<td>Date</td>
<td>Activity</td>
<td>Observations/Inferences</td>
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<td>10/24</td>
<td>Owl Pellet</td>
<td>• Observation and inference</td>
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<td></td>
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<td>• Tentativeness</td>
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<td></td>
<td>• Subjectivity</td>
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<td></td>
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<td>they still wonder</td>
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<td>• List your observations. What inferences do you have about the object?</td>
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<tr>
<td>11/03– 11/05</td>
<td>Rollercoaster</td>
<td>• Theories and laws</td>
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<td></td>
<td>Force and motion</td>
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<td></td>
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<td>• Record your observations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• What inferences do you have for how a roller coaster best works?</td>
</tr>
<tr>
<td>11/10- 11/19</td>
<td>Ramp and toy jeeps</td>
<td>• NO NOS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Record your results from your investigations</td>
</tr>
<tr>
<td>11.24- 11/26</td>
<td>Making Poster (ideas from Ramp lesson)</td>
<td>• Creativity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Observation and inference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Empirical data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Subjectivity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tentativeness</td>
</tr>
<tr>
<td>02/18</td>
<td>Sound: Vibrating forks</td>
<td>• Observation and inference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Empirical data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debriefed orally</td>
</tr>
<tr>
<td>02/25</td>
<td>Sound: Pitch (taught by classroom teacher, first author debriefs for NOS)</td>
<td>• Observation and inference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tentativeness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Empirical data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debriefed orally</td>
</tr>
<tr>
<td>03/04</td>
<td>Sound (taught by classroom teacher, not first author)</td>
<td>• No NOS discussed</td>
</tr>
<tr>
<td>03/11</td>
<td>Sound: Pitch and Volume</td>
<td>• Observation and inference</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Empirical data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Subjectivity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debriefed orally</td>
</tr>
<tr>
<td>04/01</td>
<td>Earthlets</td>
<td>• Observation vs. inference</td>
</tr>
<tr>
<td></td>
<td>Mystery samples</td>
<td>• Social and cultural context</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• List observations and inferences in notebook</td>
</tr>
<tr>
<td>4/08</td>
<td>University Spring</td>
<td></td>
</tr>
</tbody>
</table>
Break

4/15 First author’s son’s spring break—unable to teach

4/22 Presenting at AERA

4/29 Presenting at NARST

05/06 Magnets
- Observation vs. inference
- Write down something you want to share about what you tested for the class

05/11 Magnets (circle magnets, bar magnets, horseshoe magnets, speaker magnets)
- Students share NOS elements: Background knowledge (subjectivity), empirical data, creativity, observation vs. inference, social and cultural context.
- Recorded observations and inferences on data sheet instead of notebook

05/18 Spinning (forces and motion with tops)
- Observations and inferences
- Empirical data
- Background knowledge
- Tentativeness
- Recorded on data sheets their investigations.

05/20 Presentations
(Fossils, light, solids/liquids, sound, fungus/ Jupiter)
- Observation vs. Inference
- Empirical data
- Subjectivity

05/27 Spinning (forces and motion with whirlybirds)
- Observation vs. Inferences
- Empirical data
- Social and cultural background
- Tentativeness
- Recorded investigation results on data sheets
<table>
<thead>
<tr>
<th>NOS aspects</th>
<th>Pre-intervention</th>
<th>Post-Intervention</th>
<th>Post-post Intervention</th>
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</thead>
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<tr>
<td>Tentativeness</td>
<td>4 2 0</td>
<td>3 5 8</td>
<td>2 0 1</td>
</tr>
<tr>
<td>Observation and Inference</td>
<td>6 6 1</td>
<td>9 10 9</td>
<td>0 0 0</td>
</tr>
<tr>
<td>Empirical based</td>
<td>15 15 10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>10 15 9</td>
<td>3 0 0</td>
<td>2 1 1</td>
</tr>
<tr>
<td>Subjectivity</td>
<td>3 2 0</td>
<td>4 7 9</td>
<td>3 0 0</td>
</tr>
</tbody>
</table>
- They do not know what happened. 1 2 1
- Irrelevant or no responses. 5 3 0
Profiling Career-changers: Exploring Characteristics and Motivating Factors in Selecting Teaching as a Second Career

Bonnie L. Rabe

Western Connecticut State University
Abstract

As teacher shortages continue to plague American school districts, especially in urban settings, alternative route to certification programs have developed across the nation. Exploring creative approaches to entice highly qualified individuals from other professions in shortage areas, these programs encourage individuals to make the transition to teaching.

This study explores one such program at a state university in a highly diverse urban community. By examining the characteristics of two groups of career-changers transitioning to teaching, the author explores whether career-changers share common demographics, personal, educational, attitudes, or professional attributes; and seeks to identify the barriers, real or imagined, which influence these career-changers. Career-changers describe their motivation to become a teacher and what made them finally initiate the process.

A profile of a career-changer is constructed and patterns influencing their choices to become a teacher emerge. This study identifies the career-changer as only slightly more likely to be a female rather than a male, is 39.4 years of age, Caucasian, is married with 2 or 3 children attended a public high school, attended 1-4 universities, and holds a Bachelor of Arts degree. The vast majority of career-changers come from a background in management.

The greatest barrier for these career-changers in making the transition was financial, followed by family responsibilities. The rationale for teaching was primarily focused on wanting to make a difference, the responsibility to educate and prepare for the future, a deep interest in content, and relating the content to real world issues.
Although alternate routes to teacher certification have been in place for some time across the nation, research on these programs and the career-changers who elect to participate in them is now truly emerging. This study is primarily focused on the career-changer (candidate) rather than the program in which they were enrolled. The issues guiding this study contributed to the formation of the conceptual framework, focusing the search of the literature. The author explores whether career-changers, electing to become teachers, share common demographics, personal, educational, attitudes, or professional attributes. In addition the author investigates how career-changers describe the motivation to become a teacher and what made them finally initiate the process. Finally, barriers, real or imagined, which influence these career-changers, are explored.

**Background and Purpose of the Study**

In the review of the literature and development of the study, several influences surfaced repeatedly. Three areas of interest drive the overall organization of the study: The teacher shortage, the stages of adulthood, and the change process. In reference to the teacher shortage, the necessity for increased numbers of highly qualified teachers and the possible sources of these teachers are discussed. Why people consider changing careers is discussed through the frame of the stages of adulthood. Finally, the change process is viewed through a discussion of quality preparation of the alternate route teacher.

**Teacher Shortage: The Need for Increased Numbers of Teachers**

Nationally, one in five new teachers will leave the field within the first three years of teaching and nearly three-quarters of a million teachers are projected to retire by 2009, according to the National Center for Education Statistics.
While turnover rates for...all college graduates are difficult to calculate in a meaningful way, it is apparent that if even 5 percent of teachers left the profession each year, schools would still have to hire 180,000 replacements annually.

Traditional teacher certification programs are producing about 150,000 graduates annually, leaving a shortfall of at least 30,000 teachers each year. Numerous federal and state agencies made it easier and more attractive for people to change careers and become teachers.

Nationally, 51% of our current teachers are teaching in elementary schools and, over the next 10 years, just over half the predicted 700,000 retirements. In 2004, 9 percent of elementary and secondary teachers (333,000) left the public and private schools where they were teaching. Undergraduate teacher education programs produce 150,000 teachers annually (NCES, 2009).

With the current fiscal situation, universities throughout the nation are reporting record increases in applications from displaced professionals who desire to re-tool themselves for a new career. More applicants are looking to local Institutions of Higher Education because of their affordability (Wright, 2009).

**Who Will Replace These Teachers?** The National Center for Education Statistics project that first professional degree holders will increase by 22 percent overall through 2017. According to the Bureau of Labor Statistics, postsecondary teachers are expected to grow by 23 percent between 2006 and 2016, at much faster than the average for all occupations. Because of the size growth rate of this occupation,
postsecondary teachers will account for 382,000 new jobs, among the largest number of new jobs for an occupation.

By 2007 every state in the country had developed some type of an alternate route to teacher certification. In the 2006-07 academic year, alternate route to certification programs prepared 57,000 educators.

The Master of Arts in Teaching (M.A.T.) program at this university utilizes a cohort model which has been shown to reduce attrition (Dinsmore, K., 2006, Koeppen, K., Seifert, K. & Mandzuk, D., 2006). Graduate cohort candidates in education are more likely to graduate and to feel that their academic performance is improved (Seifert & Mandzuk, 2006), and they will build professional and support networks. Cohort learning can improve individual performance, increase self-esteem, and enhance mutual attraction among group members (Johnson, Johnson, and Scott, 1978).

The majority of the classes within the M.A.T. program (with the exception of the student teaching semester) accommodate the needs of working professionals by scheduling courses at night or by utilizing a hybrid online model. Candidates complete the program in 15 months. Participants in this study were applicants and cohort members.

**Why People Consider Career Changes**

As we investigate what motivates a person to make a change in their career, several related bodies of research must be explored. Whether we look at early or middle adulthood, there are the variations in characteristics demonstrated by individuals in various periods of life. Individuals think about change, but what factor(s) cause them to move from thinking about change to acting out that change?
Daniel Levinson (1978, 1996) identified the “seasons of adulthood”, as a series of transitions followed by periods of reassessment and adaptation, ultimately resulting in stabilized life structures. The age ranges for these seasons are 17-22, 28-33, 40-45, and 50-55. The mid-life transition period 40s-50s are a time where people begin to reflect on their own mortality, they take stock of their lives and often begin new directions which may include personal and career changes.

**Barriers to Changing Careers**

According to Heppner, Wampold, and Kivlighan (2008), little is known at this time about the barriers to changing careers. Lent, Brown and Hackett (2000) observed that career barriers are often described as objective or perceived. Kenny, Blustein, Chaves, Grossman & Gallgher (2003) view constructs such as career barriers within a dynamic person/environment process, where an individual processes an environment experience, gives meaning to that experience, then acts on these interpreted meanings to further shape the environment.

Albert & Luzzo, (1999) questioned the available literature because of the modest effects of perceived barriers on career choice which were reported. Lent and his colleagues (2000) suggested that a distinction be made between expectations and perceived barriers. Measures of perceived barriers should be specific to the population of interest, and the developmental task being contemplated (Lent et al., 2000).

**Deciding to Make the Change**

Rita Serotkin (2006) profiled the motivations, perceptions, and profiles of midlife career-changers choosing teaching as a second career. Teaching is a career that people may enter at any time, attracting people who are intrinsically motivated. She
noted that many “[r]espondants noted the importance of their ability to move into teaching from another career in later life and their ability to continue in their previous career until they were ready for student teaching or the intern experience.” (Serokin, p. 223).

Rhodes and Doering (1993) attempted to isolate the process of thinking about making a change to actually making that change. In the thinking about making a change, a process of withdrawal occurs between the thinking and intention. The decision to make a change also appeared to be influenced by issues such as opportunities for growth, salary, status, security, perception of opportunities. Many participants thought about the change for a long time and made the change when another change in their own lives made it possible (family support, availability of caregivers for children, financial support, etc.). It appears there is a convergence of time, opportunity, and self-realization. It is important to note that even though these studies were done with teachers thinking about leaving the profession, there is value in their identification of the process in making the shift from wanting to change to doing it, which appears to be transferrable to this situation.

The advantages and disadvantages of various teacher preparation programs, including alternative routes to certification and appropriate coursework, are vigorously debated. In a review of significant studies of alternate route programs, C. Emily Feistritzer and Charlene Haar (2008) observed, “The research… indicates that the route one goes through does not seem to matter all that much as far as effective teaching goes. Experience and effective mentoring seem to be the most important variables for becoming a competent teacher”. (p. 145).
Chart 1.

Factors Influencing Career-Changers to Make a Change

- Motivation to Teach
- Professional and Personal Needs
- Stages of Adulthood
- Motivation to Leave Current Job
- Attitudes About Working with Children
- Career-Changers Choosing Teaching as a Career
- Love of Learning
- EVENT
- Overcome Barriers to Change
- Choice of Program
Program Selection

In September 2008 the Peter D. Hart Research Associates conducted interviews for Woodrow Wilson National Fellowship Foundation. Interviews were conducted to identify a target audience of adults, between 24 – 60 years of age, with at least a Bachelor’s degree. Two thousand telephone interviews were conducted and two hundred ninety-four interviews targeted “harder to reach groups”. The results of the interviews determined that a significant number, 42% of the sample population, would consider teaching in the future.

In a report released by the National Center for Education Evaluation and Regional Assistance, *An Evaluation of Teachers Trained Through Different Routes to Certification Final Report* (Constantine, J., Player, D., Silva, T., Hallgren, K., Grider, M., and Deke, J., 2009),

The study caused traditional teacher preparation programs to take a closer look at what the essential elements of teacher preparation should be. The main findings of the study concluded that: There was no statistically significant difference in performance between students of AC [alternate program certified] teachers and those of TC [traditionally certified] teachers and there is no evidence from this study that greater levels of teacher training coursework were associated with the effectiveness of AC teachers in the classroom.

The study included the following teacher candidate profile characteristics: Personal background, age, race/ethnicity, gender, academic ability, professional background, education, nature/extent of previous work history, preparation to teach, prior classroom experience, motivation to teach, and motivation to select route.
**Methods**

This study explored the motivating factors behind the decisions of career-changers to become a teacher. The need for more research in the area of motivating factors to aid recruitment of new teachers is evident in the light of projected retirements, attrition, and changes in educational needs. Seeking to add to the limited literature as to why these career-changers make the choice to teach, this study uses a mixed-methods design allowing for in-depth analysis in the context of one current and one pending teacher training cohort.

**Participants**

The university, a mid-sized university in the northeastern United States, offers traditional undergraduate programs in elementary and secondary education; and a new Master of Arts in Teaching (M.A.T.) program, offering candidates coursework, field, and clinical experiences leading to a Masters degree in Education and coursework qualifying them for certification in Secondary Biology, Mathematics, or Spanish, Education.

The university is located in one of the most diverse urban communities in the northeast on the border of two northeastern states. The city has a population of 75,000 and its' diversity is reflected in 75 national groups where over 60 different languages and dialects are spoken.

For the purpose of this study, the actual candidates accepted into the program have been separated as a group from all other applicants. This group is referred to as Cohort I. The second group contains applicants to the program who have not yet been accepted to the program, who have elected to attend a different program, or who have delayed in enrolling for a program at that time. The second group is referred to as
“Other”. All applicants participating in the study have earned at least a Bachelor’s Degree in their content area and several hold advanced degrees.

The initial cohort was diverse from many perspectives. Ages ranged from 22 through 54. They were diverse by gender (evenly split, 11 males and 11 females) and represented several ethnic backgrounds, with one candidate from Pakistan. Content areas represented: 2 Spanish, 9 Biology, and 11 Mathematics. Two candidates were from an urban setting in another state.

Backgrounds of the candidates include recent college graduates, a pharmacist, cancer researcher, neurophysiologist, landscape design, manager of a resident facility at a psychiatric hospital, stay-at-home Moms returning to the workforce, computer scientist, psychology major, karate school owner, administrator from the pharmaceutical industry, paraprofessional, and corporate executives. Several candidates hold Masters Degrees in other areas.

**Procedure**

Data for the study were collected from a variety of sources using a variety of methods: An essay from the graduate program application, the applicant interview, a survey containing responses formatted in a Likert scale as well as open-ended responses, and a post survey interview. The application essay, *Why I Want to Be a Teacher*, became the basis for the identification of barriers and the development of the questions in a survey, *Profiling Career-changers: Exploring Motivating Factors in Selecting Teaching as a Second Career*, the primary source of data. A semi-structured post survey interview further clarified responses to the open ended question at the end of the survey.
Why I Want to Be a Teacher Application Essay. Along with the typical application demographics, candidates were also required to submit a mini-portfolio containing two essays:

1. Explain your personal and professional reasons for desiring to become a teacher. Be specific as to knowledge base, skills, and dispositions (attitudes) you hope to develop.

2. Describe a difficult or challenging situation that occurred in your personal life or in a career setting. Discuss the role you played in the resolution of that situation. Include a description of each of the following personal attributes or characteristics that you employed: problem-solving, conflict resolution, interpersonal relations, initiative-taking and attention to diverse needs of individuals.

The content of the first essay for each candidate was transcribed (through data processing) from the graduate application packet into word documents for analysis. For the purpose of this study, the first application essay entitled Why I Want to Be a Teacher was then reviewed to identify barriers to and rationale for becoming a teacher. As Lent and his colleagues had observed, the measures of perceived barriers should be specific to the population studied (2008).

The following barriers (b) were identified and coded in the first set of Cohort I applicants' essays. In reviewing these identified barriers, four categories emerged: Financial, emotional, age, and family responsibilities. The contents of the essays were revisited and appropriately coded by these categories (code): Financial (f), emotional (e), age (a), and family responsibilities (f). These categories were used in a question at the end of the demographic section.
As a result of a second read through to identify the rationale for becoming a teacher, 5 emerging themes were identified by the researcher: (h) I want to help others, (i) I want to work with and inspire children, (j) I have a love of learning, (k) I want to make a difference, (l) I always wanted to be a teacher. These emerging themes became the basis of the questions which were developed for the Rationale for Teaching section of the Profiling Career-changers Survey.

**Initial Applicant Interviews.** The notes from the initial applicant interviews form Cohort I were reviewed to identify the barriers to changing careers identified by the applicants. The interview question asked was, “Why do you want to be a teacher?” Each candidate spoke about why they were making the change at that point in his or her and why he or she had decided to make this transition at this time. These rationales for delaying the decision to change careers were identified as barriers. As a result of this review of the interview notes, four barriers to becoming a teacher were identified in this group of applicants: Financial, emotional, age, and family responsibilities.

These identified barriers were then included within the developed survey in the form of a Likert scale to evaluate to what extent each of these barriers had on the initial cohort I from which the barriers were derived as well as the extent of the impact these barriers had on other applicants.

**Survey Development.** Since the initial data source of applicant demographics was the graduate program application packet and since this application had limited data about the applicants’ characteristics, an additional data source in the form of a survey was developed.
The questions developed for the survey, *An Exploration of Motivating Factors in Selecting Teaching as a Second Career*, were created by the researcher based on the themes identified in the reading and coding of the application essays. Using accepted standard categories outlined in each section, the researcher constructed the survey consistent with federal or state collection categories as noted. Once the questions were developed, they were reviewed and validated by a group of six peers who all have knowledge and experience in working with demographics.

The Survey consisted of four sections: Informed Consent, Demographics, Career History, and Rationale for Teaching. The Informed consent section identified if the applicant was a willing participant. Participation in the survey was voluntary and every applicant affirmatively completed the informed consent. The survey was constructed so that data collection could not proceed unless this question was completed. Only those applicants agreeing to participate were included in the study. Respondents could stop the survey or recall their submission at any time.

In the demographics section, participants were asked to disclose their gender, age, degree information, marital status, high school and university information, and barriers experienced. The U.S. Equal Employment Opportunity Commission, with the addition of the category *Bi- or Multi-racial*, an area currently under study at this university. The barriers which were identified at the end of this section were based on those barriers identified consistently in a review of the research and presented at the end of the demographic section in a Likert scale to identify degree.

In the Career History section, candidates were asked to select both their most recent career experience and search of their other career experiences. The categories
for the career history components were based on Connecticut Department of Labor: Labor Market Information, Occupational employment and wages. A final set of two questions focused on whether the applicant had worked in the teaching profession before and, if so, in what capacity.

The fourth section, The Rationale for Teaching, was divided into three sections: Why I want to be a teacher, looking back, and looking forward. The categories for first section, why I want to be a teacher, were based on the categories which surfaced in the review of notes from the original interviews for Cohort I: Financial, emotional, age, and family responsibilities. A four-point Likert scale was implemented to force the choice: Strongly disagree, disagree, agree, strongly agree. The looking back and looking forward sections of the survey were also based on an analysis of the graduate application essay. In addition, candidates were asked an open ended question: What was the one motivating factor that finally caused you to make the decision and act on that decision to become a teacher?

Data such as gender, age, race, marital status, number of children, were collected. Additional qualitative data were collected from the graduate application essay, biographical information, interview notes and anecdotal information, and transcripts.

The validated survey was then submitted to the university’s Institutional Review Board and approved. The survey, An Exploration of Motivating Factors in Selecting Teaching as a Second Career, questions were entered into Survey Monkey, an electronic tool for electronically disseminating and analyzing the survey. The survey was distributed electronically by way of personal e-mail to all 56 candidates who had applied to the program during the application process accepted to cohort 1 and those in
the process of applying. The Survey was sent to every applicant received for the program between the Fall of 2008 and the Fall of 2009 when the survey was administered (n=56).

Of the 56 applications distributed, 37 applicants responded. Of these responses, participants were classified by a field in the survey as Current Cohort I Members (12) and Other Applicants (24).

**Follow-up Interviews.** Based on the candidate responses to the optional open-ended sections of the survey, some of the responses, when reviewed, indicated to the researcher that additional information would be helpful to provide clarification to the study. In all, the reviewer selected four participants in follow-up interviews. These interviews were conducted by the researcher over the phone or face-to-face, and audio-taped. The contents of the follow up interviews were transcribed, reviewed for patterns, coded, and analyzed.

All information has been treated as confidential and is stored in a secure location.

**Data Analysis**

This ethnographic research study employed a mixed-methods design, integrating the analysis and interpretation phases with emphasis on the qualitative aspects. The qualitative data was interpreted by constant-comparative methodology. The essays, *Why I Want to Be a Teacher*, were analyzed through line by line coding which generated numerous categories. Themes emerged and were used to develop the survey.
The survey results were considered along with other qualitative data sources such as participants’ demographic information, transcripts, and standardized test scores; as motivating factors were analyzed and the profile was assembled.

**Trustworthiness**

Judgment as to trustworthiness of a qualitative research project is based on whether the study conforms to standards for acceptable and competent practice as well as meeting standards for ethical conduct. To that end, all contact with participants was conducted professionally and acceptable standards of etiquette applied.

Trustworthiness was achieved through the triangulation of multiple data sources, constant comparison methodology, and recursive data collection. The follow-up survey instrument was validated by a group of higher education colleagues prior to administration.

The confidentiality of participants and the districts was maintained through the use of pseudonyms thus reinforcing trustworthiness.

**Results**

**Demographics**

**Gender.** As the data were collected and analyzed, a profile of the career-changer began to emerge. Of the 37 respondents, 40.54% were male and 59.46% female.

**Educational Level.** Of the participants, 78.38% had attended public high school and 16.22% of the participants had attended a Community College. When the participants attended institutes of higher learning to complete their Bachelor’s degrees, 45.95% attended a state university and 54.05% attended private universities. The vast majority (75%) had completed their Bachelor’s degree in 4 years, 19.44% took more
than 4 years to complete the degree, and one candidate (5.56%) completed the Bachelor’s degree in 3 years.

The participants all had earned Bachelor’s degrees and, for 72.2% of them, this was the highest degree earned. In addition, 22.22% of the participants had gone on to earn a Master’s degree, one candidate had earned a second Master’s degree, and one candidate had earned a PhD in Biology prior to applying to the M.A.T. program. It was reported those participants already holding a Master’s degree, 37.5% completed the degree in 2 years, 50% in 3 years, and 12.5% in 4 years. In all, 7 participants (18.92%) also attended this university as undergraduates.

Pressing more deeply into the profile of their higher learning experiences, when the participants were asked how many institutes of higher learning they had attended. Overall, the respondents reported that 18.9% had attended one, 35.14% had attended two, 27.03% had attended three, and 10.81% had attended four institutes of higher learning.

**Age.** During two post survey interviews, participants questioned if their age would impact their marketability upon graduation from the program even though there were no references to age presented at any time during the application process. Three of the six participants who are over 40 years of age reported that age was a barrier for them in their survey responses.

The overall mean age for the 36 participants responding to the age query was 39.4. For the 15 male respondents the mean was 39.2 years and for the 21 females the mean age was 39.5 years. Although the participants’ ages ranged from 24 to 54 years, the distribution is positively skewed toward the age of 40.
Table 1

Comparative Ethnic/Racial Backgrounds

<table>
<thead>
<tr>
<th>Ethnic/Racial Group</th>
<th>Survey Respondents (Participants)</th>
<th>Graduate Candidates</th>
<th>Undergraduate Pre-service Teacher Candidates</th>
<th>All University Students</th>
<th>Geographic Community Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>75.68%</td>
<td>87.7%</td>
<td>85%</td>
<td>77.1%</td>
<td>85.2%</td>
</tr>
<tr>
<td>Black, Not of Hispanic Origin</td>
<td>2.7%</td>
<td>0.87%</td>
<td>4.6%</td>
<td>6.1%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18.92%</td>
<td>2.6%</td>
<td>4.7%</td>
<td>6.6%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Asian, Pacific Islander</td>
<td>2.7%</td>
<td>0.87%</td>
<td>4.6%</td>
<td>6.1%</td>
<td>4.0%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>0.0%</td>
<td>0.44%</td>
<td>0.41%</td>
<td>0.02%</td>
<td>0.01%</td>
</tr>
<tr>
<td>Bi- or Multi-racial</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Note: Adapted from 2009 Western Connecticut State University Institutional Report, Table 9.
Racial/Ethnic Backgrounds. Although the university is located in a very diverse community, the representative participants applying for the program did not reflect the demographics of the community but rather, were reflective of the general graduate community of the university.

The racial categories used in this study were taken from the categories of The U.S. Equal Employment Opportunity Commission, with the addition of the category Bi-or Multi-racial, an area currently under study at this university. The population applying to and enrolled in this program do not reflect the racial diversity of the community, but do represent the racial breakdown of the university student population. The respondents to this survey demonstrate a dramatically increased Hispanic population due to the fact that Spanish is one of the three content majors of the program. Whereas the Hispanic graduate candidate enrollment is 2.6%, the responding Hispanic candidates represent 18.92%. The ethnic/racial diversity of the responding candidates does not reflect the range of diversity of the undergraduate university population, but is slightly more diverse than the university’s traditional graduate students.

Motivating Factors. Many of the candidates referred to parenthood as motivating factor in deciding to become a teacher. In the application essays candidates cited activities supporting children as motivating factors in making the decision to become a teacher. Candidates referenced supporting children in their school experience through volunteering as well as coordinating and attending functions. Candidates also reported being involved in extra-curricular events such as sports and scouting.
**Children.** Because of the number of candidates referencing the influence of being involved in activities with their children (77.3% of the candidates have children), additional data were collected on marital status, parenting, and number of children. It is important to note that a majority of the candidates (64.8%) were married at the time of the survey and of this group, 83.3% of them had children. Note that 13.5% of the candidates are single parents.

Additional demographic data were collected on the respondents to broaden the scope of the profile of the career-changer. Data were extracted from candidates’ application files for the program and reported standardized test results. These data are treated with confidentiality and kept in a secure location.

**Barriers in Making the Transition to Teaching**

In the review of the literature we addressed the observation by Rhodes and Doering (1993) that there is a period time between thinking about a change and actually making that change. Since Lent et al. cautioned us that measures of perceived barriers should be specific to the population of interest and the developmental task being contemplated, the four categories were identified from the original application interviews.

Question 14 on the survey instrument tried to get at what is going on during that period by asking, “Which of the following barriers have you experienced in making a transition from your current position to entering a program to become a teacher?” The survey instrument asked candidates to rate four barriers to starting the transition to teaching: Emotional, Age, Financial, and Family Responsibilities, using a 4-point Likert
Scale, of which 1 was strongly disagree and 4 was strongly agree. It is also important to note that these are barriers as perceived by each of the individual candidates.

To better understand the variances by the demographic of age, the following four tables have been broken out into the following age groups: 22-25, 26-30, 31-35, 36-40, 41-45, and 46 and above. Note each of the age ranges include 5 years with the exception of 22-25 which represent the newly graduated candidates (Bachelor’s degree), and those candidates who were 46 and over. Some interesting differences in responses emerged in the analysis when shown by age.

Table 2

*Age as a Barrier*

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>22-25</th>
<th>26-30</th>
<th>31-35</th>
<th>36-40</th>
<th>41-45</th>
<th>46+</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>Mean</td>
<td>1.50</td>
<td>1.50</td>
<td>2.00</td>
<td>1.40</td>
<td>1.82</td>
<td>2.11</td>
<td>1.78</td>
</tr>
<tr>
<td>Median</td>
<td>1.50</td>
<td>1.50</td>
<td>2.00</td>
<td>1.00</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.707</td>
<td>0.577</td>
<td>0.548</td>
<td>0.982</td>
<td>1.054</td>
<td>0.870</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-6.000</td>
<td>-3.333</td>
<td>1.136</td>
<td>-0.546</td>
<td>0.808</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>0.000</td>
<td>0.609</td>
<td>1.204</td>
<td>0.552</td>
<td>1.083</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The financial barrier.** Overall, candidates reported the greatest barrier in making the transition to entering a program to become a teacher was financial. In fact 80.6% either strongly agreed or agreed that finances were an issue, leaving 3 candidates (19.4%) reporting that financial concerns were not an issue.

Respondents discussed the need to continue earning an income as they trained to be a teacher. Most did not have a sufficient alternate income or savings to support their current financial needs. Many reported they had or were soon to have college age...
children which would require additional financial commitments. Approximately 25% reported receiving financial aid of some type.

The overall mean calculated for responses to the issue on financial aid is 3.47 (3 being Agree and 4 being Strongly Agree) with no significant variation among the mean, median, and mode. The standard deviation is relatively small (0.577 to 1.08) and may be influenced by the small sample size.

Only three participants disagreed or strongly disagreed that finances were not an issue. Two participants strongly disagreed in the age range of 36-45 and 46 and above; and one candidate in the age group 36-45 disagreed.

The family responsibility barrier. The majority of respondents are married, have children, an established career, and, in considering making a career change, needed to continue working to support the family. Therefore, it is reasonable to comprehend why the second greatest barrier was family responsibility.

Approximately half (45.95%) of the candidates agreed or strongly agreed that family responsibilities were a barrier, yet the overall mean was 2.89 (2 being Disagree and 3 being Agree). There was little variation among the mean, median, and mode and the standard deviation was small.

By looking more closely at the break down by age, it is important to note that 68% of the candidates are parents, which appears to suggest this may be a factor in the 26-45 year categories. 100% of the candidates, albeit a small sample group (n=2), in the age bracket 31-35 reported they strongly agreed. Both are parents.

In the post survey interviews, two candidates from Cohort I reported they had an especially difficult time keeping up with family demands, a full time job, and academic
expectations. Although the university clearly articulated the level of commitment required for such a program, some candidates were more successful than others in organizing their time and prioritizing.

**The emotional barrier.** With an overall mean of 2.20, the emotional barrier was the ranked third. All respondents reported they either strongly agreed or agreed that there was an emotional barrier.

Several candidates referenced that they had been thinking about changing careers for a time, but were not ready. In follow-up interviews, respondents spoke about how the emotional barrier was interlinked with the financial and family responsibility barriers.

Looking more closely at the age distribution for the emotional barrier, it should be noted that the mean increases steadily with the exception of the new graduates, the sample population of which was small (n=2). Respondents expressed that it became more difficult to make the decision to actually act on the career change as they got older. Factors disclosed by respondents related to the emotional barrier included having a comfortable income in the current job, achieving a level of competence and respect in the current job, concerns about family income, or paying for college for their children.

Even though the standard deviations are higher, they are not significantly so.

**The age barrier.** Most candidates (72.22%) did not indicate that age was a barrier. Only three of the six candidates, as previously discussed, reporting that age was an issue, are over 40 years of age.

The overall mean is 1.78, with no large difference between the mean, median, and mode indicating there was little variation in the pattern of responses. No consistent
pattern of increasing or decreasing is observed in this perceived barrier as age increased.

Career History

Most Recent Employment. When the most recent employment experiences of the participants were analyzed, the most frequent employment categories reported were: Business and financial operations (27.03%), computer and mathematical occupations (16.22%), management occupations (10.81%), and education, training, and library occupations (10.81%). (See Table 2: Career History.) Logical results because the minimum educational requirement in these occupations is a Bachelor’s degree.

The following categories were not represented by candidates’ recent employment: community and social services, building and grounds cleaning, office and administrative support, installation and maintenance/repair, production, and transportation and material moving.

Overall Career Experiences. When candidates were asked about their overall career experiences, all job categories were represented. The most frequently indicated career experience categories were management (64.86%) and business and financial (51.35%), sales and related (27.03%), and computer and mathematical (21.62%). This is not surprising when we consider that of the three secondary areas of concentration are Biology and Mathematics.

Of interest is even though the highest frequency career overall was Management (64.88%), however, only 27.03% of candidates listed it was their most recent employment. A similar shift occurred in the Business and Financial Operations Occupations category where 51.35% of candidates reported having worked in the field
and only 16.22% of candidates listed it as their most recent employment. Not
considered here are job interruptions, whether they be layoffs, job reductions, or
decisions to parent full time.

Table 3

<table>
<thead>
<tr>
<th>Category*</th>
<th>Most Recent Employment</th>
<th>Overall Employment Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Occupations</td>
<td>27.03%</td>
<td>64.86%</td>
</tr>
<tr>
<td>Business and Financial Operations Occupations</td>
<td>16.22%</td>
<td>51.35%</td>
</tr>
<tr>
<td>Computer and Mathematical Occupations</td>
<td>5.41%</td>
<td>21.62%</td>
</tr>
<tr>
<td>Architecture and Engineering Occupinations</td>
<td>2.70%</td>
<td>10.81%</td>
</tr>
<tr>
<td>Life, Physical, and Social Science Occupations</td>
<td>0.00%</td>
<td>13.51%</td>
</tr>
<tr>
<td>Community and Social Services Occupations</td>
<td>2.70%</td>
<td>16.22%</td>
</tr>
<tr>
<td>Legal Occupations</td>
<td>10.81%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Education, Training, and Library Occupations</td>
<td>0.00%</td>
<td>29.73%</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, and Media</td>
<td>8.11%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical Occupations</td>
<td>2.70%</td>
<td>13.51%</td>
</tr>
<tr>
<td>Healthcare Support Occupations</td>
<td>0.00%</td>
<td>13.51%</td>
</tr>
<tr>
<td>Protective Service Occupations</td>
<td>2.70%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Food Preparation and Serving-Related Occupations</td>
<td>0.00%</td>
<td>13.51%</td>
</tr>
<tr>
<td>Building and Grounds Cleaning and Maintenance</td>
<td>0.00%</td>
<td>10.81%</td>
</tr>
<tr>
<td>Occupations</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Personal Care and Service Occupations</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sales and Related Occupations</td>
<td>2.70%</td>
<td>27.03%</td>
</tr>
<tr>
<td>Office and Administrative Support Occupations</td>
<td>0.00%</td>
<td>21.62%</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry Occupinations</td>
<td>2.70%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Construction and Extraction Occupations</td>
<td>5.41%</td>
<td>5.41%</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair Occupations</td>
<td>0.00%</td>
<td>5.41%</td>
</tr>
<tr>
<td>Production Occupations</td>
<td>0.00%</td>
<td>8.11%</td>
</tr>
<tr>
<td>Transportation and Material Moving Occupations</td>
<td>0.00%</td>
<td>5.41%</td>
</tr>
</tbody>
</table>

Note: Calculations are based on the percentage of candidates responding to each item
as compared to the number of respondents.

* Source: Connecticut Department of Labor: Labor Market Information. Occupational
employment and wages.
Work in the Teaching Profession. At the time of the survey 32.43% of the responding candidates reported they had worked in the teaching profession in some capacity, while 67.57% reported they had not. Of those candidates reporting that they had worked in the teaching profession, 10.81% were working as teachers but held no teaching certification, 66.67% were working as substitute teachers, and 33.33% were working as paraprofessionals.

Rationale for Teaching

The rationale categories for why the candidates were motivated to become a teacher were inspired by the essays written as part of the program application. The essays were coded and analyzed for patterns. In this portion of the survey, responses were shifted to a Likert-type scale ranging from strongly disagree, disagree, agree, strongly agree, as well as an N/A (does not apply) response. A four point range was selected to force choice.

Why do you want to become a teacher? In the analysis of the application essays, five themes emerged: 1) I always wanted to be a teacher, 2) I enjoy helping others, 3) I enjoy working with and inspiring children, 4) I love learning, and 5) I want to make a difference.

These themes became the initial queries for the survey section on rationale for teaching. Two additional categories related to the motivation for making the career change to teaching were categorized as looking back and looking forward.

It is commonly accepted among public school personnel that teaching candidates who have the potential to become a really good teacher often say, “I always wanted to be a teacher”; but not so with these respondents. In fact ten of the respondents (five in
Cohort I, one in Cohort II Participants, and four in the other group reported that they \[did not\] always want to be a teacher and two responded that they \[do not\] love learning.

Of the initial five query options, an unexpected response took president: \[I want to make a difference\]; with 83.33% of the current Cohort I candidates and 86.36% of other respondents strongly agreeing. Two other categories demonstrated equal weight: \[I enjoy helping others and I love learning\] (77.27%).

**Looking back.** Looking back at why the candidates made the choice to become a teacher, five themes were presented to respondents: 1) I have been a mentor or role model and that inspired me, 2) Difficult concepts came easily to me, 3) A teacher impacted me in a positive way, 4) My previous job was no longer rewarding, and 5) I have a deep interest in the subject that I want to share.

The Cohort I respondents (83.33%) agreed or strongly agreed to the query, \[difficult concepts came easily to me\]; whereas the other respondents were more divergent, reporting at the rate of only 76.19% that they agreed or strongly agreed to this query. It is interesting to note that 16.67% Cohort I and 23.81% group of the other applicants disagreed or strongly disagreed.

The best compliment anyone could give a teacher is to tell that teacher “You motivated me to become a teacher”. The fact that it is commonly accepted that good teachers motivate some of their students to become teachers was supported by this study where 90.91% of applicants either agreed or strongly agreed with the query; \[a teacher impacted me in a positive way\].

Cohort I responded they agreed or strongly agreed (68.75%) to the query: \[I have a deep interest in the subject that I want to share and inspire students’ interest in the\]
subject with 45.45% specifically agreeing. The affirmative response rate was 86.36% for other applicants (with 40.91% agreeing).

Responding to *My previous job was no longer rewarding*, 63.64% of Cohort I candidates either agreed or strongly agreed compared with 77.27% for other candidates. No applicant strongly disagreed with this query.

**Looking forward.** The motivating factors listed in the looking forward section of the rationale for teaching included:

- *I want to work with at risk students,*
- *I have a passion and talent for working with young people,*
- *There are a wealth of opportunities in teaching to relate the subject matter to real world issues,*
- *Teachers have a responsibility to educate and prepare children for the as future world/community citizens, leaders, and educators,*
- *Teaching is rewarding,* and
- *There are available positions in my area of teaching*

The responses of the three groups were very different in response to this set of motivating factors. Cohort I candidates (83.33%) responded they strongly agree with the statement: *Teachers have a responsibility to educate and prepare children for the as future world/community citizens, leaders, and educators.* The remaining 16.67% of the Cohort I candidates agreed with the statement, whereas the other applicants strongly agreed (22.73%) or agreed (77.27%) with this statement.

It is also interesting to note that Cohort I (16.67%) and the other applicants (23.81%) disagreed or strongly disagreed to the query, *difficult concepts came easily to*
me. This raises an interesting series of questions: Are these candidates willing to work hard to master these concepts? Do they perceive this career change to not require mastery of these difficult concepts?

All applicants responded they either agreed or strongly agreed with four of the five statements: *I have a passion and talent for working with young people*, *Teaching is rewarding*, and *There are a wealth of opportunities in teaching to relate the subject matter to real world issues* and *Teachers have a responsibility to educate and prepare children for the as future world/community citizens, leaders, and educators*. The statement in which applicants varied their responses was *I want to work with at risk students*.

When asked if they wanted to work with at risk students 18.18% of Cohort I and 28.57% of other applicants that they did not want to work with at risk students by selecting the level *disagree*. It would be interesting to discover whether their desire not to work with at risk students changed by the end of the M.A.T. program for those specific candidates. However, this was not a measure of this study.

**The ultimate motivating factor.** Candidates were asked, in an open-ended question, to describe the one motivating factor (Event) that finally caused them to make the decision to begin training for a career in teaching and act on it. Responses were varied and aligned with the motivating factors listed on the survey. An in-depth analysis of selected responses can be found in the discussion sections.

A Cohort I candidate said, “My interest in learning more about my culture sparked an interest in teaching. I am very eager to learn more about the Spanish culture and language and ultimately share the knowledge with my students”. Another Cohort I
candidate reflected the research on how so many people delay in making the decision to make a change through her response as well as falling in the minority about always wanting to be a teacher, stating

[I applied to the program] to make my dream come true. I always wanted to be a teacher but for different circumstances in life, I never pursued my dream. Now I am at a point in my life where I believe I want to go for my dream and I want to make it a reality.

A third Cohort I candidate had a very different perspective, aligning with the survey item stating that the previous job was no longer rewarding, “I am tired of everyday feeling like I do not care about what I do. I don't impact anyone, I don't have any passion for it, and I do not feel inspired anymore.”

Addressing financial barriers, another applicant stated, “I finally was able to save up to continue with my education. Also, [because of] the convenience of the schedule for the program. I will be able to attend to classes after work hours.” Yet another applicant addressed a different angle of the financial barrier:

Being laid off from my long time position in marketing. In the past, I wanted to always make the move to become a teacher, but it was not possible due to financial and family restraints. With my layoff, the timing is a little better (children are school age now), and I considered this to be my last real chance to finally make the move to what I always wanted to do.

One of the respondents said, “the timing was right”, actually (and most likely unknowingly) citing the research on change. Following up on the convergence of time, opportunity, and self-realization (Rhodes & Doering, 1993) and demonstrating there
often is an incident that actually triggers the change (he actually used that word), another applicant stated:

The main motivators had been present for a while. The catalyst that got me "over the hump" was a generous severance package that gave me the time, opportunity, and financial security to pull the trigger. The WCSU MAT program was a perfect fit for my needs and timing.

Finally, one applicant addressed the age barrier, “Age-I realized that if ever I wanted to make this career change that I should make it now.”

**Discussion**

Even though the size of the sample population was small, it is possible to frame the characteristics of career-changers who are becoming certified as teachers. The career-changer is 39.4 years of age, Caucasian, attended a public high school and universities as he or she earned a Bachelor of Arts degree. The career-changer most likely had management or business and financial operations somewhere in his or her background. The career-changer is only slightly more likely to be a female rather than a male, but is married with 2 or 3 children. In making the transition to teaching, the greatest barrier faced by the career-changer was financial followed by family responsibilities.

Their rationale for teaching is primarily focused on wanting to make a difference, feeling a sense of responsibility to educate and prepare children for the future, a deep interest in their content, and the perception that opportunities in teaching exist to relate the subject matter to real world issues.
As is stated in the research of Rhodes and Doering (1993), many participants thought about the change for a long time and made the change when another change in their own lives made it possible (family support, availability of caregivers for children, financial support, etc.). The decision to make a career change also appeared to be influenced by some of the identified issues, such as opportunities for growth, status, security, and perception of opportunities. This study also reinforces the convergence of time, opportunity, and self-realization.

Candidates in this study reported they made the choice to become a teacher based on one or more of five identified themes: I have been a mentor or role model and that inspired me, difficult concepts came easily to me, at teacher impacted me in a positive way, my previous job was no longer rewarding, and I have a deep interest in the subject that I want to share. The most significant of these responses, which have been reinforced in various aforementioned aspects of this study, were: I have a deep interest in the subject that I want to share followed by being a mentor or role model to children in various settings.

Because no applicant strongly disagreed with the statement: My previous job was no longer rewarding, this might indicate that only those people experiencing a perceived “lack of reward” or dissatisfaction with their jobs were motivated to seek out the possibility of another career.

The identification of profiles for these career-changers and the motivators that propelled them to make their career change has implications for recruitment of second career teacher candidates, teacher education program and curriculum design, as well as pre-admission counseling and academic advisement. Recruitment efforts directed
toward potential career-changers into teacher certification programs could be focused on a more clarified target population.

The university is committed to the success of enrolled candidates in this certification/Master’s program. Since two candidates in Cohort I had an especially difficult time keeping up with family demands, a full time job, and academic expectations; the university is considering how to adjust the program, provide additional support for organizing time and prioritizing with future candidates.

In the final, open-ended, question on the survey, respondents were asked, “What was the one motivating factor (event) that finally caused you to make the decision and act on that decision to become a teacher?” A multitude of answers addressed various aspects of good intentions, but a few responses were unique or memorable. There was no one consistent event.

This study profiled a cohort of candidates applying to a Master of Arts in Teaching Program at a state university in the northeastern United States, the demographics (race, age, gender, standardized test scores, marital status, children, degrees earned, and area of degree held), and their motivations to change careers may have limited generalizability to the larger population of career-changers across the country due to the varied nature of the programs and entry requirement.

Conclusions

This study focused on the characteristics of two groups of applicants interested in a program leading to a Master’s degree in Education and secondary level teacher certification. Quantitative data collected from a survey, application documents, as well as qualitative data from individual interviews, helped to complete the profile.
As patterns of personal characteristics, previous positions, educational experience, and motivating factors influencing their choice to become a teacher emerged; the profile of a career-changer was constructed. The career-changer is 39.4 years of age, Caucasian, attended a public high school, attended 1-4 universities, and holds a Bachelor of Arts degree. The career-changer is only slightly more likely to be a female rather than a male, but is married with 2 or 3 children. In making the transition to teaching the greatest barrier was financial followed by family responsibilities. The vast majority of career-changers came from a background in management. This profile will assist with recruitment of future candidates to the program.

The rationale for teaching cited by these career-changers was primarily focused on wanting to make a difference, having a responsibility to educate and prepare children for the future, a deep interest in their content, and relating the subject matter to real world issues.

Further study interests would include a longitudinal analysis over several cohorts and expansion of this initial case study to a broader range of programs as well as placement information and information on career progression. Of special interest is how the motivating factors and demographics act as predictors of long-term teacher retention.

In addressing retention, the university has developed an extension of the program with additional coursework in the area of Special Education. This state requires all teachers to earn a thirty credits beyond the Bachelor’s Degree within 5 years of certification. Since these candidates will already have a Master’s degree, there is no requirement to continue their formal learning experience. This extended learning
opportunity at the university continues to support the program’s evolving novice teachers’ continued professional development, providing new skill sets and learning which are tested and applied in their own classrooms.

Consistent feedback from new teachers and cooperating teachers will inform the profile characteristics and necessary instructional decisions. Attention must be directed toward to the development of an extended Professional Learning Community with partner districts which consistently analyzes, reframes, and supports teachers from the point of entry to the teacher preparation program throughout their careers.
References


Preparing New School Administrators for the Current Challenges of Fiscal Leadership

Hawaii International Conference on Education
January 4-7, 2011

Abstract

Acceptance Number 611

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Abstract

Preparing New Administrators for the Current Challenges of Fiscal Leadership

Today’s new administrators face challenges of academic accountability coupled with less resources to reach school goals. The faculty in educational administration programs focus not only in providing aspiring administrators basic fiscal and budgeting knowledge, but also providing them with practical real life opportunities to learn the skills to effectively use the scarce school fiscal resources to meet goals in their school plan. California, in particular, has been hard hit in recent years with massive budget cuts that have lead to significant cuts in programs, staffing, facilities, and materials. This paper will review the essential fiscal and budgeting skills necessary for new administrators to be effective school leaders from the perspectives of current district Chief Business Officers, principals, and aspiring administrators in an educational administration graduate program. Instructional materials, strategies, and techniques will also be highlighted that have been successfully utilized in school finance courses.
bei-Constructions are not the Basic Passive in Modern Chinese
--Dispelling Myths in Chinese-English Translation Studies

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Abstract

This paper disputes the assumption of the bei-construction as the basic or standard passive in Chinese, as is the be-passive in English. This is a fairly pervading misconception or myth in the context of Chinese-English contrastive and translation studies in China. A detailed analysis is given on each of the following four points against this misconception: i) The VP of a be-passive is simple but that of a bei-construction is not; ii) the bei-construction is a semantically loaded passive, but the be-passive is not; iii) by is a preposition but bei is not; and iv) short and long bei are not structurally related, deriving from different sources. The paper concludes with a proposal that some parallels can be drawn between the short bei-passive and the get-passive for translation studies between Chinese and English.

Key words:
bei-construction, be-passive, get-passive, basic passive

1. Introduction

A widely practiced view of passive constructions in Chinese is this: since particle bei2 is the canonical passive marker in Chinese, the bei-construction should be taken as the basic or standard passive in the language, as is the be-passive in English. This is a misconception, however. It is this misconception that has misled many writers to a series of myths about the bei-construction in the context of English-Chinese translation studies. One of these myths is that “Chinese distinguishes itself from

1 The research presented in this paper is supported by an IPM grant (RP/ESLT-1/2008) to the author.
2 The particle bei here is taken to be a neutralized term, generalized to its more or less colloquial variants such as jiao(叫), rang(让), and gei(给) on the one hand, and its more formal variants such as “wei /bei(为/被…suo(所))”, on the other. Therefore, a passive clause that features a variant of bei, say gei(给) as in (i) below, is treated just as an instance of the bei-construction: (i) 屋里已给小福收拾好. (老舍:骆驼祥子)
English by using fewer passives” (Chen 1998:145), or more straightforwardly, “passive structures are less used in the Chinese language than English.” (Xu 2003:93). This is indeed one of the most explicit universal teaching theses in all the textbooks that I have ever consulted as a classroom teacher of Chinese-English translation for the past eight years. Accompanying this grand teaching myth is the treatment of the particle bei as the Chinese counterpart of by in English passives, and this latter myth then in turn leads to still one more. That is, a neat and tide parallel in passive structure between English and Chinese: just as there is distinction between a long be- and a short be-passive in English, so Chinese distinguishes between a long bei- and a short bei-passive. Certainly, it is a lopsided comparison, since the long and short be-passives in English are structurally related, but it is not the case with the long and short bei-passives in Chinese.

With these misconceptions in mind, all these translation studies writers have come to find themselves in dire strait: on the one hand, taking the bei-passive as the basic passive in Chinese, they declare that “Chinese distinguishes itself from English by using fewer passives”. But on the other hand, their native intuition tells them that Chinese is a language that is never parsimonious with passive expressions, the overwhelming majority of which do not take the form of bei-construction. Out of the force of this native intuition on the openhandedness of the Chinese language with passive expressions, all of these writers have to admit that Chinese uses more passives than English, a nullification of the their initial teaching that Chinese uses fewer passives than English. As an effect to dissolve the tension between theoretical teaching and native intuition, literally more than half dozen turns of phrases has been created in current textbooks in Chinese-English translation textbooks for the passive expressions that do not take the form of bei-construction. Among these turns of phrases are: completely covert (劉宓慶 2006), incomplete (熊文华 2006), inherent (连叔能 1993), logical (譚衛國 2005), notional (周志培 2003), simplified (张震久 & 孙健民 2009), object-first structures (Xu 2003), and unlabeled (Chen 1998) passive. All these creative terms are descriptively glowing but lack the theoretical rigor of a scientific study, causing quite bit of conceptual and methodological confusion in current Chinese-English translation studies of passive expressions.

This state of theoretical confusion in Chinese-English translation studies is, to simplify the matter a little, all because of the misassumption, implicit or explicit, of the bei-construction as the basic passive in Chinese. The concept of basic passive as a typological construct has been around for a while. But it seems that this typological idea is invisible to the mainstream Chinese-English translation studies community in

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3 This ever-present proposition has been articulated in slightly different wording in different authors (e.g. Guo & Li 2003:80; Liu 2006:311; Pang 1997:364; Tang 2005:266, Zhu 2004:94; Wang 2006: 61, just to name a few)
the present-day China. This paper is designed as an effort to make this typological idea visible to the translation studies community by drawing on the recent linguistic insights into the bei construction. In what follows I shall start with a sweeping comparison between bei-constructions and be-passives (section 2), raising the issues for subsequent discussion in the paper. My arguments will deploy along four lines: a review of syntactic disparity in the internal structure of VP in bei-passives and be-passives (section 3); a survey of semantic disparity between bei-construction as an adversative structure, as opposed to be-passives as a semantically neutral structure (section 4); separating long bei from short bei in light of a derivational analysis (section 5); and a constituent-based analysis against the treatment of bei as a preposition (section 6). The present paper is concerned only with the issue of why the bei-construction is not the basic passive, as comparable to the be-passive in English, without committing itself as to the question of what it is that constitutes the basic passive in Chinese. Thus instead of proceeding to attempt at an answer to the question of what makes up the basic passive in Chinese, this paper concludes by proposing a study between bei-constructions and get-passives, a cross-linguistic parallel that can be expected to yield some practical results for contrastive and translation studies of passive between Chinese and English.

2  be-Passives and bei-Constructions: Raising the Issues

In the simplest cases, be-passives in English can be illustrated in (1) below:

(1)  a. The thief was caught by the police
    b. The thief was caught yesterday

The sentences in (1) are usually known as be-passive, to be distinguished from other forms of passive in English, say the get-passive as in John got fired, which is a type of passive that is syntactically and semantically very different from its be-passive equivalent John was fired.

English linguists distinguish between two types of be-passives: the long passive and the short passive (e.g. Biber et al. 1999). This terminological distinction is simply based on the presence or absence of the by-agent phrase: In the long passive, the agent, the police in the (1a) case, is expressed while in the short passive the agent is left suppressed as that in (1b).

To all appearances bei-constructions in Chinese exhibits the same pattern, as illustrated below, where the agent NP 警察 ‘police’ is present in (2a) while the agent drops in (2b):

4 The terms Agent and Patient are used here in Dowty’s (1991) sense of proto-role.
Modeling bei-constructions on English be-passives, we thus seem to have every reason for a similar dichotomy of passives in Chinese. That is, like English, Chinese also makes a distinction between a long and a short passive, or long a bei-(construction) and a short bei-(construction) (I henceforth drop the term (construction)).

However, this cross-linguistic parallel between the be-passive and the bei-passive is quite misleading. For this comparative model has as its direct consequences a number of (mis)matches in passive constructions between English and Chinese: i) bei-constructions are basic passive in Chinese as be-passives in English; ii) long bei and short bei are structurally related constructions, as are long be- and short be-passives in English; iii) the particle bei is a preposition, the Chinese counterpart of preposition by in English. These three cross-linguistic matches are both theoretically and practically unworkable in spite of the fact that they have widely been practiced in the current mainstream works on contrastive and translation studies in English and Chinese. It is against these three mismatches that this paper contends that the bei-construction should not be conceived of as the Chinese counterpart of English basic passive, namely the be-passive.

2.1 Short be-Passives are Preferred in English while Long bei-Passives in Chinese: Distributional Mismatch

There has been a consensus among English linguists - that the short be-passive is preferred to the long one in all syntactic positions and across a variety of registers (e.g. Huddleston et al. 2002). This pattern of usage of the short passive over the long one has been confirmed by a number of corpus findings. Biber et al. (1999: 938), for example, find that the ratio of occurrence of the short passive as opposed to the long passive in daily conversation context is 8:1.5

Coming to the long bei and the short bei in Chinese, we find the picture is just

5 More elaborated corpus-based statistics can be seen in Huddleston 1971/2009 (pp.120-125).
the opposite: the long *bei* is used substantially more frequently than the short *bei.* Historically, the short *bei* appears as early as 300 BC (何乐士 2000). However, since the Tang-Song dynasties it is the long *bei* that has been dominant in usage (唐钰明 1988). The relative occurrence ratio of the long *bei* to the short *bei* is 5.7:1. This rate is getting higher from late modern to contemporary Chinese.《儿女英雄传》 is a novel in late modern Chinese, in which a total of 188 *bei*-constructions are identified (陈昌来 & 李琳 2006) with long *bei* accounting for 85%. Lao She’s 骆驼祥子 can be considered as a more or less contemporary writing, where a total of 105 *bei*-passives are identified with long *bei*-form making for 87% (蔡建光 2008).

Given the data on the relative frequencies of occurrence of short *be*-passives in English and long *bei* in Chinese cited above, it should be safe to say that long passives are preferred in Chinese while it is short passives that are preferred in English. How would we interpret this distributional discrepancy between *be*-passives and *bei*-passives from a comparative perspective? This question takes us to a typological taxonomy of basic and non basic passives in subsection 2.2.

### 2.2 *be*-Passive is Basic Passive while *bei*-Passive is not: Typological Insights

Keenan & Dryer (2007) have the following typological remark on the relative distributional pattern of long vs. short passives

(3) …it is also generally the case that agentless passives are preferred even when the language syntactically permits agent phrase (2007: 332).

Needless to say, agentless passives are short passives, and agentive passives are long passives. At this point we have to bring in Keen & Dryer’s distinction between basic and non-basic passives, complicate the matter a little. For Keenan & Dryer, agentlessness is one of the defining properties of what they mean by the notion of basic passive (pp.328-329). Agentless passives are basic passive not only because they are usually shorter than agentive passives, but mainly because they are more passive in nature than agentive ones. By ‘more passive’ it is meant that basic passives are the most prototypical passive in the sense that the ultimate force behind the formation of a passive is to foreground the expression of Patient role at the cost of the expression of Agent role. So a chain of reasoning emerges here: an agentless passive is the most prototypical and thus most basic simply because the Agent is completely suppressed in order to give a full expression of the Patient.

Having explained the correlation between agentless, short, and basic passives, we are now ready to examine the *be*-passive and the *bei*-passive in light of Keenan & Dryer’s generalization in (3). Since the dominant form of *be*-passives is agentless, the
be-passive, as opposed to other types of passives (say get-passives for example), should be deemed the basic passive in English. In contrast, since the dominant form of be-passives is agentive, it then follows that the bei-construction should not be the basic passive in Chinese. In what follows, I present four lines of evidence in support of the above observation that the bei-construction is not the basic passive in Chinese.

3. **be-Passives are Simple while bei-Passives are Not: Syntactic Disparities**

Short be-passives are usually unadorned in the sense that its main verb is simple and plain: simple because it consists of a singleton lexical verb; plain because it doesn’t take a direct object. (4a) is a short be-passive, where the main verb paid is bare and plain. No direct object is allowed as a syntactic adornment, as showed in (4b) below:

(4) a. The bill was paid
   b. *The bill was paid two hundred dollars.

Note that a standard passive subject is nothing but a permutated active object. In other words, when the object of the verb in its active form has been rearranged as the subject of the same verb in its passive form, the verb has syntactically been deprived of its object. This is exactly the case with the passive verb paid in (4a-b): it has been deprived of its object which has become the subject. Given this syntactic deprivation, any passive object to the passive verb cannot be accepted, as illustrated in (4b) where the passive direct object *two hundred dollars* is not permitted. It is in this sense that an English be-passive must be unadorned and simple.

In contrast, the main verb of a bei-passive can be highly sophisticated for two reasons. First the passive verb can take a direct object; second, it can be serialized into a complex. For example, the predicate VP of the passive sentence in (5) consists of a host of lexical verbs of ‘arrest’ plus ‘write’ plus ‘fine’ and plus ‘send’ in a series:

(5) 这个外省小偷被警察逮住 (arrest), 写(write)了一个检讨书, 罚(fine)了两百块钱, 送(send) 回到当地政府去了

In addition, the main verb of a bei-passive, unlike that of a be-passive, can take a direct object. The NPs 一条腿 ‘one leg’, 陈圆圆 ‘Chen Yuan-yuan’ and 衣服 ‘clothing’ in (6a-c) are all a passive direct object, respectively, of the main verbs 打断 ‘break’, 抢走 ‘rob’ and 脱光 ‘strip’. This kind of object is not permitted in be-passives, as showed in their near English translations in (6d-f):

---

6 This sentence is composed from two examples in Lu (2004: 10)
There are three points to note about the characteristics of the main passive verbs in (6a-c): first, they are all mono-transitive verbs in active; second, they all take a passive object; third, the passive objects are thematically related to the patient subject of the sentences in one way or another. The direct object 一条腿 ‘one leg’ in (6a) is the body part of the patient subject 西门庆 ‘Xi Men-qin’. The semantic relation between the object NPs 衣服 ‘clothing’ and the subject NP 潘金莲 ‘Pan Jin-lian’ in (6b) is one of possessor and possessed, and roughly the same can be said of the passive direct NP 陈圆圆 ‘Chen Yuan-yuan’ in (6b). All these three traits indicate that the VP of bei-constructions can be anything but simple and plain in passive, disqualifying the constructions as basic passive.

There is more evidence that indicates that the bei-construction is of non-basic passive. Consider the following sentences that have been termed impersonal passives (Keenan & Dryer 2007; Payne 2006). These sentences are so called because they are formed from semantically intransitive verbs as illustrated in (7): the main passive verbs 叫 ‘shout’, 来 ‘come’, and 爬 ‘climb’ in these bei-constructions are all intransitive.

Even without going into all the syntactic details of the impersonal passive, it is conceptually clear enough that an impersonal passive is necessarily of non-basic. For a basic passive is a construction that is prototypically derived from a transitive verb and thus necessarily with a patient subject. However, the impersonal passive is a subject-less passive (Keenan and Dryer 2007; Payne 2006). This is the case with all the impersonal bei-constructions in (7).

4. be-Passives are Neutral while bei-Passives are Non-neutral: Semantic
Another defining property of the basic passive is related to affectedness of the subject. That is, the subject of a basic passive is understood to be neutrally affected whereas the subject of a non basic passive is either negatively or positively affected. For example, Vietnamese distinguishes between three types of passive, namely negative, positive and neutral passives (Keenan & Dryer 2007:341). It is neutral passives, not positive or negative passives, that are deemed basic passive.

English distinguishes between two types of passive as regards subject affectedness. The get-passive, as in John got fired, can be said to be a negative passive, expressing an event that is detrimental to the subject John. Unlike get-passives, be-passives are neutral, being non-committal as to subject affectedness. For example, John was fired is not bound with a negative effect on the subject John.

Unlike be-passives, bei-constructions are, in both its long and short forms, negatively loaded passives as to the subject referent. The following examples from Lao She are illustrative for what we mean by the term ‘negatively loaded.’ In the case of (8a) below, for example, being thrown out (撵出去) is definitely something detrimental to the whole family. In this sense, bei-passives have acquired the label adversative passive.

(8) a. 房钱交不上，全家便被撵出去，而且被扣了东西.  
    b. 夏太太因为买了四盆花，而被女仆杨妈摔了一盆.  
    c. 一切可以换作金钱的都早晚必被卖出去.  

《骆驼祥子》

Following the reasoning of the recent constructionist theory (Goldberg 2006), the semantics of negative affectedness in a bei-construction should not be explained as a contextual imposition. In other words, the semantics of negative affectedness is simply what the bei-construction is designed for, where either the main verb or its resultant complement of a bei-construction must be semantically negative. This point has independently been confirmed by findings from 范晓(2006). Readers are referred to this excellent paper for a full list of negative lexical verbs (e.g. 吃、咬、打、撞、批评、欺负、压迫) and negative complement elements (e.g. 坏、漏、断) that make, in collaboration or alone, bei-constructions an inherent adversative passive.  

By inherent I mean the construction would fit into a negative environment better than a neural one. This point can be illustrated in the contrast of the following paired sentences in grammaticality:

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7 There are quite a few text-count studies in support of bei-construction as inherent adversative passive, e.g. 李临定(1980) on 《骆驼祥子》and 王还 (1983) on 《三里湾》and 《创业史》.
(9) a. 那辆车被修烂了
b. 那辆车被修好了

Since the main verb 修 ‘repair’ is semantically neutral, it is the resultant complement 烂 ‘kaput’ in the VP of (9b) that fits appropriately into the adversative frame of bei-construction. The complement 好 ‘well’ in (10b) is however inappropriate for an inherently adversative structure. This accounts for the reduced grammatical acceptance for the sentence in (10b).

It should be clear enough that it is the inherent adversative property of the bei-construction that prevents us from drawing a parallel between the bei-construction and the be-passive: the former is non-basic while the latter is basic.

5. Separating Short bei from Long bei: Derivational Speculation

In Sections 2 through 4 we have dismissed the assumption of bei-construction as basic passive in Chinese, comparable to be-passive in English. As noted in the Introduction section, two theoretical myths have resulted from this misassumption. The first of these two myths is about the particle bei that is treated as a Chinese counterpart of the preposition by in English. The second myth is that the short bei are perceived as shorthand for the long bei without the Agent NP in the way the short be-passive for the long be-passive. In what follows I deal with the second issue, i.e. the alternation between long and short bei. In the next section I will take up the question of whether or not the particle bei can be treated as a preposition.

It has been reasonably assumed that the alternation between long be- and short be-passives in English as a matter of deletion or addition of the by-agent phrase. Thus the alternation is a two-way lane, as diagrammatically illustrated below:

(10)  Long be-passive $\xrightarrow{\text{short}}$ Short be-passive

Then what about the alternation between long and short bei constructions? One of the best known answers to this question is: the short bei is derived from the long bei via deletion of the agent NP, as illustrated in the following diagram:

(11)  NP$_1$ + bei + NP$_2$ + VP $\xrightarrow{\text{short}}$ NP$_1$ + bei + VP

The above diagram actually represents a claim, explicit or implicate, that practically pervades the overwhelming majority, if not all, of the current published textbooks in contrastive and translation studies. This claim seemingly does capture native intuition.
about the relationship between the long and short *bei* forms.

But note that, unlike the two-way derivation between long and short *be*-passives in (9), the alternation between long and short *bei* is a one-way derivation in (10).

Deriving the short *bei* from the long *bei* via deletion of NP2 entails treating the *bei* in the two forms is grammatically identical. If the two forms of *bei* is grammatically one and the same thing, then the alternation between the long and short *bei* forms might be postulated the other way round. That is, the long *bei* is obtained from the short *bei* by addition NP2 after the short *bei*, as illustrated in (11) below:

\[
\begin{align*}
(12) & \quad \text{NP}_1 + \text{bei} + \text{NP}_2 + \text{VP} \quad \leftrightarrow \quad \text{NP}_1 + \text{bei} + \text{VP}
\end{align*}
\]

Then one may ask: is (10) or (11) the right derivation? There is in principle no telling which is which, unfortunately.

This paper holds a different view: the long *bei* and short *bei* are distinct structures, deriving from different sources. In particular, we propose that the long *bei* is derived from an object-topicalized construction in the literature (e.g. Li & Thomson 1981) like that in (12a) below. The short *bei* is derived from what has been called patient-subject construction in the literature, as illustrated in (12b) (e.g. 龚千炎 1982; 王灿澜 1988; 陆俭明 2004):

\[
(13) \quad \begin{align*}
\text{a.} & \quad \text{老虎武松打死了} \\
\text{b.} & \quad \text{老虎打死了}
\end{align*}
\]

Departing from Keenan & Dryer’s analysis of passive formation as a syntactic operation only at the VP level, we contend that there are other avenues for constructing a passive. In particular, passives can be formed at either phrasal or lexical or clausal level. Readers are referred to Payne (2006) for passives at lexical level. In the case of *bei*-passives, we propose that they are formed at clausal level with the particle *bei* as a passive marker for the patient subject (邵敬敏 & 赵春利 2005), rather than as a periphrastic verbal marker. One piece of evidence in support of passive formation as a sentential operation is from a coordination test on the following paired sentences:

\[
(14) \quad \begin{align*}
\text{a.} & \quad \text{你被地主害死爹, 我被地主害死娘} \\
\text{b.} & \quad *\text{你被地主害死爹, 我地主害死娘} \\
\text{c.} & \quad \text{老六被老四打了两拳, 被老三踢了三脚} \\
\text{d.} & \quad \text{老六被老四打了两拳, 老三踢了三脚}
\end{align*}
\]
The grammatical contrast between (13a) and (13b) shows that *bei* is a clausal passive marker: two instances of *bei* each are needed for two separate passive clauses. Since a clausal passive marker is missing in (13b) it is ungrammatical. Since (13b) and (13c) are both coordinated clauses, the omission of *bei* is then optional.

It is reasoning along this line we argue that long and short *bei*-passives are derived separately from the structures in (13a) and (13b). That is 老虎被武松打死了 is derived from 老虎武松打死了 while 老虎被打死了 from 老虎打死. One of the desirable consequences of this derivational analysis is that neither the long *bei* nor the short *bei* are the basic passive in Chinese.

The above proposal for separate derivations for long and short *bei*-passives involves the category status of the particle *bei*. A variety of the grammatical categories have been assigned to “*bei*” over the past 30 years or so. The particle has been analyzed, for example (see 刘升东 2008 for a detailed review), as a preposition, or an auxiliary, or a light verb, or a lexical verb. Given the purposes of the present writing, we are not obliged to commit ourselves to any of those analyses. However, if we start with an analysis of “*bei*” as a preposition on a par with the preposition “by” in English, then we are surely on the wrong track, a point we now turn to presently in the next section.

6. *by* is Preposition but *bei* is not: Constituent –based Tests

In this section we present two analyses against the assumption of *bei* as preposition, comparable to *by* in English. The first of our analyses rests on a constituent test. The second on coordination test. The two tests presented here are heavily based on Huang et.al (2009:112-152). Coming to the constituent test, our argument is this: if *bei*-NP were a prepositional phrase, it should be permitted to move around the sentence. But an inspection of the contrasts among the sentences in (14a-f) immediately reveals that the *bei*-NP sequence cannot form a constituent at all:

(15) a. 老虎被武松打死了
b. *被武松老虎打死了
c. *老虎打死了被武松
d. The tiger was killed *by* Wu song
e. It is *by* Wu song that the tiger was killed
f. It is the tiger that was killed *by* Wu song
g. 在景阳冈老虎被武松打死
h. 老虎在景阳冈被武松打死
i. 老虎被武松在景阳冈打死
j. 老虎被武松打死在景阳冈
(14a) is a standard long bei-passive. The ungrammaticality of (14b) and (14c) indicates that the bei-NP, namely 被武松 (by Wu Song), is not permitted to move around the sentence as a single unite. This lends strong support to the fact that bei is not a preposition and the Agent NP is not its object. In contrast, this is not the case with the sequence by-Wusong in their near translations in English (14d-f). In other words, the string of by-agent NP does form a constituent headed by the preposition by. This accounts for why the by-NP is movable in (14e) and (14f). Similarly, this is the case with the zai-NP, namely 在景阳冈, in sentences (14g-j), since zai 在 ‘in’ is a preposition in Chinese, which takes its object 景阳冈 to form a movable constituent.

A second line of evidence against the supposition of bei as Chinese counterpart of by is based on coordination test. As showed in (15a) and (15b), the particle bei can be detachable from the following agent NP. The detachability of the bei in a string of bei-NP indicates that bei-NP is not a structured sequence. In contrast, by-NP in English is a structured sequence. This means that preposition by is in a tight bond with the following Agent NP. This accounts for why (15c) is grammatical while (15d) is not:

(16) a. 老六被亲人怀疑，被外人指责．
b. 老六被亲人怀疑，外人指责．(李临定 1980: 406)
c. John was slapped by Mary but kissed by Alice
d. *John was slapped by Mary but kissed Alice

More examples from 李临定 (1980) are cited below to lend further support to the grammatical alternation between (15a) and (15b), in which the particle bei and the following NP do not form an independent constitute.

(17) a. 被人踏被马踩：被人踏马踩
b. 被杀伤被击毙：被杀伤击毙
c. 被责问被考验：被责问考验
d. 被照顾被呵抚：被照顾呵抚
e. 被保存被记录：被保存记录

5. Conclusions
In this paper I have laid out four lines of evidence against the assumption of bei-constructions as basic passive in Chinese, comparable to be-passives in English. It is this misassumption that has led to some myths about the parallelisms between Chinese and English, such as the lining up of long and short bei with long and short
be-passives, and of the particle bei with the passive proposition by. My analyses presented here is basically intended as dispelling these myths of parallelism in the context of English-Chinese contrastive and translation studies, leaving open the question of what it is that constitutes the basic passive in Chinese.

By way of conclusion, I propose a more productive parallel that can be drawn in passive structures between Chinese and English. This is the parallel between the bei-passive and the get-passive, both of which are of non-basic passive. The point of bei-construction as non-basic passive in Chinese has been argued for in the body of this paper along the distributional, syntactic and semantic grounds. These three lines of augmentation may neatly apply to the case of the get-passive as non-basic in English. First of all, in terms of distribution, the get-passive is marginal as compared to the be-passive. The marginality of the get-passive should set it apart immediately as a non-basic, as opposed to the be-passive as the basic.

Second, there is some syntactic evidence that it is be-passive, but not the get-passive, that should be treated as the basic passive. It has been noted (Keenan and Dryer 2007; Cart & McCarthy 2006) that, for example, the get-passive is used exclusively with dynamic verbs or in the dynamic sense of the passive main verb. This implies that the get-passive enables a clear distinction between a dynamic event and a state of situation. Thus the get-passive in (17a), according to Cart and McCarthy (2006:800), is clearly interpreted as an event, while be-passive (17b) is ambiguous between a state and an event:

(18) a. The fence got damaged.
   b. The fence was damaged.

The third line of argument for the get-passive as non-basic involves affectedness of the passive subject. A typical get-passive is a “problematic” (Payne 2006) passive in the sense that the passive subject is responsible for or negatively affected by the event of the main verb. In (18a) below, for example, the subject of the get-passive is understood to be adversatively affected by the event of being locked out, whereas this interpretation of the subject of the be-passive in (18b) does not obtain:

(19) a. She got locked out
   b. She was locked out

Alternatively, (18a) can be interpreted in light of intentionality involvement of

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8 I feel strongly inclined to follow 张志公 (1982) and others (e.g. 熊学亮 & 王志军 2002) in taking the patient- subject clause as the basic passive in Chinese, though there is an analysis of patient-subject passive as the middle (Cheng & Huang 1994) in the literature.
the subject. In particular, being locked out is part of the intention of the subject of the get-passive in (18a). This semantic coloring of the passive subject is not available in (18b), as illustrated in the contrast in grammaticality between the following paired sentences (Huang et al 2009: 115):

(20) a. The pedestrian deliberately get hit.
    b. *The pedestrian deliberately was hit
    c. John intentionally get fouled by Bill
    d. *John intentionally was fouled by Bill

Huang et al use these sentences to make their point that the bei-passive behaves on a par with the get-passive, as illustrated below:

(21) 张三 是 故意 被 (李四)打了.
    ‘Zhangsan intentionally got hit (by Lisi).’

The semantic of the phrase 故意 ‘intentionally’ indicates the subject 张三 ‘Zhangsan’ is the person who is intentionally involved in the event of hitting.

To sum up, both the bei-passive and get-passive are of non-basic in their respective language. The points proposed above for a comparative study between the two structures should promise a productive line of investigation into Chinese-English contrastive and translation studies.

References

University Press.


範曉 2006. 被字句謂語動詞的語義特徵. 長江學術 2:79-89


龔千炎 1980. 現代漢語裏的受事主語句. 《中國語文》5:335-344


劉宓慶 2003. 翻譯教學：實務與理論. 北京:中國對外翻譯出版公司

潘文國 1997. 漢英語對比綱要. 北京:北京語言文化大學出版社

劉東升 2008. 被動標記詞“被”應歸入助詞. 《語言研究》3:74-76


魏志成 2003. 英漢語比較導論. 上海:上海外語教育出版社

熊文華 2006. 英漢翻譯教程. 北京:北京語言文化大學出版社

熊學亮、王志軍 2002. 被動句式的原型研究. 《外語研究》1:19-23.


Academic advising and counseling: Lessons from the Academic Development Centre, North West University, South Africa

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This discussion notes that the provision of academic advising and counseling by the Academic Development Centre (ADC) at the North West University, Mafikeng campus, South Africa, is being met with mixed reaction hence a lot still needs to be done to ensure that lecturers and students appreciate the concept. ADC is mandated to ensure that quality teaching and learning as envisaged in the university’s ethos is provided and adhered to. To achieve this, through its diverse arms, ADC should work closely with the teaching staff members so that whatever they need to execute their core teaching and research activities is provided. This entails requesting the teaching staff members and students to attend different capacity building workshops designed to improve their teaching and learning/studying skills respectively. Conversely, ADC is yet to receive maximum support from its major stakeholders. The prevalent challenges ADC has to navigate through range from stakeholders’ failure to appreciate its strategic role in the improvement of throughput, non attendance of dully called for capacity building workshops, disregard of deadlines, non-implementation of suggestions, lack of resources among others. To circumvent these, ADC is calling for stakeholders’ mindset change, dialogue and proactiveness in view of the emerging teaching and learning trends characteristic of the 21st century.
Heritage language can be defined as any ancestral language that may, or may not, be spoken in the home and the community in formal and informal settings (UCLA Steering Committee, 2000). Heritage language loss refers to lack of first language development, delayed first language development, or a progressive loss of previously acquired language ability (Collier, Ovando & Combs, 2004). For the purposes of this research, I will refer to language loss as the lack, decline or gradual shift of language proficiencies in the first language. The Spanish language, as spoken by people in Texas, fits this definition. Spanish language and proficiencies, which are the spoken and written forms of the language, vary within Hispanic communities in the Southwest. Bilingual education teachers are influential in retention of heritage languages in their classrooms however; indications are that many do not take advantage of their influence.

Many societies in a global economy benefit from the multilingual aspects of commerce, not just economically but culturally with one another. Current examples of the multilingual diversity needed to function effectively in rapidly growing economies are exemplified by methods used by the European Union and mandates by the United Nations (Spring, 2004). The European Union, which was officially organized in February of 1992, recognized the need for promoting unity within the various nations, not by promoting one language, but by emphasizing a multiple language policy in which the objective for education is to “develop proficiency in three European languages” (Spring, 2004, p. 79). This program allows students to participate in a language exchange program to any university or college within a member nation of the European Union. As part of the agreement, the student must demonstrate knowledge of the language of the host country in return for social security protection and health care in the host country. If a student is not familiar with the host country’s language, another program provides special language training and textbooks before the student travels to that country. This agreement ensures that students have every opportunity to share cultural and multilingual perspectives and values. In the U. S. multilingualism is not a concern and the effects have been language loss and lack of academic proficiency in English.

Generational language loss occurs after a language has completely shifted to English or has maintained only a semblance of that first language after the second generation of speakers (Tse, 2001; Ovando, Collier & Combs, 2004). The Pew Hispanic Institute (2006) considers the second generation of heritage language speakers as anyone born in the United States of immigrant parents. Using this definition, third generation Hispanics, or the children of the first generation born in the United States, experience complete heritage language loss. According to several researchers (e.g., Ovando, Collier, Combs, 2004; Yamachi, Ceppi & Lau-Smith, 2000), loss of one’s heritage language also seems related to the low academic achievement experienced by Native Americans and Hawaiians in the United States and can account for the continual rise of Hispanic dropout rates in the Southwest. For Spanish speakers in the United States this loss can take place within two generations (Crawford, 2004; Snow & Hakuta, 1988). Language loss is also associated with the loss of cultural ideals that are embedded within every language and as such can cause the loss of a culture.

There is a need to study the methods and language used by bilingual education teachers in programs in which high populations of Spanish-speaking children are enrolled. Guerrero (2003)
argued that bilingual education teachers are hired by districts under the impression that they are fluent in a language other than English, when in reality many teachers with bilingual education certification are not proficient in any language but English. Their Spanish language proficiencies may be inadequate to teach content area instruction in Spanish. Research (Cummins, 1996; Fishman, 1991; Ovando, Collier & Combs, 2004; Ramirez, 1991) indicates that children retain information and learn concepts best and are able to transfer to English effectively when taught academic content in their heritage language; it is therefore imperative that their teachers be academically proficient in the learners’ heritage language.

By studying the factors that contribute to heritage language loss and shift, this research will gain knowledge about some of the attitudes toward using Spanish as the language of instruction in bilingual education classrooms. Analysis of Spanish speakers’ public school backgrounds and social views will allow this researcher to learn about subtractive as well additive bilingual programs from the teacher’s perspective. I will explore the prevailing attitudes toward the schooling backgrounds of Spanish speakers and attitudes toward bilingualism by bilingual education teachers. Attitudes toward school and school experiences are often determinants of higher education attainment and of the decisions made to retain a heritage language (Ogbu 1978; Mehan 1997; Valenzuela, 2005).

Participants

Bilingual education teachers within their first through third years of teaching in a TBE program will be the focus of the study reported herein. The participants were new teachers whose backgrounds included experiences with subtractive school policies as well as lived experiences in their backgrounds meant to acculturate their language. In order to gather adequate data from surveys and interviews with Spanish speakers it is important to point out that the participants represented varying socioeconomic as well as generational backgrounds. The survey used in this study will be the Multigroup Ethnic Identity Measure (MIEM). Although the MEIM does not measure the use of a heritage language, it does consider and attempt to quantify a concept such as “commitment” to one’s ethnicity which leads to maintenance of the heritage language (Phinney, 1999). Interviews with semi-structured questions were also used in order to gather enough information about the participants’ background schooling, education and Spanish language experiences.

Teachers from both TBE program schools and dual-language program schools were chosen for this study. The participants chosen are an adequate representation of people who have retained all or part of their heritage language in spite of or as a result of their backgrounds and school experiences. This study will reveal the attitudes of these teachers toward teaching in their heritage language and relate those attitudes to their own language learning backgrounds. The consequences related to the loss or shift of Spanish language do not always prove detrimental to the economic success of the participants, but do prove that the processes of that loss create a negative attitude towards all that is “Mexican” (Ovando, Collier & Combs 2004; Ogbu 1978; Valenzuela, 1999).

Through the use of interviews with new bilingual teachers, this study explored teachers’ own heritage language loss and their interest in using native language instruction. The supposition is that the participants’ information about their teaching goals and their experiences in the educational programs they attended will reveal a pattern of socio-political subtraction of heritage language though the use of transitional-types of curriculum. The interview and questions should also give more insight into the candidates’ own attitudes towards their
heritage language. Reform of subtractive educational practices will be the central solution in this study with an emphasis on additive programs for Spanish speakers in this area.

Another supposition is that government policies and mandates for learning the English language are a factor in heritage language loss and shift. According to the No Child Left Behind Act of 2002 (NCLB), the main language goal for schools in the United States, should be proficiency in English. NCLB does mandate that school districts with high numbers of low-achieving students alleviate this problem by showing adequate yearly progress (AYP) on test scores (Texas Education Agency, 2009). This educational mandate leaves schools and districts with high numbers of second language learners at a disadvantage in view of the fact that a significant amount of research confirms that it takes from 4 to 10 years to learn English well enough to pass an academic test (Cummins 1996; Krashen 1996; Ramirez 1991). The assumption is that the use of transitional bilingual programs seems to be set up for failure of attainment of academic English.

The participant group for this study involved six new bilingual education teachers, who were in their first through third years of teaching, in grades kindergarten through fourth grade. Three participants were chosen from a school that uses Transitional Bilingual Education (TBE) as their program for second language learners, and three were from a school that used a Dual Language Program for instruction. Only Mexican American teachers educated in the United States, or raised in the United States from early childhood, were asked to participate. The rationale for the aforementioned criterion is that this study explores whether new bilingual education teachers are still using teacher training principles learned in their education programs or whether the delivery of instruction in their classrooms may have been influenced by early schooling experiences in the United States. Foreign-born Hispanic teachers were also excluded from this study because Spanish acquisition is usually attained in their country of birth, and their educational experiences will be significantly different from those born or raised in United States. For these reasons, the interview and survey responses were directed toward understanding the participants’ perspective on their experiences in school, the community, and home as such experiences pertain to their use of heritage language and English.

The participants for this study must have been educated in the United States in order to effectively answer questions of heritage language loss (Guerrero, 1997, 2003). The participants were from two West Texas school districts that include both transitional and dual-language education programs. In as much as there were six participants chosen for this study, three of the participants were from one school district, while the other three were chosen from another school district about 20 miles away. A university’s certification office provided a list of bilingual education certification completers between 2005 and 2007 who met the following criteria for new bilingual education teacher interviews:

1. The teachers were within their first three years of teaching.
2. The teachers speak or have spoken Spanish at varying levels of proficiency.
3. The teachers were certified to teach bilingual education in Texas public schools.
4. The teachers were born in the United States or have been in the U.S. since early childhood (before the entering school at age 5).
5. The teachers were educated the United States.

The purpose of this study was to examine the views of bilingual education teachers regarding their use of Spanish in their classrooms. Within the study, the focus was on the motives bilingual education teachers have for the methods and languages used in their classrooms, but the types of bilingual education programs that influence their motives were also considered. Within
the findings examined are included the schooling and educational backgrounds that influence the teacher participants’ use or non-use of native language instruction in their particular bilingual education program.

Methodology

The potential participants were contacted by phone or e-mail and asked to participate in this study once it was determined that they met the aforementioned criteria. In order to gain employment in the local districts the teacher candidates must have taken the two required exit exams and the Texas Oral Proficiency Test as well as completed student teaching or a year as an intern. I looked up each teacher’s name on the list of school websites provided by each school district. Each name was searched, from the list of completers, and each teacher was contacted by leaving a message with the school in which they were employed and asking them to contact the researcher. Times and dates were set up for meeting with the researcher for at least 2 hours. A consent form was signed and each teacher was asked to fill out the Multigroup Ethnic Identity Measure (MEIM).

Texas Oral Proficiency Test

The TOPT is currently used by Texas to assess oral language proficiency in Spanish. The bilingual teacher candidate must take the test, by recording answers to specific questions, before the end of his or her teacher training program. The TOPT is considered a criterion-referenced test and the results are determined by three types of questions. The questions are meant to correspond to specific communication tasks such as giving directions, narrations or giving instructions at the intermediate level, while the advanced level consists of supporting opinions or hypothesizing on an impersonal topic. In order to perform successfully on the TOPT, the teacher candidate must score at a level of three or higher by two independent scorers who use a scale of 1 to 4/5. The score assigned by each scorer is one of four proficiency ratings with one being the lowest and 4/5 being the highest, which means that two raters could easily add a tester’s score to a minimum passing rate of six. The scores from the two raters must correspond for a combined score of six or higher. It was therefore determined that a score of six is the minimum score needed to be considered proficient in Spanish (State Board for Educator Certification, 2007).

The data for the TOPT was obtained from the university once the participant has signed the consent form to obtain those scores. The TOPT scores were used to point out the Spanish oral proficiency, according to state standards, of each of the participants in this study. The scores from the TOPT will be considered only with regards to the participants’ oral Spanish proficiencies as a possible comparison to their use of native language instruction in the classroom. According to research (Ovando, Collier, & Combs, 2004) the use of content area instruction in a heritage language is only considered important to the teacher when they feel comfortable teaching in that language. It is also important to understand the participant’s view of his or her own ethnicity and how this view plays a role on the impact that heritage language loss or shift has had. Phinney’s (1992) Multigroup Ethnic Identity Measure (MEIM) should be able to assess the participants’ self-identification, or the ethnic label a person gives himself.

The Multigroup Ethnic Identity Measure (MEIM)

The Multigroup Ethnic Identity Measure and interview questions in this study were used to show a minor relationship to what participants self-identified about their ethnicity and their views concerning their heritage language proficiencies. The MEIM survey was taken at the time of the first interview with the participant and, although the MEIM does not measure the use of a heritage language, it does consider and attempt to quantify concepts such as commitment to one’s ethnicity and what survey takers’ ethnic membership means to them, which may lead to
maintenance of the heritage language. Phinney’s (1999) MEIM survey includes details on coding the responses into the concepts of *affirmation of one’s ethnicity*, *belonging to one’s ethnicity*, and the commitment one may have to his or her own ethnicity (p. 160). For reliability of participant response, the researcher-generated questions include consideration of the language, schooling, and developmental backgrounds of the intended participants. The six semi-structured interviews were conducted in the participant’s choice of settings before or after their school day, so as to keep the atmosphere familiar and friendly to the participant. Because of the number of questions and the depth of the possible answers, each interview took between one to one and a half hours, and each participant was asked for a second or follow-up interview time that was intended to take from thirty minutes to one hour. Although the MEIM survey and TOPT scores include the participants’ names, all forms of identification will be kept in separate files for confidentiality. Both the survey and the TOPT scores were used as general information on oral language proficiency and ethnic identity for each of the participants. A semi-structured interview followed the MEIM survey while meeting with each participant. The interview was used to gain insight into the participant’s background and language attainment experiences that may influence his or her own teaching practices and how they view their ethnicity. Responses from the MEIM survey and interviews with the participants were gathered within the school calendar year in order to locate and contact new teachers in the schools in which they are employed.

**Data Analysis**

Concepts gathered from the MEIM, the TOPT and interview questions were categorized by coding the answers into themes that included attitudes toward the participants’ language and ethnic backgrounds and the support or lack of support for their language and ethnicity during their school-age years, when optimal attainment of more than one language is most promising and likely (McLaughlin, 1992). The coding process created the best venue for accessible and comprehensible themes and patterns to be revealed during the course of the data analysis. An advantage to using this technique of transcribing and categorizing was the accessibility of the data within the themes and patterns of the text (Berg, 2004, McMillian & Schumacher, 2006). Interview questions about the participants’ backgrounds also helped establish a more phenomenological approach by describing the participants’ lived experiences (McMillan & Schumacher, 2006).

The six new bilingual education teacher participants in this study taught in grades kindergarten through fourth grade within two cities in West Texas. All of the participants were within their first three years of teaching. Their names were obtained from the school directories and appointments for interviews were confirmed through phone conversations. In order to better understand their attitudes and beliefs about bilingual education and Spanish language proficiencies, the bilingual teachers took a short survey of their understanding of their ethnic identity and participated in a semi-structured interview.

Misconceptions about the methods used to teach Spanish speakers in the classroom abound among political and media opinions. Blame for the high Hispanic dropout rates and low achievement scores has also been misplaced with programs for English language learners being cited as the main problem. To fully understand the attitudes and problems of teachers who teach within these programs, face-to-face interviews and surveys regarding views of ethnicity were conducted and are interpreted.

Their names have been replaced by the order in which they were interviewed with the purpose of maintaining confidentiality and anonymity. The bilingual education teacher
participants also granted permission to access their Texas Oral Proficiency Test (TOPT) scores in order to include Spanish oral proficiencies determined by this test. To that end, this part of the study introduces the bilingual education teachers and their perceptions of their own schooling backgrounds, language proficiencies, and attitudes as they pertain to teaching in their native language. Included with each participant is a short summary about the school in which each one teaches. Each school’s information was gathered from an Academic Excellence Indicator System (AEIS) report from the Texas Education Agency website and included 2007-2008 reporting data.

New Bilingual Education Teachers

Table 1 includes information as it pertains to each bilingual education teacher’s background while considering the type of bilingual education school program in which each teacher was employed. Three of the bilingual education teachers taught in dual-language or two-way developmental school settings while three taught in transitional bilingual education settings. The definitions used for the titles in table 1 are indicated above the table and show the family generation for each participant as well as the type of program, whether Transitional Bilingual Education (TBE) or Dual Language (DL), in which they teach. Average scores for the Multigroup Ethnic Identity Measure (MEIM) and Texas Oral Proficiency Test (TOPT) scores are also included for each participant.

The second section of these findings include more detailed information gathered for each of the participants on the MEIM. This survey provided an average score from a questionnaire using a Likert scale requiring the respondents to answer questions about their attitudes toward their culture and cultural practices (Phinney, 1992). The answers ranged from a 4, meaning the respondent strongly agreed with the statement to a 1, which meant the respondent strongly disagreed. All participants also took the TOPT in order to be certified as bilingual education teachers. The test reports a score of six or above as a measure of oral language proficiency in Spanish. A score of six is the lowest a bilingual teacher candidate can score and still pass the test (State Board for Educator Certification, 2007).

Table 1
Summary of Bilingual Education Teacher’s Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Ethnicity (Self-identified)</th>
<th>MEIM Avg.</th>
<th>TOPT</th>
<th>Generation</th>
<th>Program Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>Hispanic</td>
<td>3.6</td>
<td>7</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>TBE</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>Hispanic</td>
<td>3.0</td>
<td>6</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>DL</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>Hispanic</td>
<td>3.1</td>
<td>6</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>TBE</td>
</tr>
<tr>
<td>Teacher 4</td>
<td>Hispanic</td>
<td>3.8</td>
<td>7</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>DL</td>
</tr>
<tr>
<td>Teacher 5</td>
<td>Latina</td>
<td>3.6</td>
<td>6</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>TBE</td>
</tr>
<tr>
<td>Teacher 6</td>
<td>Hispanic</td>
<td>2.6</td>
<td>6</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>DL</td>
</tr>
</tbody>
</table>

**Generation** = Family Generation in U.S.  
**MEIM** = Multigroup Ethnic Identity Measure  
**TOPT** = Texas Oral Proficiency Test  
**TBE** = Transitional Bilingual Education  
**DL** = Dual Language
The six bilingual education teachers included as participants for this study had a few common concerns about their bilingual program type. Table 2 gives an overall view of the common themes that occurred and responses to questions from the interview and the survey. Included in their responses are the commonalities of the teacher’s backgrounds and the fact that they, with the exception of one, considered themselves as having come from lower middle-class backgrounds. The responses are listed in the order in which they were asked in the interview and answered on the survey questions with the most frequency. Only those responses and experiences that were answered by a majority of the teacher participants were included in this table. The teachers’ attitudes toward their ethnicity, which includes responses ten through twelve, did not show a strong relationship to what they believed about using Spanish as the language of instruction in elementary school classrooms. While most of the respondents stated that they had positive feelings and a sense of pride in their ethnicity, they did not equate that with the use of native language instruction in their classrooms. Themes one through nine, which were answered similarly during the interview, and are included using the number of respondents in Table 3.

Table 2
Reoccurring Themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Responses or experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Became a bilingual education teacher because of oral Spanish proficiency</td>
</tr>
<tr>
<td>2</td>
<td>Father had the most influence in Spanish retention at home</td>
</tr>
<tr>
<td>3</td>
<td>Elementary schools attended as a child were all conducted in English</td>
</tr>
<tr>
<td>4</td>
<td>Somewhat comfortable teaching in Spanish in my classroom</td>
</tr>
<tr>
<td>5</td>
<td>Most from lower middle class upbringing</td>
</tr>
<tr>
<td>6</td>
<td>Grew up with English literacy in school and oral Spanish at home</td>
</tr>
<tr>
<td>7</td>
<td>Teacher education courses should offer more time in actual classrooms</td>
</tr>
<tr>
<td>8</td>
<td>By fourth grade all students should be literate in English</td>
</tr>
<tr>
<td>9</td>
<td>Not enough materials in Spanish to teach it effectively</td>
</tr>
<tr>
<td>10</td>
<td>Positive feelings for ethnic group membership</td>
</tr>
<tr>
<td>11</td>
<td>Strong sense of belonging to ethnic group membership</td>
</tr>
<tr>
<td>12</td>
<td>Strong sense of pride for ethnic group</td>
</tr>
<tr>
<td>13</td>
<td>School principal is supportive of bilingual program</td>
</tr>
</tbody>
</table>

Table 3 shows the three major concepts gathered from the 13 reoccurring themes. The concepts included the responses from the teacher participants that were specified most often. Although the numbers suggest that some disagreement occurred, the majority of the themes and concepts were gathered using the most frequent responses. Major concepts are included from the research questions and were the focus of the interview questions and survey. Using this table as an integral part of the findings, each concept is described in terms of the bilingual education teachers’ views and responses made by most of the teacher participants.

Table 3
Categories of Themes and Major Concepts

<table>
<thead>
<tr>
<th>Themes</th>
<th>Major Concepts</th>
<th>#</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>HERITAGE LANGUAGE VALUE IN</td>
<td>Agree</td>
<td>Disagree</td>
<td></td>
</tr>
</tbody>
</table>
The Value of a Heritage Language

The responses from some of the Multigroup Ethnic Identity Measure and the concerns the teachers had for using Spanish as the language of instruction in their classrooms seemed to have very little in common. When considering the Texas Oral Proficiency Test (TOPT) scores, two-thirds of the scores were at the lowest passing score (six). Two of the teachers said they were surprised by their scores either because they felt the score was not as high as expected or because they were surprised to have passed. This means that the teachers did not gauge their Spanish proficiency on whether they would help their students with Spanish retention. Although all of the teachers agreed with statements of positive feelings for their ethnicity, they did not mention a connection between the reasons for becoming a bilingual education teacher and Spanish language retention in their classrooms. With regular frequency, the teachers, even those teaching in dual-language programs, admitted that they were only somewhat comfortable or very comfortable teaching all subjects in Spanish. One of the teachers reported that she was very uncomfortable with using Spanish in her classroom for any reason, and one reported that she was completely comfortable using Spanish. The information gathered is not completely reflective of the value bilingual education teachers place on Spanish language maintenance, but it does seem to relate to how their students will learn English. Almost all of the teachers, with the exception of one, said that they considered careers as bilingual education teachers because they were offered a grant to pay for college and since they spoke Spanish decided to take advantage of the monetary offer.

Ethnic Identity and Teaching in Spanish

The Multigroup Ethnic Identity Measure (MEIM) consisted of 12 items that relate to how a person feels about his or her ethnicity. This survey particularly was used to find out if there could be a relationship between how teachers feel about their ethnicity and using Spanish in the classroom as an approach to Spanish retention. With the exception of one teacher, all seemed positive about the ethnic group they belonged to and responded that they felt pride to be Hispanic. All the teachers except one self-identified as Hispanic, with one labeling herself as a Latina.
The teacher with the lowest average score on the MEIM, surprisingly, teaches in a dual-language program. She also admitted that she “loves the Spanish language” and enjoys learning it along with her students each day. The score on the MEIM for this teacher was an average of 2.6 out of four on all questions answered. The disparity between how this teacher feels about her ethnicity and how she teaches in classroom may be due to the differences of her experiences growing up in Illinois. When compared to the other teachers, all of whom were born in Texas, her attitude toward her ethnicity and her view of Spanish language instruction seemed almost contrary. Opposing this view, the other teachers seemed positive about their ethnicity while opining that Spanish retention was secondary to academic English learning.

Attitudes toward TBE or Dual Language

Interestingly the responses every teacher had regarding what to do about program improvement, whether TBE or dual language, was to have access to more materials in Spanish. The overarching consensus among the teachers as the mitigating problem to being bilingual education teachers was the lack of sources for Spanish materials and the lack of resources in their schools. According to the teachers, the principals and assistant principals were all supportive, but could not help with location of materials in Spanish when they did not know where to look either. Two of the six teachers, one from a TBE program and one from a dual language program, stated that their principals did not understand their bilingual programs.

The teachers in the dual language programs all reported that although they taught the curriculum in Spanish, they did not agree with how the program was implemented in their schools. One dual language teacher did not have an opinion about how the program was implemented; she liked the idea of using and learning Spanish along with the children. She also happened to be the teacher from Illinois, who had a very different view of the Spanish language than did the other teachers. She stated that she believed it was “not difficult to teach” and that she “loved the Spanish language.” It became clear during the interviews that the TBE program teachers felt that their job was to make sure the students understood content area and literacy in English, while the dual language teachers felt that their programs were not set up efficiently enough for biliteracy to occur. Although the dual language program teachers, with the exception of the teacher from Illinois, conceded that their program was a little better than teaching in a TBE program they admitted that that there was considerable pressure to ensure literacy in English.

Influence from Background Experiences

With the exception of one, teacher respondents stated that their lower middle income upbringings may have been related to the level of Spanish and English academic acquisition they had attained. Interestingly, the one teacher exception was also one of only two of the six teacher respondents who scored a seven, or higher rating, on the Texas Oral Proficiency Test (TOPT). Based on the differences in agreement on most of the MEIM survey questions, the respondents’ backgrounds and lived experiences seemed to influence what they considered important to language learning in their classrooms. Their generational status also seemed to play a role in how the teachers viewed the use or non-us of Spanish instruction in their classrooms. Three of the teachers were third-generation, or children of parents born in the United States, and either believed they should not be bilingual education teachers or looked at bilingualism as an outsider. The one dual language program teacher from Illinois who said, “I love the Spanish language,” also stated that she did not mind learning “correct Spanish” as she taught it to her students, admitting that she could be “more or less comfortable” speaking it as long as she could continue learning it. Although this denotes a positive attitude toward
retention of Spanish, her MEIM survey responses were almost always in disagreement about how she felt about her ethnic group membership. All of the third-generation teachers recalled negative experiences while attempting to speak Spanish in school. The other two third-generation teachers were certain that teaching English only in their fourth grade classrooms was what would be most effective for their students. Both of these teachers stated that their parents spoke a mix of both Spanish and English, with English considered correct and Spanish spoken as either “Spanglish, Tex-Mex or incorrect.”

Of the remaining three teacher participants, one was first-generation and the other two were second generation. The teacher respondent considered first-generation or born in Mexico but educated in the United States, has a very positive attitude about using Spanish as the language of instruction in her fourth grade classroom but considered her TBE program very subtractive. She stated that she “had always wanted to teach in Spanish,” and so far her teaching situation had not allowed it. She is also looking forward to being able to teach in Spanish in a dual language school setting next year. The two second-generation teachers both teach in dual language schools and both grew up hearing, what they referred to as “Spanglish, Tex-Mex or incorrect Spanish.” One teacher stated that she had negative experiences in school while the other witnessed negative events over speaking Spanish, but did not experience them herself. The only second-generation teacher who reported negative experiences in school is also the only one who admitted that she grew up poor. Of the six teachers interviewed, four considered their father’s influence over retention of their Spanish language most important while two teachers said they had grown up without their fathers and therefore experienced no influence on language retention from their fathers. One of the two teachers with no paternal influence of Spanish retention admittedly spoke what she considered “Tex-Mex” while the other said her grandmother was the main person that influenced her retention of Spanish because her mother only spoke “broken Spanish.”

This study focused on six bilingual education teachers’ attitudes toward and beliefs about using Spanish as the language of instruction in their classrooms and the impact that a background in heritage language loss, shift, or retention has had on them. The results of the research questions indicated that heritage language loss, shift or retention from the teacher participants’ background experiences have contributed to how the teacher participants view their teaching practices. According to Fishman (1991), acculturation and assimilation of languages into a dominant language all lead to factors prevalent in the loss of heritage languages. Through the use of narrative inquiry in qualitative methods, this study provided more detailed insight into the type of language loss as this phenomenon is explained by the models of acculturation and assimilation experienced by Spanish-speaking bilingual education teachers in West Texas.

According to Freeman (2001), language involves much more than the acquisition of phonology, semantics, and pragmatics; it also involves the culture and life experiences of people, and therefore their perspective and worldviews. Most of what is known about heritage language loss does not include the viewpoints of teachers in bilingual education programs as they enter into public service. With the exception of one teacher participant in this present study, all of the other teacher respondents said they did not come from poor family backgrounds, yet they all worked in schools with high numbers of economically disadvantaged children. It is also important to note that society, ethnicity, and most importantly, class socio-economic structures play major roles in the indoctrination of negative attitudes toward cultures and languages other than English (Campbell, 2004). As society
molds the policies and programs that are used in public education, schools become the socialization agents that represent society’s goals (Freire, 1987). At least 30% of all families living in poverty in the United States are of Mexican origin and usually speak very little or no English (U.S. Census Bureau, 2000). Most families of students living in poverty do not typically feel that they have influence over the programs or curriculum of public education, but heritage language development, attainment, and shift are highly influenced by the families (Crawford, 2004; Ovando, Collier & Combs, 2004).

Spanish Language Use

All of the teacher participants in this study admitted to feeling “uncomfortable” or “somewhat uncomfortable” with the use of content area Spanish in their classrooms, and all the teacher participants thought that all children should be academically proficient in English by the time they reach fourth-grade. This indicates that their use of the students’ heritage language was not a central part of the curriculum for most of them. All of the teacher participants stated that they were schooled exclusively in English and although they did not experience a complete loss of their heritage language, acculturation or acquiring another group’s values as their own, became apparent in how they viewed the heritage language of their students. According to researchers (Ovando, Collier, & Combs, 2004) the use of content area instruction in a heritage language is only considered important to the teachers when they feel comfortable teaching in that language. It is also important to understand the participant’s view of his or her own ethnicity and how this view plays a role on the impact that heritage language loss or shift has had. Heritage languages, when considered as equal in status to English, have been proven to enhance cognitive abilities (Banks 2006, Cummins 1996, Ovando, Collier & Combs 2004).

The consequences related to the loss or shift of Spanish language do not always prove detrimental to the economic success of the participants, but do prove that the impact of that loss can create a negative attitude toward the culture associated with the language (Ogbu, 1978; Ovando, Collier & Combs, 2004; Spring, 2007; Valenzuela, 1999). For this reason, bilingual education teachers may have more influence on the attitudes of their students toward their native language than they have indicated in the interviews. As a form of assimilating their heritage language into that of the dominant language, these teacher participants viewed their students as being at fault for not having learned enough English in previous primary grades. The bilingual education teachers’ own goals for language retention in their students reflected their backgrounds in school and not necessarily those of any teacher certification programs in which they had been enrolled. This illustrates Freire’s (1987) phenomenon of ideological reproduction, or the idea that the U.S. educational system simply reproduces its own hegemonic ideas of a curriculum without consideration for differences in language and culture (p. 126). With this expectation, teachers often teach the same way they were taught.

Generational Loss and Ethnic Identity

Language loss or shift among the bilingual teacher participants seemed to increase with each generation born and schooled in the United States. According to Valenzuela (1999), first and sometimes second-generation students academically outperform third-generation counterparts. Two of the three teacher participants who reported being third-generation residents also reported negative experiences in school. While their parents did not involve themselves much with the teachers or schools, both of the teacher participants said their parents considered learning English most important. The other third-generation teacher thought that “learning Spanish along with the students” was a positive experience and
considered her own schooling background as being very different, and somewhat worse than that of a Hispanic born in Texas. She commented on feeling how much more accepted Spanish seemed to be in Texas than it had been in Illinois. The results of the interviews seemed to point to the idea that the higher on the generational ladder a teacher was, the more she implied that English was more important to emphasize in her classroom. This is symptomatic of the subtractive schooling backgrounds and parental influence each of the teacher participants had experienced. They all said they were sure they would not be expected to use Spanish as the language of instruction in their classrooms.

The three third-generation teachers in the study did not have the same view of their ethnicity as the other participants although all participants agreed that they were proud of being Hispanic and all self-identified as being Hispanic from the choices of Hispanic, Latina, or Mexican American. Interestingly, the term Hispanic seemed to be the primary connection the participants had to their ethnic identity. Their answers were varied enough to conclude that they did not consider their ethnicity as equal to their language, but they all stated that they were not active in any social groups that included only their ethnic group. This information leads to the conclusion that the third-generation teachers questioned on the Multigroup Ethnic Identity Measure (MEIM) were more involved in society or social events outside of their language groups, but had pride in their heritage if not their language.

Generational language retention did not seem to have an impact on who influenced the teachers’ language most. Four of the six teachers stated that their fathers seemed to have more influence over their retention of Spanish while two of the teachers said their fathers had no influence over their language. The four teachers that credited their fathers with having retained their Spanish language used statements like, “he was an avid reader, which made me want to read in Spanish,” or “he could speak English, but preferred to speak Spanish at home and insisted that his children do the same,” and “my dad spoke more Spanish than my mom.” The two teachers who said their fathers had very little or no influences over their Spanish acquisition were second- and third-generations. Of the two teachers, the third-generation teacher was also the one with the lower passing score of six on her TOPT while the second-generation teacher had one of the higher passing scores on her oral proficiency test. It is noteworthy to mention that the third-generation teacher was the only one who stated that she was surprised when she saw her passing score on the oral proficiency test because she did not think she spoke Spanish well enough to pass.

*Teachers in Transitional Bilingual Education Programs*

The participants’ information about their teaching goals and the history of the educational programs they attended revealed a pattern of sociopolitical subtraction of heritage language though the use of transitional-types of curricula and the candidates’ own attitudes and backgrounds in their heritage language. Three of the teacher participants in this study taught in transitional bilingual education (TBE) classrooms. Although two of the teachers expressed regret for not using Spanish as the language of instruction, they thought their fourth-grade students should all be proficient in English. Since these teachers’ schooling backgrounds were in an English only environment, it is not unusual for them to consider that this will not harm their students since they themselves had not been harmed. The TOPT used to assess the oral language proficiency of bilingual education teachers can be considered part of the low expectations the state has for native language instruction. It seems that by not asking that all bilingual certification candidates be academically proficient in Spanish, the true intent of the state is monolingual learning. This expectation is disguised as the method with which to
teach English to limited English proficient (LEP) students when there is research on learning a second language that indicates that those who read well in their heritage language will read well in their second language (Krashen, 1998; Ovando, Collier & Combs, 2004).

Of the six teachers interviewed only two had majored in Spanish in college, but the others admitted that, in hindsight, they would have liked to have enrolled in Spanish courses in order to gain more proficiency in academic Spanish. They all expressed the view that all teacher certification programs should allow more time in actual classrooms in order to gain a better understanding of the curriculum and of how to be able to effectively communicate with the Spanish speaking parents. Two of the three TBE teachers thought their students did not do well in their fourth-grade classrooms because they had not learned enough English in their primary classrooms. Although this is a blame-the-victim attitude among the teacher participants, studies have shown that the highest priority for TBE is transition into all English instruction (Garcia, 2009; Ovando, Collier, & Combs, 2004). The students have accomplished the English-only language goal, but to the detriment of maintaining their first language (Crawford & Krashen, 2007; Cummins, 2008). One TBE teacher did not agree that the fault lay with her students, but with the subtractive school situation in which she found herself. She stated just the opposite and considered that her students did not do well in English because they had not learned enough in their first language. She said she felt miserable in the school in which she taught and had decided to transfer to a dual language school in another city. Teachers who find themselves disliking their jobs are usually at odds with the philosophy of the school’s curriculum, principals, or colleagues which can be a highly stressful situation in which neither the student or the teacher gains positive educational experiences (Lindsey, Lindsey, Robbins & Terrell, 2006).

An example of the bilingual education program differences creating subtractive attitudes is of the two teachers with opposing views of the issue of Spanish use in their classrooms. One who was not comfortable with Spanish had no desire to teach it or use it to communicate with her students, but did disclose that she wished she was more proficient in Spanish. The other teacher who admitted she was uncomfortable using Spanish took a more positive view and said she could always learn more Spanish as she taught her students. The difference between the two teachers’ views was that the latter taught in a dual language school which emphasized the importance of both Spanish and English.

**Teachers in Additive Dual-Language Programs**

Additive models of teaching and instilling the value of heritage languages can be gained through knowledge of factors that have been determined to remove or replace a heritage language. Much research in the area of language acquisition proves (Cummins, 1996; Garcia, 2009; Krashen, 2000; Ovando, Collier & Combs, 2004) that more than one language can be learned simultaneously with cognitive advantages, in the primary grade levels.

The major goal of additive models of bilingual education programs is biliteracy for all students enrolled in such a program. Schools have implemented various models of this type of bilingual program with varying results, but the outcomes of tests in dual-language programs have always surpassed those of a TBE program (Bennett, 2006; Cummins, 1996; Garcia, 2005; Ovando, Collier & Combs, 2004). The main influence in the success of the schools has been the teachers and their beliefs, expectations, and levels of confidence in the ideals of a dual-language model. The three teacher participants in this study had positive views of dual language programs; however, only one of the three exhibited excitement when talking about learning and teaching Spanish with her students. The three dual-language...
program teachers taught kindergarten and first grades, which they all agreed were critical grade levels for language and literacy development.

Two of the dual language teachers had seen a program change from a two-way developmental model, or half the day in Spanish and half the day in English, to a *subject-determined* model in which some subjects are taught in one language and other subjects in the other. Literacy was separated by the dominant language of the child and not taught simultaneously with the target language. In other words, the English dominant children were taught literacy lessons in English separate from the Spanish dominant children. Research tells us that the goal of this model of dual-language education is biliteracy, because “once we are literate in any language, we are literate and we don’t need to learn to read each time we learn to read a new language” (Krashen, 1998; Lessow-Hurley, p. 95). According to Garcia (2009), this model of dual language education is best used after students have an understanding of content in their first language, or at about middle school age. The two dual language program teachers were not happy with this model and thought the school should return to the two-way, developmental model, because they felt as if they were teaching in a TBE model when they separated the students for literacy lessons. They both felt that the school’s ambiance and acceptance of Spanish among all the teachers had changed. They were not as likely to address each other in Spanish in the hallways or during breaks because they felt they were not the language models for Spanish anymore.

The year prior to the change, all students had been tested in both Spanish and English versions of the TAKS so that progress could be assessed in both languages although the teachers reported that only the English scores could be turned in. The previous principal at that time had expected the teachers to model the language they taught throughout the day no matter where they were. One of the teachers remarked that the school may as well go back to a TBE model since it seemed Spanish was not given the same status as English anymore. She commented on the idea that when the students hear their teachers model Spanish in the classroom and revert to English in other areas of the school, their impression is that English is the most important language because adults speak it to each other. Neither teacher felt they could complain about how they felt about the new program because they were new and looked to the veteran teachers to ask for changes or be the intermediary with the principal.

The dual language program teacher who was happy with her teaching position considered it a privilege to be able to teach in Spanish without repercussions. She had grown up in a subtractive schooling situation and did not see the problem with a program in which some students could be enrolled in the dual language programs and others in the school were not. Although her views of teaching Spanish in her classroom were positive, her Multigroup Ethnic Identity Measure (MEIM) was the lowest average of all the teachers surveyed. Her answers to belonging to her ethnic group were mostly in disagreement with the statements about belonging to the group with which she self identified. However, since teachers’ attitudes about teaching in their heritage languages need to be additive and positive in order for the students to gain biliteracy, this teacher, who considered herself an *outsider* of the Spanish language community, will most likely be successful with her teaching. According to research, the revitalization of heritage languages has succeeded when the teachers’ interest is in language maintenance and addition of English rather than subtraction of the heritage language for replacement by English (Banks, 2006; Crawford, 1996; Yamauchi, Lau-Smith & Luning, 2008).
This double tracking system for a dual language school depends on parental interest. Teachers reported that if parents enrolling their children in this particular school did not want their child to learn two languages they could opt out of the dual language program. The school’s academic excellence indicator system (AEIS) report shows that the parents who chose not to enroll their children in the dual-language program were mostly Hispanic. Although the Hispanic parents may have had varying reasons for not encouraging their children to learn in two languages, it seems that many of them, judging from the school’s percentage of reported low socioeconomic status had either suffered their own subtractive schooling experiences or may not have been aware of the cognitive advantages of learning in two languages. Parents are aware of their children’s need to learn English and often choose English only programs without realizing the cognitive problems caused by the subtraction of their heritage language (Crawford & Krashen, 2007; Fishman, 1996; Garcia, 2009; Valenzuela, 1999).

Overall the dual-language program teachers had a positive view of retention of Spanish in their classrooms. Although two of the teachers thought their program models could be better by going to a fifty-fifty model, or using English and Spanish as languages of instruction equally, they were still in favor of using both languages for instruction in their classrooms. Like the teachers in the TBE models, these teachers were also uncomfortable teaching in Spanish. Unlike the teachers in the transitional models, the dual-language program teachers were willing to step out of their comfort zones with the use of Spanish and learn the language along with their students or considered that they already had enough proficiencies for the grade level they taught. Teaching in additive programs such as the dual-language model helped the bilingual education teachers understand the importance of language retention and how it relates to the equal value that both languages should comprise in a bilingual education classroom.

The Hidden Curriculum

The dual language teacher who translates English reading program worksheets into Spanish in order to keep the curriculum equal thinks she is considering her students’ best interests, but admitted that she would not use the teacher-made worksheets if she had equal material in Spanish. The English reading program reflected the dominant culture and skills valued by that culture. According to Freire (1987), although this teacher may think she is equalizing the curriculum by translating a reading program into Spanish, she is really perpetuating the skills that do not emphasize critical thinking and are reflective of a hidden curriculum. Cummins (1996) referred to bicultural ambivalence as an attitude attributed to negative feelings for one’s culture as well as the dominant culture. Banks’ stages of cultural identity similarly state that in stage one or the cultural psychological captivity stage, an individual internalizes all he believes is wrong with his language and culture. The same can be said for a language that is considered marked, or not necessarily the language of learning in a society (Fishman, 1988). The marked language is generally considered a lesser status than the dominant language; yet dominant language speakers often admit that they would like to learn a second language. The bilingual education teachers in this study exhibited these contrary views in the methods they used for delivery of literacy lessons. All of the teachers were concerned over the lack of materials in Spanish, and all expressed doubt over the equality of the curriculum with English mainstream classrooms, but not one of the teachers interviewed considered looking for materials on their own or outside of what the school provided. Public schools are creating the secondary characteristics described in Ogbu’s
(1991) study of involuntary minorities as a part of the hidden curriculum. Secondary characteristics include the idea that education is meant only for the dominant language group and therefore cannot fully include anyone from a culture that includes other languages.

The statements made by the teachers regarding their own schooling experiences and the assimilation they encountered caused their attitudes of resignation toward the bilingual education of their students. The fourth-grade bilingual education teachers all said that their students had not done well on the Texas Assessment of Knowledge and Skills (TAKS) testing in English because of lack of knowledge of English. While this is not an untrue statement, it is by most critical standards unjust. Having the view that bilingual education is for teaching English means these teachers believe the students failed to gain English, no matter that no other language was tested for bilingual students. The No Child Left Behind (NCLB) Act has also been instrumental in the growth of subtractive programs for Spanish-speaking children in the U.S. There is no mention in any of the mandates for adequate yearly progress (AYP) of the use of languages other than English. In fact the NCLB mandate goals are for the increase of English for speakers of other languages.

Recommendations

Bilingual Education Programs in Public Schools

Schools have often modified and revised curricula used by bilingual education teachers in attempts to improve students English language skills. While curriculum changes for improvement of the English language have always been important, curriculum for Spanish-dominant students has mostly been ignored. Spanish should be used to transition students to English. The view that English should be learned easily and without the use of the heritage language as a resource however prevails (Cohen, 1982; Cummins, 2008; Ovando, Collier & Combs, 2004). Teachers helping to empower their students by using their heritage language in the primary grades emerged as the most important suggestion for public schools as this study progressed. Although all of the teachers, except one, alluded to the idea that their principals were open to suggestions about their classrooms and easy to get along with, most research suggests that educational leaders can direct the ambiance of their schools to match their own values and beliefs about a program (Larson & Ovando, 2001). The principals did not seem to encourage the use of Spanish in their schools. Veteran bilingual education teachers should be given a chance to understand how they may be contributing to students’ language loss and the long term effects of that loss. Research proves that when bilingual education teachers show academic proof of success, it is usually because of the methods and strategies they are using in the heritage language and not from the lack of English (Cummins, 1996; Garcia, 2009; Krashen, 2000; Ovando, Collier & Combs, 2004; Tse, 2001). Through the knowledge of the factors that cause language loss there can be curriculum methods that acknowledge the need for social change in the education of Spanish speakers enrolled in Transitional Bilingual Education (TBE) programs.

Transitional bilingual education programs that do not bring their students to an equal standard as that of a mainstream English classroom should be replaced by additive programs that have demonstrated academic gains by their students. There are many examples of successful additive programs that can be implemented instead of the transitional methods that are currently popular. However, it will take the bilingual education certification programs and the public schools working together to bring about the needed changes in the attitudes of teacher candidates and mentor bilingual education teachers who will actually help educate
English language learners. The goal should be biliteracy, or learning English while maintaining academic proficiency in Spanish.

Replacement of the LEP Label

Another suggestion is to replace the use of the subtractive label of LEP, a label used by all participants in this study as well as the state. Although this will take replacing at the state level as well as by the school districts, it should be disallowed as soon as possible by the districts. This type of labeling of students initially indicates a language deficit without allowing for the students’ knowledge and cognitive familiarity of a language other than English. Two of the dual-language model teachers stated that their program did not raise the status of both languages when few teachers in their schools modeled the use of Spanish outside the classrooms. The view of language as a deficit closely relates to the belief that a cultural deficit exists. This view emerged in the 1960s as a way to devalue the linguistic backgrounds of minority students (Bennett, 2006; Ovando, Collier & Combs, 2004). Through this view, lack of English language skills can be used an excuse to ignore the proficiencies a student has in another language and simply label them limited in English. Proponents of this deficit view also seem to rely on teaching for remediation rather than academic gains which leads to more testing of skills and placing the blame for failure on the students’ lack of language proficiency. Testing in an individualistic culture is used to measure each student but is meant to gain the same results for all students. If the melting pot or assimilation ideals were truly adhered to within the American monocultural educational system, individualistic testing would not be considered best practice as a measure of knowledge acquired since this leads to heritage language loss. Finally, the publishers of educational material should produce more Spanish-language materials, especially for the primary grades, and make them more available to the teachers and textbook- adoption committees in school districts that educate large number of Spanish-speaking students. Indeed all schools should make languages other than English accessible for biliteracy and beyond as a measure of global awareness in a pluralistic society. For children who are learning English the term LEP does not adequately describe their language proficiencies.

The Culturally Proficient Principal

Five of the six teacher participants in this study stated that the problem with the program in which they taught was not the principal’s attitude or lack of understanding of their program, while all six cited lack of enough materials in Spanish as the core problem. New teachers are apt not to blame their principal, but contend that the system’s inadequate and unequal dispersal of school curriculum material is at fault. Principals can often communicate their own values and interests through the use of test data that make programs such as bilingual education appear to be failing. When the students in a bilingual program do not do as well as students in the regular school program, then the principals may contend that they are not learning English quickly enough. In a society that espouses assimilation, the answer will not be more heritage language instruction, but less. The principals, however, retain the main role of advocates for all the students in their school, not just those in need of materials in English. The principals of all the teacher participants were aware of the failures of their English language learners, but blamed the lack of English proficiency on the parents’ and teachers’ lack of English use. This indicates a lack of understanding of what Terrell and Lindsey (2009) refer to as cultural proficiency or advocating for students identified as underserved and needing to be taught differently. In order to achieve the cultural proficiency needed to guide all students to success, the principal must first realize that issues of social justice play a part in
how best to implement program for English language learners. He or she must also be aware of best practices and research data that demonstrate success for all students.

*Bilingual Education Teacher Certification Programs*

Teacher certification programs for bilingual education teachers in Texas currently have one pre-assessment of language proficiency to gauge whether or not a teacher is ready to teach bilingually. By the fall of 2009, the Texas Assessment of Oral Proficiency Test (TOPT) will be renamed the Bilingual Target Language Proficiency (BTLP) and include a written portion. This is a good indication of higher expectations in Spanish proficiencies for bilingual certification candidates in the coming years, but it does not excuse the low expectations of the previous certification measures. In the meantime, however, public schools have hired hundreds of bilingual education teachers who needed only an oral proficiency in Spanish in order to teach academic content.

A critical look at certification programs for bilingual education teachers is necessary in order to educate the type of teachers who will use progressive methods of teaching by using heritage languages, which will yield a biliterate populace. For too long, bilingual education certification programs have certified teachers who do not all understand the best practices in bilingual education for their students. Whoever has sought to become a bilingual education teacher has been allowed to enter the public school arena with only an oral understanding of the first language of their students. This is evidenced by two-thirds of the teacher participants in this study which considered English as most important to learn by fourth grade with very little consideration of how much Spanish had been attained. Bilingual certification candidates should be held to the same standard as that of the *highly qualified* teacher within the No Child Left Behind mandate. According to Yell and Drasgow (2009), the NCLB standard for a *highly qualified* teacher includes the teacher’s ability to “demonstrate subject matter competency in the core academic subjects in which they teach” (p.45). In order to effectively meet this standard, certification programs must include courses that help the candidate gain academic proficiencies and critical literacy in the heritage languages they expect to teach. Five of the six teacher participants agreed that the bilingual certification programs they went through needed more time in a bilingual education classroom and more courses that helped develop academic levels of Spanish. Unlike universities and bilingual teacher certification programs in South Texas, the teacher certification programs in West Texas have not had to include courses in academic-level Spanish. They do not have to major in Spanish, nor take any Spanish courses in order to become a certified bilingual education teacher (Rodriguez, 2007). When research in bilingualism has been taught in bilingual certification courses, it has been taught in English. Certification programs typically prepare bilingual education teachers in English-only courses.

Language programs such as TBE and dual-language have an impact on how bilingual education teachers view teaching methods and strategies in a second language, but a measure of their attitudes toward their own ethnic identity yielded no relationship to the methods of native language instruction used in their classrooms. Additive or subtractive views of language learning depended on the language backgrounds as well as the language program in which the teachers were employed, but certification programs seemed to make very little impact on those views. Research on how much influence veteran teachers have on the educational outcomes of their students should be conducted in order to gain insight on whether the phenomenon of language retention, shift, or loss has long-term effects on their Spanish speaking students.
The additive programs, which influenced teachers” views, also depended on the type of language acquisition methods used. Additive programs with which the teachers did not agree, such as the subject-determined dual-language program also seemed to cause concern for second language attainment not seen in more established two-way programs. The bilingual education teachers interviewed showed that Spanish speakers, who later become teachers, are more influenced by their background and schooling practices, which are influenced more by the community attitudes than by their level of education.

Reform of subtractive educational practices was the central recommendation of this study with an emphasis on additive programs for Spanish speakers in this geographic area. It is also suggested that the best method by which to save Spanish heritage language from loss is for the speakers of the Spanish language to understand, through social changes and dialog, that retaining their heritage language facilitates and does not impede, but rather improves, the chances for a better life in the United States. Additive bilingual education programs need to be implemented with the teachers” pedagogical knowledge and Spanish proficiencies taken into consideration. Teachers who do not believe that keeping the students” native language and acquiring English should not become certified to teach in bilingual programs. The guiding principle of all bilingual education programs should be biliteracy.
References


Using Desk-Top Virtual Environments in Transitioning Students from Elementary to Middle Schools:

A Proposed Study at Prague Middle School- Prague, Oklahoma

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Introduction

Transitioning from elementary to middle school is fraught with many challenges. Some of these challenges include the change from the traditionally taught classroom with one teacher, to multiple classes each having a separate teacher for each subject; adapting to a variety of teaching methods and styles; an increase in homework; and, sometimes, a larger, more overwhelming environment (“Transitioning from Elementary to Middle School,” 2003).

In addition to the stressors of maneuvering in an unfamiliar physical environment, students must also learn to respond to and handle social pressures and cues. Without adequate coping mechanisms (many of which can be learned), counselors and other school personnel often see students move into a high anxiety state, leading to the manifestation of physical symptoms such as headaches, stomachaches and onward to a refusal to attend school (“Middle School Marks Most Critical Time to Start Ongoing Conversations About Drug and Alcohol Use with Kids,” 2007).

Understanding how students learn, adapt to and navigate in new and unfamiliar environments is critical to the creation and implementation of an effective virtual orientation program. Discovery learning and Wayfinding provide researchers with the means to explore how students may become acclimated to the rigors of their new school without ever leaving home.

Purpose of the Research

Starting a new school can be intimidating when one is unfamiliar with the structure and environment. Adults entering into a new university often spend several days in orientation to help them become familiar with their surroundings and school procedures. If this transition is intimidating for an adult, imagine how intimidated young adults might be when they have to change environments. The transition becomes much more frightening for adolescents in the age
range of 10-13 when they switch from one traditional classroom to multiple classrooms a day.

Desk-Top Virtual Reality may be an inexpensive way to help reduce young adults’ fear of acclimating to a new environment. This proposal will review several theoretical foundations as it relates to adolescent behavior and transitioning, and how this work correlates with and complements implementing a Desk-Top Virtual Reality program for school transition.

**Problem Statement**

Studies have shown many students experience difficulties and struggles, along with anxiety which at times may be severe, when transitioning from elementary to middle school. Desk-Top Virtual Reality may be a significant resource to help ease and reduce those anxieties and stressors, as well as having the potential to make the transitional process much smoother for students, families and school staff. Even though virtual reality is well known in health care as a tool for professional education and practice, there is little literature directly relevant to the proposed research. This lack of literature reflects the view that although virtual reality is recognized as an effective vocational training tool, much research still needs to be performed to develop an explanatory theory base that is applicable to a wide variety of environments (Ausburn & Ausburn 2008).

**Significance of the Research**

The transition from elementary school to middle school raises many concerns for adolescents. They are maturing from childhood to adulthood and are about to encounter numerous environmental changes in their educational process. Some of those changes include new friends, new teachers, multiple subject integration, a variety of instructors and instructional methods and an unfamiliar building with multiple rooms which must be learned and navigated. Given the complexity of these adjustments, the school transition can be stressful and may affect the

Understanding social cognitive theory and the concept of self-efficacy is important in that it helps to explain how students reach a sense of well being. It also explains how students make adjustments from elementary to the middle school level. This transition requires students to adapt to uncomfortable situations and deal with their feelings of self concept.

Self-efficacy, as defined by Bandura, is how people’s thoughts affect how they feel, think and motivate themselves to act in certain situations (Bandura, 1994). Meaning, students’ confidence to perform tasks or be successful in the academic realm predicts their ability to achieve tasks and succeed in activities. Self-efficacy also affects other personal characteristics such as self-concept, principles, anxiety, nervousness, apprehension and self-control practices which ultimately impact their academic achievement (Pajares, F. and Grahma, L, 1998). Until students become adjusted to their environment, it is difficult for them to focus on their academic and service commitment, or to acquire new knowledge. An effort to help students adjust to their physical environment is one way educators can begin to tackle stressful situations that may impede learning. Virtual Reality (VR) is a tool that may be used to mitigate impediments to learning caused by transitional challenges. Virtual Reality has been defined by Gaddis as follows: “a computer-generated simulation of the real or imagined environment or world” (Mantovani, 2003).

Virtual Reality has been proven to be an effective tool in the learning process in many areas. When using VR, learners are engaged active participants. VR requires the users to interact— they cannot be a passive learners (Mantovani, 2003). Students/trainees have the freedom and ability to move and control the VR and engage in self-directed activities within their learning contexts. These individuals can make as many mistakes as they need to in order to
learn the concept. They can attempt the same task as many times as necessary to gain understanding (Standen, 2001). This is an active process allowing the students, or trainees, to reach and understand the world by creating their own version of reality as opposed to someone else’s. Virtual Environments are visual, and one can literally go into the impossible--explore the inside of the human body, the outskirts of space, etc.

Virtual Reality is motivating, fun, allows for collaboration and discussions, is adaptable and may even be used as a valuable tool for assessment (Mantovani, 2003). In comparison to real environments, the virtual environment provides opportunities where learning from mistakes can occur without adverse effects on pride or safety (Standen & Brown, 2005, 2006; Wilson, et al., 1997). Virtual Environments can be engineered in ways the real world cannot (Standen, 2005).

A Virtual Environment also provides educators with the ability to manipulate the environment in order to control its complexity to match the skill level of the learner, both initially and as training proceeds, and assistive scaffolding can be added or deleted from the environment as required (Standen & Brown, 2005, 2006). Further, computers are completely objective and infinitely consistent. Desk-Top Virtual reality may be one of the ways to help students adjust to their new environment, ultimately allowing students to move forward in their academic learning and social interactions. Anxiety levels decrease, self-confidence and self-assurance may increase, resulting in a well-rounded adolescent and a successful transition from elementary to the middle school.
Conceptual Framework and Research Questions

Specifically, this research proposes to answer the following questions:

1. Does the use of Desk-Top Virtual Reality reduce anxiety when navigating a new environment?

2. Was the experimental group better able to navigate the new environment through the use of Desk-Top Virtual Reality?

In order to examine these research questions, a research conceptual framework has been developed. See Figure 1 below. Along with the research questions, this framework depicts the entire process of the proposed study. The emphasis will be on how Desk-Top Virtual Reality will impact the student’s anxiety level and, ultimately, the way it affects his or her self-efficacy through transfer of knowledge and discovery learning from the virtual reality to actual navigation of the new environment. In addition, this research will examine prior research completed in this area, pros and cons of using Desk-Top Virtual Reality in the classroom and attempt to provide meaningful data on whether using virtual reality as a method of orientation will increase the student’s security when entering a new school. We contend that access to repeated Desk-Top Virtual Reality orientation, as compared to traditional orientation methods, will have a significant bearing on the learner’s anxiety level and his or her self-efficacy.

Figure 1 – Theoretical Framework for the Proposed Desk-Top Virtual Reality Enhanced Transition of Fifth to Sixth Grade Students Entering Prague Middle School
Literature Review

There are several theoretical anchors utilized in this proposal including Maslow’s hierarchy of needs, Piaget’s cognitive development, discovery learning, wayfinding and transfer of learning. Understanding how students learn, develop coping mechanisms when encountering new situations or environments, and what drives them to master these situations is critical to the creation of a virtual orientation program. These theories will be explored and discussed as to how they relate to the proposed research.

Maslow’s safety quadrant best represents adolescents’ fears about transitioning into a new school environment and structure. In the safety quadrant, Maslow defines a person’s needs as a sense of security and access to resources. Desk-Top Virtual Reality for school orientation would help address this need by acclimating adolescents to their new school environment from the safety of their own home, or deemed safe place. As young adults navigate through the desktop orientation, they will become familiar with their new surroundings without having entered into the real school, thus helping to reduce the fear of an unknown environment. Progressing through the safety quadrant will bring the child to the belonging needs quadrant and forward into the esteem needs quadrant as they enter into their new environment with the confidence of knowing their surroundings and structure.

While Maslow’s hierarchy of needs addresses what motivates students, Piaget’s cognitive development theory defines how students learn. The ultimate goal of desktop VR is to enable the students to formulate mental representations of their school environments, and to link these images when they enter into the school building for the first time, helping to reduce or even remove their fear of new surroundings. These images or schemas are blocks of knowledge such as mental representations or pictures used to guide people through unfamiliar situations.
According to McLeod, 2007, we use schemas to understand and respond to situations. By using schemas, adolescents move directly into assimilation and accommodation according to Piaget’s theory. Assimilation is the concept of applying or changing the environment so that it can be put in previous cognitive structures. Accommodation is the process of changing cognitive structures in order to accept something from the environment. Both processes are used at the same time and alternately throughout life (Huit and Hummel, 2003).

Discovery learning postulates that students learn more readily and retain more information when they are the ones pursuing facts, experimenting, and puzzling out solutions to problems. They draw from a variety of resources including their senses, past experiences, and current/existing information to arrive at their own conclusions (“Discovery Learning”). However, without oversight or instructor guidance, learners may be at a disadvantage, gathering and interpreting information, but arriving at false conclusions. The development of any type of virtual orientation program should include a facilitator component in which the facilitator may be a parent, trusted adult, or teacher.

An effective orientation program must also incorporate the means by which students will navigate (engage in wayfinding) in the virtual orientation program. According to Mark Denton, in order to develop an effective Wayfinding program, the designer must first seek to understand the visitor's perspective and what he/she needs. In relation to middle school students, this would mean the developer would need to plan the program from the students’ perspective, seeking to understand first the concerns and key issues of the student (Denton, M., 2009). Denton identified six common elements of a Wayfinding system. These components make it easier for visitors to navigate and locate where they would like to go or what to experience (Denton, M., 2009).
Similar to discovery learning is the Transfer of Training Theory, also referred to as the Transfer of Learning Theory. Transfer of training refers to the ability of an individual to take a skill and knowledge learned in one context and apply it in a separate context (Pennington, 1995). Transfer of training and its effectiveness has typically been studied in the educational arena. This research will determine if the information learned through traditional methods carries over to current needs. However, the transfer of training from a virtual reality environment to a real life experience is limited and will be discussed throughout this proposed research study.

Transfer of Learning Theory is important because transfer leads to performance change; a change that will hopefully reflect the desired training outcomes (Hutchins and Burke, 2007). In a previous study, skills learned from VR were transferable from the virtual environment to the real environment (Standen, 2001). “Additionally, the goal of transfer is the full application of newly learned knowledge and adapted skills to improve individual and organizational performance” (Song, 2008). Lim and Morris (2007) state,

From a comprehensive review of literature, Baldwin and Ford developed a training transfer construct composed of trainees’ characteristics (ability and aptitudes, personality, and motivation) and work environment variables (supportive organizational climate, discussion with supervisor, opportunity to use knowledge and skills, and post-training goal setting and feedback) that may support transfer of training. This model explains the transfer process in three phases: (1) training input factors, (2) training outcomes, and (3) conditions of transfer. Training input factors include training design, trainee characteristics, and work environment characteristics. Training outcomes refer to the amount of original learning that occurs during a training program and the retention of the learning after the training program is completed. In conditions of transfer, both the
generalization of learning to the job context and maintenance of the learned material over
a period of time on the job influence the transfer process.

For the Desk-Top Virtual Reality to be an effective training tool, the VR should be filmed in
the actual work setting (Kim, 2001). One of the primary characteristics of virtual reality is the
“trueness” of its presentation of the reality of a 3D environment and the spatial relationship of
items within it, lending itself to a more accurate and realistic experience of a complex visual
scene than would be possible with still imagery. Due to the “trueness” of the desk-top virtual
reality, students utilizing the Desk-Top VR, will be able to demonstrate thorough knowledge and
transfer of learning.

Research Design and Methods

Primarily, the approach of this research is experimental research. This type of research will
be used in order to manipulate and control assessments so as to recognize underlying processes.
This will allow the researchers to maintain control over all factors that may affect the result of an
experiment. In doing this, the researcher will attempt to determine or predict what may occur. In
conducting the research the following steps will be taken: compilation of sample subjects,
assembly of subjects, identify and control non-experimental factors, choose and create valid and
reliable instruments to assess results, perform pilot studies, establish location, time and length of
the experiment, perform the experiment, assemble the data, and analyze outcomes. There will be
a control group (students using traditional face-to-face orientation) and an experimental group
(students using Desk-Top-Virtual Reality for orientation).

Students will be placed in two groups: group one will be one-half of the sixth grade class.
Group two will be the remaining one-half of the sixth grade class. Students in the control group
will visit the school on the night of orientation and go through the standard procedures given by
the school. Students in the experimental group will be taken to the computer lab and will be guided through the desktop virtual reality of the school guided by the researchers. Students in the experimental group will access the Desk-Top Virtual Reality as many times as they wish in the allotted time. Both groups will complete the orientation approximately one week prior to the first day of school.

**Data Collection**

The target population, which will be assessed to draw conclusions, will be sixth grade students in a small rural Oklahoma school. The sample will be taken from the entire fifth grade classes at Prague Elementary School transitioning into sixth grade at Prague Middle School. In order to study the effects of Desk-Top Virtual Reality on students’ anxiety levels and navigational abilities, a virtual environment that simulates the students being present in the building will be delivered to the experimental group. Before school, the control group will proceed through the traditional face-to-face orientation provided by the school in a morning session. This orientation will have the students physically visit each classroom for approximately ten minutes for a total of about one hour.

The experimental group will be guided through the desktop virtual reality program the same afternoon and will be allowed to navigate through the building via interactive desktop virtual reality for approximately one hour. Simple random sampling is the basic sampling technique where groups of subjects (a sample), are selected for a study from a larger group (a population). Each individual is chosen entirely by chance, and each member of the population has an equal chance of being included in the sample. Every possible sample of a given size has the same chance of selection; i.e. each member of the population is equally likely to be chosen at any stage in the sampling process (Easton and McColl, 1997).
**Instruments**

Several methods such as surveys, interviews, observations, etc. will be used to collect data for this study. Since this study is a mixed method study, both qualitative and quantitative data will be collected. Qualitative data using interview questions and observations will be used to determine if the students felt the VR helped them in their navigation and reduced their stress levels. The students’ perspectives and feelings when using VR will be a very important factor in this research. Quantitative data will be gathered through surveys to statistically confirm the results of utilizing virtual reality.

**Data Analysis**

Analyzing Research Question One: Does the use of Desk-Top Virtual Reality reduce anxiety when navigating a new environment? Quantitative methods will be used to compile data through an anxiety stress level survey. Then, Research Question Two: Was the experimental group better able to navigate the new environment through the use of Desk-Top Virtual Reality? Observations through the use of a checklist will be made during the first couple of days to see how the participants navigate the building. Interviews will be conducted using random sampling from both the control group and the experimental group. An interview will be used to achieve greater depth of understanding of how students felt about the methods they used to orient themselves to the new environment. The goal of the Desk-Top Virtual Reality is to understand how the students used the VR to transfer knowledge, discover the elements of their new environment and how this affected their self-efficacy.

This research will be conducted in August of 2011 – prior to the beginning of the 2011-2012 school year. After all research has been collected and analyzed, graphs and charts will be created to analyze the results of the research, and a final report will be compiled. Limitations such as
timeframes, age, and ability to access the Desk-Top Virtual Reality program will be examined.

Further areas of investigation include examining if the VR program would be a way to eliminate the physical orientation program, to see if the VR program fills a void for parents who are unable to attend the physical orientation programs, and if the effectiveness of the VR program is impacted by the size of the facility being navigated.
References


fd2s Blog (2009, April).


http://www.medicalnewstoday.com/articles/12414.php

http://www.simplypsychology.pwp.blueyonder.co.uk/index.html

skills: is knowledge use specific? *Cognitive Psychology, 28*(1), 175-224.

environment: transfer to real world tasks and equivalence to real task training.

Formation Process: Integrating the Concepts of Individual Learning and Learning

Standen, P. J., & Brown, D. J. (2005). Virtual reality in the rehabilitation of people with

Standen, P. J., & Brown, D. J. (2006). Virtual reality and its role in removing the barriers that

Transitioning from Elementary to Middle School. (2003). Retrieved July 10th, 2010 from
www.sandi.net

Wilson, P., Foreman, N., Tlauka, M. (1996). Transfer of spatial information from a virtual to a
real environment in physically disabled children. *Disability and Rehabilitation, 18*(6),
633-637.
EDUCATORS’ PERSPECTIVES ON CURRENT PARENT INVOLVEMENT ACTIVITIES AND PRACTICES IN K-12 SCHOOLS

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Section I: Abstract

Abstract

This research studies the perceptions of K-12 educators on current parent involvement practices in their schools. Parent involvement in education is well known as important and has been linked to academic achievement; however it continues to be weak in some communities. This study contributes to the field of education by exploring current parent involvement activities that parents currently attend and those they would benefit the most. Thirty three K-12 educators completed a survey. Out of the thirty-three participants twenty-seven are employed in Los Angeles County K-12 schools. This analysis revealed that teachers believe it is important and necessary to provide more resources, services, and parent involvement activities in schools. However, they agreed and were overall dissatisfied with their current parent involvement in their schools. Educators overwhelmingly agreed that it is necessary to offer parent workshops that explicitly teach reading and homework skills. Finally, this research will provide future educational school practices, policies, and reform.
Section II: Significance of Topic

Introduction

In the United States today, approximately one in five children under 18 years of age lives in an immigrant-headed household (U.S. Census, 2000). Furthermore, an analysis conducted by the Census Bureau, the Current Population Survey (CPS) for the month of March 2000 reported the following findings. The Current Population Survey conducted by the Center for Immigration Studies indicated that 28.4 million immigrants now live in the United States, the largest number ever recorded in the nation’s history, and a 43 percent increase since 1990. As a percentage of the population, immigrants now account for more than one in 10 residents (10.4 percent), the highest percentage in 70 years. In addition, in the last few years, a good deal of attention has been focused on the dramatic increases in enrollment experienced by many school districts across the country. The Department of Education recently reported that the number of children in public schools has grown by nearly 8 million in the last two decades (U.S. Department of Education).

One of the fastest growing groups in California is the immigrant population. In ranking the states by the size of their immigrant populations California came first with 8.8 million immigrants, which accounts for 30.9 percent of the nation’s total immigrant population. Furthermore, the March 2000 Consolidated Metropolitan Statistical Areas (CMSA) reported that Los Angeles has one of the largest immigrant populations in the United States.

However, the primary concern to educators is the existing gap in the academic achievement gap between White and Latino students. Latinos are the largest minority group in the United States. Within the next twenty years, it is predicted that “the number of Latino children ages 5 to 13 will double, and by 2030 Latino students will comprise one-fourth of the
total K-12 school population” (Gibson, 2002). With this increasing population of Latino students, particularly in Los Angeles, the education of this group has grown in importance to educators in Los Angeles County School Districts. The latest 2009 California Standards Tests Scores for Los Angeles County Schools revealed that Latino students continue to struggle with reading and language arts skills; thus not graduating from high school prepared with adequate skills for college. For instance, in Los Angeles County 12% of 11th grade Latino students scored advanced in Language Arts in the 2009 CST and 19% far below basic. Their White counterparts scored 35% advanced in Language Arts in the 2009 CST and 5% far below basic (California Department of Education).

**Background**

Although the United States “No Child Left Behind Act” (NCLB 2001) makes educators primarily responsible for increasing student reading achievement, the involvement of parents are also taken into account. As a result, schools receiving Title I funds must implement programs and activities for parent involvement. According to the NCLB Act of 2001 schools must jointly develop such activities with parents and distribute the policy in order to be in compliance. There are numerous studies that have concluded that such involvement creates community partnerships and home-school connections (Epstein, 1996). However, researchers have also found that these school-centric activities do not incorporate parents’ leadership in designing school reform (Lawson, 2003; Warren, 2009; Lareau, 2000; Warren et al, 2009). By the same token, studies have been conducted to debunk the idea that “those parents just don’t care”. According to Delgado-Gaitan (1992), Quiocho & Daoud (2006) Latino parents value education because it is a means of economic mobility for their children. Such a discrepancy is worth solving because the Latino population continues to grow in the United States and educators ought to be prepared on
how to educate the Latino youth and involve parents in the educational process of their children. In this study it was hypothesized that the majority of the student population among the districts where the participants work was predominantly Latino. For this reason it is important to continue fostering parent involvement activities that will lead to uncovering ways in which parents’ behaviors and beliefs about learning will influence students’ academic achievement.

**Purpose of the Study**

Many studies have shown that there is a correlation between parent involvement and academic achievement (Epstein, 1996; Chavkin & Gonzalez, 1995). In addition, studies have found teacher-parent interaction being praised and considered valuable (Comer, 1986; and Fruchter, 1984). However, Becker and Epstein 1981, mentioned that there exists a disconnect between the desired parent-teacher interactions and actual parent-teacher interactions. Therefore, the purpose of this study is to garner K-12 educators’ perceptions of parent involvement and evaluate the current parent activities and practices their schools have in place to encourage parent involvement. This study will contribute to the field of education because it will provide insightful information regarding the parent involvement activities that are ranked as most important by educators, missing components of parent practices, and recommend future research and educational practices.

**Section III: Literature Review**

**Parent Involvement**

It is needless to say that the involvement of parents in students’ education is vital for their achievement and success. There are federal, state, and local mandates that require schools to jointly create parent involvement activities and partnerships (NCLB, 2001). Furthermore, A Nation At Risk (1983), published by the National Commission on Education had a strong impact
on parental involvement concerns. Latinos comprised about 11 percent of the student population and are expected to increase to 28 percent by 2020 (U.S. Census, 2000). In other words, as the demographics continue to change, our classrooms will significantly include Latino youth. Although, Latino parents have shown interest and studies indicate that they value education (Delgado-Gaitan, 1990, 1992; Delpit, 1996), many of them are still not sure how to get involved. In her book, Other People’s Children, Delpit mentions that “school personnel fail to understand that if the parents were members of the culture of power and lived by its rules and codes, then they would transmit those codes to their children (Delpit, 1996)”. Delgado-Gaitan (1990) found that Mexican American parents in the Portillo School District in California were also similar. She concluded that the successful participation of parents “is dependent on the ability of the schools to incorporate the parents and the culture of the home as an integral part of the school instruction plan.” This is what Delpit would refer to as keeping the Heritage way while learning Formal English. However, many times parents face obstacles that make it more difficult for them to be involved in their children’s schools. Some of these barriers may include the lack of proficiency with the English language, little familiarity with the American educational system, and demanding work schedules (Chavkin, & Williams, 1987). Hoover-Dempsey and Sandler (1995) attributed such low levels of school-centric parent involvement to challenges associated with living in poverty.

**Literacy Programs**

Parents who get involved in literacy programs can become more effective and gain valuable resources. Epstein (1996) has developed six different types of parent involvement that have proved to be beneficial in creating family and community partnerships. One of the school’s goals is to promote parent involvement activities by engaging families in literacy events. In
these family literacy events the parents who participate will gain or enhance their reading strategies and tools which they can continue to implement with their children at home.

One strategy that schools have used to improve parent involvement is the use of parent tutoring in reading. One study by Smith, Stoner, Shian & Good, (2000) investigated a parent tutoring program in reading and its impact on student reading achievement. They compared the use of literature books with the use of classroom basal reading materials to determine which would have a greater impact on student achievement. The study found, however, that no significant changes occurred with either program. However, the parents, teachers, and students involved in the study indicated that they believed the parent tutoring program was worthwhile. Studies, such as this one, indicate that although mixed results have been found in literacy programs, parents do demonstrate interest in being involved in their children’s education.

Social Learning Theory

According to Vygotsky (1978) social interaction plays an important role in the development of the learning process. One important aspect of his theory is the zone of proximal development. The zone of proximal development is defined as the learning that can be achieved as a result of having adult assistance. This type of learning is beyond what the child can attain on his/her own. Building on Vygotsky’s findings, Bandura further developed the idea of social learning. According to Bandura’s findings children are more likely to imitate and copy behaviors modeled by adults. This phenomenon was more pronounced when the adults were their parents. Other researchers found that this modeling effect also occurs towards parent values in education (Marchant, Paulson, and Rothlisberg, 2001). This model reflects that when parents model behaviors that are consistent with the valuing of education the children imitate the behavior.
Most people learn by observing models (Bandura, 1977). Bandura claims that children learn through observation. In his famous Bobo doll study, Bandura et al. (1961) showed how children were able to learn and imitate the behavior they observed. In this experiment children observed adults interacting with a doll, Bandura found that the children tended to imitate the behaviors of the adults they observed.

A model created by Bandura (1977), Social Learning Theory, helps one to understand that anyone can learn observationally through modeling. As a result, parents who are engaged and involved in school activities will gather ideas and learn new skills to later transmit them to their own kids. The parents in turn will serve as models to their children at home.

While the definition of parent involvement might vary from family to family, studies have shown that parents that read with their children perform better in school. Vygotsky emphasizes the importance of having a “more able guide” model reading as the zone of proximal development (Vygotsky, 1978). In addition, for one person to be able to acquire new knowledge a prominent model displaying the desired behavior must be present. In other words, observational learning and social modeling in human learning takes place by following the modeling process (Bandura, 1977).

**Theoretical Rationale**

Abundant and extant literature on the benefits of parent involvement is available; such benefits include improvement in academic achievement, encourage learning at home, better attendance, higher graduation rates, and good behavior (Epstein, 2001; Hoover-Dempsey & Sandler, 1995; Chavkin, 1993). However, parent involvement might have different meanings to educators and parents. In a traditional parent involvement context it examines the scope of school-centric parent involvement activities which are structured and defined for parents by
schools. In many instances the schools have their own agendas and parents have very little input, power, or influence over school decision-making processes especially in low socioeconomic schools.

In his article, School-Family Relations in Context: Parent and Teacher Perceptions of Parent Involvement, Lawson found that parents viewed parent involvement as a desperate fight for their children’s lives and futures. One of the parents said:

You know, most of us, we’re concerned with what’s gonna happen to these kids after they leave school each day. I mean, some of us are scraping to put food on the table, clothes on their backs. You know, keeping kids off of the street corner. That’s our job, you know (Lawson, 2003).

Even though teachers’ parent involvement responses varied Lawson categorized their responses as either school based or home based concerns. One of the teachers explained, “Parent involvement, in my mind, is having parents who are interested in their child’s education and are willing to cooperate with the school.” (Lawson, 2003). Consequently, Quiocho and Daoud found recurring parental involvement themes from teacher interviews in a case study. They reported that teachers believed Latino parents were unreliable and refused to volunteer in the classroom, parents did not support the school’s homework policy, and Latino parents did not care about schooling. On the other hand parents reported that their primary concern was help for their children and themselves, learn academic content, improve communication, and want to be informed about the work their children are doing. It is interesting to note that besides the dissenting views between parents and educators they both feel that it is important for both parties to be partners in learning (Quiocho & Daoud, 2006).

Needless to mention misunderstanding and conflict emerges when educators and parents have different, perhaps competing, perceptions of the meanings and functions of parent involvement (Lightfoot, 1978). In short, these conflicting views are hypothesized to frame discontinuities, disconnects, and blaming cycles between families and schools that are hurtful to
children, families, and teachers alike (Lightfoot, 1978). In fact, Waller, refers to the parent-teacher relationship as ‘natural enemies.’ Each group holds different concerns for the child. The teachers have a universalistic concern, having to take responsibility for all of the children in the class, and parents hold a particularistic concern, having to be responsible with a single child in a class (Waller, 1932).

**Section IV: Research Questions/Hypothesis**

**Research Questions**

This research will investigate the following questions. What are the perceptions of K-12 educators on parent involvement? Which parent activities are important to offer to parents? Is there a disconnect between educators’ perspectives and parent involvement in schools? What are the contributing factors for the lack of parent involvement in schools? How can educators improve parent involvement? This study seeks to identify some key elements of parent involvement. It was hypothesized that the majority of the student population in which the participants work consisted of Latino students. With the increasing changes in demographics that are mentioned in the previous section American institutions, citizens, and educators must not resist to the changes that must occur in order to accommodate the changing make-up of the United States. For this reason and the alarming statistics that Latino students continue to depict this study focuses on Latino populations.

**Definition of Terms**

Before we continue it is important to define the terms that will appear in this study.

- In this study educators are referred to K-12 teachers, out-of-the classroom teachers such as coaches, coordinators, or counselors, and administrators such as assistant principals and principals in K-12 schools.
For the purpose of this study Latino is referred to the dominant minority ethnic group in Los Angeles.

In this study parent involvement activities are defined as the avenue by which parents are brought to participate in their children’s schooling. These could be formal or informal events for the purpose of involving the parents (Delgado-Gaitan, 1991).

Section V: Methodology

Sample

This study used a survey to collect its data at Claremont Graduate University (CGU) which is located in Claremont, California. Claremont Graduate University is comprised of nine graduate programs, which serves approximately 2,261 students, 35% who are White, and 12% who are Hispanic, 9% who are Asian, 6% who are Black, and 21% who indicated Other. Fifty-two percent of the students are women.

The sample for this study consists of 33 students who are taking doctoral courses in the Education Department. Although the survey was distributed to 43 students, only 33 students met the criteria. The criteria for participation in this study was as follows: an educator either as a teacher, out-of-a classroom teacher, or administrator in a K-12 school. The purpose of this study was to gather information about educators’ perspectives on parent involvement in their respective schools. All of the students who met the criteria were asked to complete a survey that took approximately ten minutes during one of their evening or Saturday courses at CGU. Students’ participation was voluntary and a professor distributed and collected the surveys at end of his/her class session. The professor then returned the surveys to the researcher. The majority of the sample is comprised of women which constitutes for 82% and 18% men. The participants' age ranges from 25 to 55 or older. In this study, 66% of the participants reported to
be between the ages of 25 to 39 years old and 34% reported to be between the ages of 40 or older.

The method used to find participants was through a notification (Appendix B) sent to all of the professors who teach evenings or Saturday post-graduate courses in the Education Department in CGU and include themes and topics about salient issues in the history of urban education and/or teaching and pedagogical practices for K-12 educators. The letter informed the professors of the purpose of the study and criteria to participate in this study. The researcher provided the professors with surveys for all of the students in their classes, but only selected the ones that met the criteria, this equals a 77% response rate. In order to control for selective bias the participants were given the survey by their professor in class and gave it back to him/her. Then the researcher picked up the surveys from the professor or at a designated place.

K-12 educators such as teacher, out-of-the classroom teachers, and/or administrators were selected for this study for the following reasons. One of the reasons for selecting K-12 educators is because these are the primary group of people who are responsible and are in direct contact with parents on a daily basis in our K-12 schools. Further, the researcher specifically selected K-12 educators because they are the most knowledgeable in regards to the type of parent involvement workshops and activities that are present in their schools.

**Instrumentation**

The data for this study was based on a survey with 32 items (Appendix A). There were 21 Likert Scale questions in which 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree. The survey included questions about the perceptions on parent involvement in K-12 schools. It asked the participants to rate the importance of parent involvement workshops and information, perceptions on parent involvement, and parent involvement workshop/activities.
attendance on a 4-point scale (1 = strongly disagree to 4 = strongly agree). The participants
surveyed were asked twenty one questions about workshops, information, and their perspectives
about parent involvement. There were 11 demographic questions and they were coded as
follows.

Demographics Variables

1. **Position/Title:** The position/title of the participants was coded as a dichotomous variable. The variables of teacher, out-of-the classroom teacher, and administrator had the value of 1 for yes and 2 for no.

2. **Parent Involvement Workshops/Activities/Events:** The workshops/activities/events that are present in the participants’ schools were coded as a dichotomous variable. The variables of Annual Parent Workshops, Open House, Parent Conferences, Parent Center Workshops, Family Math/Literacy Nights, and Advisory Committee Meetings had the value of 1 for yes and 2 for no.

3. **Gender:** Females were coded as 1 and Males were coded as 2.

4. **Age:** Under 25 was coded as 1, 25-29 years of age was coded as 2, 30-34 years of age was coded as 3, 35-39 years of age was coded as 4, 40-44 years of age was coded as 5, 45-49 years of age was coded as 6, 50-54 years of age was coded as 7, 55 or older years of age was coded as 8.

5. **Ethnicity of the majority of students in the school:** Latino or Hispanic was coded as 1, Black or African American was coded as 2, White was coded as 3, and Asian was coded as 4. These variables were also coded as dichotomous. The converted dichotomous variable had the value of 1 for yes and 2 for no.

6. **Type of School:** The types of schools the participants work in were coded as a dichotomous variable. The variables of Program Improvement, Title I, High Performing, Distinguished, Magnet, and Charter had the value of 1 for yes and 2 for no.

7. **Type of District:** Urban schools were coded as 1, Suburban schools were coded as 2, and Rural schools were coded as 3.

8. **School Level:** Elementary schools were coded as 1, Middle/Intermediate Schools were coded as 2, and High Schools were coded as 3.

9. **Years as an Educator:** These years were coded as the number of years the respondents reported.

10. **District:** The participants’ districts were coded as the name they provided.
11. **Students in the District**: These numbers were coded as the number of students in the district the respondents reported.

In order to ensure that the instrument measures what it intends to measure, the survey was evaluated by an expert.

**Procedures**

Participants were selected from a convenience sample recruited using the university’s doctoral list of classes for the Spring. The researcher sent an informational letter to professors and students in post-graduate courses who take evenings or Saturday classes in the Education Department which subject matter includes the history of urban education and/or teaching and pedagogical practices for K-12 educators. If the students met the criteria they voluntarily took the survey. The survey did not collect names, or any personal information that would in any case identify their identity; thus protecting the confidentiality and anonymity of the participants.

**Measures**

For the purpose of this study, it is necessary to operationalize three themes that emerged from the data: parent involvement workshops and information, perceptions of K-12 educators on parent involvement, and attendance of parent involvement workshops/activities. A detailed description of emergent themes used in the analyses follows.

*Parent involvement workshops and information.* As Table 1 indicates, the researcher identified seven measures that dealt with inquiring the participants’ schools level of parent workshops occurrence and the type of information provided to parents in these workshops.

*Perceptions of K-12 educators on parent involvement.* Participants were asked to report and rate their level of leadership in designing parent involvement workshops/activities, their desire to facilitate parent workshops, and perceptions of parent involvement activities.

*Attendance of parent involvement workshops/activities.* As Table 3 shows, the participants were asked three questions regarding the best times for parents to attend workshops, during the day or evenings and if childcare is provided during these times.
Section VI: Results

Descriptive Statistics

The data in this study measured K-12 educators’ perspectives and perceptions of school-designed parent involvement workshops and its importance of offering such workshops to the parents in their schools. The participants completed a survey during one of their post-graduate courses at CGU. After the data was tabulated some themes began to emerge: parent involvement workshops and information, perceptions of K-12 educators on parent involvement, and attendance of parent involvement workshops/activities. These items were measured by using a Likert 4-point scale, 1 = strongly disagree 4 = strongly agree (Appendix A). In addition, the participants reported demographic information.

Table 1 shows the mean scores for the seven items in which participants rated the importance of providing certain type of parent workshops and information. The participants agreed that it was important (M = 3.66, SD = .658) to offer workshops in which parents explore career choices for their children. The participants also felt that it is necessary to have workshops that discuss students with special needs (M = 3.61, SD = .589). The participants did not agree (M = 2.15, SD = .489) with the statement that advisory committee meetings do not provide relevant and meaningful information to parents. Although, the participants on average agreed (M =3.11) with the overall statements pertaining with the importance of parent involvement workshops, they stated a mean of 2.71 for having someone as the primary contact person for the parents. This indicates that not every participant’s school has a central person or place where parents can bond, create relationships, and bridge ties among themselves and other staff in the schools.
Table 2 shows the mean scores for the eleven items in which participants rated their perceptions and knowledge of parent workshops offered in their schools. These figures further corroborated with the preponderance of evidence found in the literature review that both parents and educators agree that there is a need to continue encouraging parent involvement and available resources to parents. The participants agree (M = 3.80, SD = .402) that there is a need to see more available parents support, resources and services. In addition, they agreed (M = 3.28, SD = .902) that it is the school’s job to teach parents how to be involved in their child’s classrooms. Additionally, the K-12 educators placed an emphasis and agreed (M = 3, SD = .597) that it is necessary to provide parent workshops in which parents gather ideas on how to help their children with homework. Although, the participants felt that there was a need and that it is important to have more resources available for parents they disagree (M = 2.25, SD = .786) that parents in their school volunteer in their child’s classrooms. Further, overall the participants said they were not satisfied (M= 2.23, SD=.889) with the level of parent involvement in their schools.

Table 3 shows the mean scores for the three items in which participants believe are the best time for parent workshop/activities attendance. Many times schools schedule workshops during the day, thus enabling working parents to participate at parent events. The participants were asked to rate when parents are inclined to attend more workshops. The results show that parents are more likely to attend workshops during the evenings (M= 3.00, SD = .632) than during the day (M=2.05, SD=.887). In addition, it is important to provide childcare for parents, but not all of the participants’ schools provide such service to their parents (M=2.95, SD = .864).

### Table 1

**Importance of Parent Involvement Workshops and Information**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean</th>
<th>S. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important to offer workshops that teach test taking strategies to our parents.</td>
<td>3.19</td>
<td>.813</td>
</tr>
<tr>
<td>It is important to offer workshops to our parents that help</td>
<td>3.66</td>
<td>.658</td>
</tr>
</tbody>
</table>
their children explore career choices.  
Schools should offer workshops to our parents that discuss students with special needs.  
Schools should offer workshops that teach parents how to discipline their children.  
Schools should offer workshops that teach parents how to read to their kids.  
The information presented in advisory committee meetings is not relevant, helpful, or meaningful to parents.  
The school has someone designated as the primary contact person for our parents.  

Table 2  
**Perception of K-12 Educators on Parent Involvement**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean</th>
<th>S. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to be involved in designing parent workshops.</td>
<td>3.14</td>
<td>.963</td>
</tr>
<tr>
<td>I feel well informed about all of the school activities and workshops for parents.</td>
<td>2.80</td>
<td>.980</td>
</tr>
<tr>
<td>I have trouble motivating the parents of my students to be involved.</td>
<td>2.71</td>
<td>.783</td>
</tr>
<tr>
<td>I would like to see more available parent support, resources, and services.</td>
<td>3.80</td>
<td>.402</td>
</tr>
<tr>
<td>The parents who attend the workshops/activities are the ones who don’t need them.</td>
<td>2.90</td>
<td>.700</td>
</tr>
<tr>
<td>It is the school’s job to teach parents how to be involved in their child’s education.</td>
<td>3.28</td>
<td>.902</td>
</tr>
<tr>
<td>Parents in my school volunteer in their child’s classrooms.</td>
<td>2.25</td>
<td>.786</td>
</tr>
<tr>
<td>I have facilitated at least one of the parents’ workshops or events in my school.</td>
<td>2.85</td>
<td>1.01</td>
</tr>
<tr>
<td>It is necessary to provide parent workshops with ideas on how to help their children with homework.</td>
<td>3.57</td>
<td>.597</td>
</tr>
<tr>
<td>I would facilitate parent events if they were scheduled on the weekends.</td>
<td>2.76</td>
<td>1.04</td>
</tr>
<tr>
<td>Overall, I am satisfied with the level of parent involvement in my school.</td>
<td>2.23</td>
<td>.889</td>
</tr>
</tbody>
</table>

Table 3  
**Attendance of Parent Involvement Workshops/Activities**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mean</th>
<th>S. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The parents seem to attend more workshops when they are scheduled during the day.</td>
<td>2.05</td>
<td>.887</td>
</tr>
<tr>
<td>The parents seem to attend more workshops when they are scheduled in the evening.</td>
<td>3.00</td>
<td>.632</td>
</tr>
<tr>
<td>The school schedules parent activities to accommodate parents’ work and childcare.</td>
<td>2.95</td>
<td>.864</td>
</tr>
</tbody>
</table>
In this study 61% of the participants reported they were teachers, 12% were out-of-the-classroom, and 27% were administrators. In addition, 82% of these educators are females and 18% are males. The participants were asked to check all of the different parent involvement school-designed workshops their schools offer. They indicated the following results: 95% hold advisory committee meetings, 91% shared to have open house, 86% have parent conferences, 48% indicated having annual parent workshop, 38% have parent center workshops, and out of the participants 33% have family math/literacy nights.

As Table 6 indicates the participants reported that the majority of the students in their schools were Latino 76%, followed by White 19%, and out of the participants 5% said Asian was the majority of the population in their schools. In addition, the average amount of students in these participants’ schools was 1654. In this study, 50% of the educators work in high schools, 40% work in elementary schools, and 10% work in middle schools. Further, participants were asked to indicate which type of category best described their school. They reported the following: 62% Title I, 38% Program Improvement, 29% Distinguished, 19% High Performing, 5% Magnet, and 5% Charter. On average the participants have been K-12 educators for 14 years.

**Table 4**
Descriptive Statistics for K-12 Educators Positions (n = 21)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>61%</td>
</tr>
<tr>
<td>Administrator</td>
<td>27%</td>
</tr>
<tr>
<td>Out-of-the Classroom</td>
<td>12%</td>
</tr>
<tr>
<td>Female</td>
<td>82%</td>
</tr>
<tr>
<td>Male</td>
<td>18%</td>
</tr>
</tbody>
</table>
**Table 5**  
**Descriptive Statistics for Parent Involvement Activities (n = 21)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Parent Workshop</td>
<td>48%</td>
</tr>
<tr>
<td>Open House</td>
<td>91%</td>
</tr>
<tr>
<td>Parent Conferences</td>
<td>86%</td>
</tr>
<tr>
<td>Parent Center Workshops</td>
<td>38%</td>
</tr>
<tr>
<td>Family Math/Literacy Nights</td>
<td>33%</td>
</tr>
<tr>
<td>Advisory Committee Meetings</td>
<td>95%</td>
</tr>
</tbody>
</table>

**Table 6**  
**Descriptive Statistics for Schools Student Population (n = 21)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latino</td>
<td>76%</td>
</tr>
<tr>
<td>White</td>
<td>19%</td>
</tr>
<tr>
<td>Asian</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Table 7**  
**Descriptive Statistics for Level of Schools (n = 21)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>50%</td>
</tr>
<tr>
<td>Elementary</td>
<td>40%</td>
</tr>
<tr>
<td>Middle</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Table 8**  
**Descriptive Statistics for Type of Schools (n = 21)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title I</td>
<td>62%</td>
</tr>
<tr>
<td>Program Improvement</td>
<td>38%</td>
</tr>
<tr>
<td>Distinguished</td>
<td>29%</td>
</tr>
<tr>
<td>High Performing</td>
<td>19%</td>
</tr>
<tr>
<td>Magnet</td>
<td>5%</td>
</tr>
<tr>
<td>Charter</td>
<td>5%</td>
</tr>
</tbody>
</table>
Section VII: Discussion

Interpretations

In this study the perspectives of K-12 educators on parent involvement activities were investigated. The results of this study indicate that educators agree in the importance of offering resources, services, and support for parent involvement in schools. However, educators are not highly satisfied with the overall current parent involvement in their schools.

The results indicate that participants believe it is important for schools to offer workshops that teach parents how to read to their kids. In addition, participants believed that it was very important and necessary to provide workshops in which parents learn how to help their kids with homework. This is consistent with research that has found that implicitly teaching reading skills to parents improves scores. Cotton (2000) found that the most impressive study results have been from programs which involve parents in reading with children, supporting their work on homework assignments, or tutoring them using material and instructions provided by teachers. This study also shows that participants believe and agreed that it is important and the school’s job to teach parents how to be involved in their child’s schooling.

Recommendations

Delgado-Gaitan (1991) asserts that “the majority of parents fail to participate in school interactions for reasons such as language, values, and practices that differ from the white mainstream group” (p. 26). It is recommended that schools continue to provide services in the parents’ native language and make them feel welcome when they visit schools. In addition, parent involvement activities should seek to understand parents’ cultures and values. Educators ought to view students and their parents who come from different cultures as gifts and strengths.
Delgado-Gaitan (1991) reports that “parents who are knowledgeable about the schools’ expectations and the ways in which the schools operate are better advocates for their children than parents who lack such skills” (p.21).

It is recommended that educators draw on the participants’ funds of knowledge which is defined as the participants’ meaningful historical and cultural background knowledge (González, N., Moll, L., and Amanti, C. 2005) to design parent involvement activities. In addition, schools should continue offering parent involvement activities which explicitly teach parents skills such as reading with their kids so that they can in turn transmit these skills to their children at home. As a result these parent involvement activities will be taught through the use of the modeling process. The modeling process consists of paying attention, ability to store information, perform the behavior observed, and be motivated to imitate the behavior that was observed (Bandura, 1977).

**Limitations of Study**

In this study the researcher studied the current perceptions of K-12 educators on current parent involvement activities in their schools. While this study was small in scope, it provides considerable evidence that supports other existing research that the prevailing current approaches of parent involvement needs to be challenged and expand the possibilities to include other forms of parent involvement.

There are limitations to this study that provide directions for future research. First, the design and small sample of this study precludes conclusions about its effects of parent involvement; thus not able to generalize its results to other populations. In addition, future longitudinal designs that include multiple measures of parent involvement will allow exploration of parent-teacher relations over time. Such analysis will illuminate strategies that were
implemented and worked and different patterns will emerge. Further, these findings pertain to a specific small sample of K-12 educators taking post-graduate courses, expanding this research to study more educators at multiple sites from different geographic locations will generate a better understanding of current parent involvement activities in schools.

In spite of all of the limitations that this study encountered the researcher decided to use this research design. After collecting and analyzing the data, the researcher is able to use the outcomes to assess current parent involvement activities in schools and use these data to continue adding and seeking ways to further develop parent involvement practices for K-12 schools.

**Future Research**

Although parent involvement is positively linked to school success, many parents are not as involved in schooling as educators would like. It is not only imperative to continue exploring strategies for increasing parent involvement, but also what are the many factors that allows for such discrepancies. Future research that explores the differences of parent involvement or family-school relationships between the working-class and upper-middle-class communities needs to be conducted.

Furthermore, scholars ought to continue investigating the causes that involved and not involved parents have for attending or not attending parent activities at schools. Future research might include exploring the obstacles and barriers that might prevent parent involvement in schools. In search of better effective strategies to involve parents in school or in the community ethnographic interviews are needed to include both parents (ostensibly “uninvolved” and “involved” parents) and teachers’ perceptions on parent involvement worldviews. Educators will benefit from understanding the underpinnings that prevent or make it harder for parents to be
involved or not involved in schools. Finally, future possible research studies should challenge
the traditional parent involvement methods and investigate if other models such as community-
based organizations improve parent involvement in schools.

**Conclusion**

Educators and policymakers continue to scrutinize and analyze students’ achievement
scores. Alarmingly, the results indicate that there is still a lot of work to do in order to close the
achievement gap among Latino students and their counter parts. Data depict the drop out rates
that affect many of the Latino students in public urban high schools. For this reason, it is
imperative to continue to focus, implement, and involve parents in early grades’ literacy
programs so that achievement scores may increase. Many studies have shown that parent
attitudes towards reading and parent involvement may change when they are engaged and
involved in their child’s education. This study investigated the perspectives of K-12 educators
on parent involvement and rated which parent involvement activities are important to offer to
parents.

In addition, the study purports that even though the results might not be generalizable, the
study will be able to provide new insights beneficial to educators who are the primary actors in
designing and implementing parent involvement activities in K-12 schools. This study provides
a point of departure for the multiple opportunities that exist for searching and exploring the best
curriculum and parent involvement activities to empower and engage parents in K-12 schools.
References


No Child Left Behind Act of 2001


U.S. Census 2000


# APPENDIX A

## Parent Involvement Survey

<table>
<thead>
<tr>
<th>Questions</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is important to offer workshops that teach test taking strategies to our parents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. It is important to offer workshops to our parents that help their child explore career choices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Schools should offer workshops to our parents that discuss students with special needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I would like to be involved in designing parent workshops.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I feel well informed about all of the school activities and workshops for parents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I have trouble motivating the parents of my students to be involved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Schools should offer workshops that teach parents how to discipline their children.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I would like to see more available parenting support, resources, and services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. The parents who attend the workshops/activities are the ones who don’t need them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. The parents seem to attend more workshops when they are scheduled during the day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. The parents seem to attend more workshops when they are scheduled in the evening.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Schools should offer workshops that teach parents how to read to their kids.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. It is the school’s job to teach parents how to be involved in their child’s education.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Parents in my school volunteer in their child’s classrooms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. The information presented in advisory committee meetings is not relevant, helpful, or meaningful to parents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. The school schedules parent activities to accommodate parents’ work and childcare.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I have facilitated at least one of the parents’ workshops or events in my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. It is necessary to provide parent workshops with ideas on how to help their children with homework</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. The school has someone designated as the primary contact person for our parents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. I would facilitate parent events if they were scheduled on the weekends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. Overall, I am satisfied with the level of parent involvement in my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Thank you for your participation!
Parent Involvement Survey

21. What is your position/title?  
☐ Teacher  ☐ Out-of-Classroom Teacher  ☐ Administrator  ☐ Other __________________

22. My school provides parents with the following workshops/activities/events.  (Check all that apply)

☐ Annual Parent Workshop  ☐ Open House  ☐ Parent Conferences  ☐ Parent Center Workshops  
☐ Family Math/Literacy Nights  ☐ Advisory Committee Meetings (ELAC/CEAC/SSC)

☐ Other __________________

23. What is your gender?  
__________ Male  __________ Female

24. What is your age?  
☐ under 25  ☐ 25-29  ☐ 30-34  ☐ 35-39  
☐ 40-44  ☐ 45-49  ☐ 50-54  ☐ 55 or older

25. What is the ethnicity of the majority of students in your school?  
☐ Latino or Hispanic  ☐ Black or African American  ☐ White  ☐ Asian  ☐ Other __________

26. Which of the following describes your school the best?  (Check all that apply)

☐ Program Improvement  ☐ Title I  ☐ High Performing  ☐ Distinguished  ☐ Magnet  
☐ Charter  ☐ Other __________

27. Which of the following best describes your district?  
☐ Urban  ☐ Suburban  ☐ Rural

28. What level is your school?  
☐ Elementary  ☐ Middle/Intermediate  ☐ High School  ☐ Other __________

29. How many years have you been an educator?  
___________________

30. Which district do you work for?  
___________________

31. Approximately how many students are in your school?  
___________________

Thank you for your participation!
April 13, 2010

Dear Prospective Participant,

My name is Veronica Gonzalez. Currently I am a graduate student at Claremont Graduate University working on my Ph.D. in Urban Education. One assignment for my quantitative analysis class is to design and conduct a research study. The purpose of this study is to measure K-12 teachers and administrators perspectives on parent involvement. If you agree to be in this study, I will ask you to answer questions on a survey about your school’s parent involvement.

I expect your participation to take about 10 minutes to complete. I expect this research to benefit the evaluation of parent involvement programs. To ensure that the information you provide is comprehensive and includes the input and perspectives of essential persons like yourself please answer all of the questions on the survey. However, if you rather not answer a question, you may leave it blank.

I will use the information I obtain from the survey to report themes that emerged from the data. Your responses will not be identified with you in any way and you will not be named in any report. In other words, your individual privacy will be maintained.

If you have any questions or would like additional information about this research, please contact me at veronica.gonzalez@cgu.edu. Thank you for your participation.

Sincerely,

Veronica V. Gonzalez, M.A.
Ph.D. Student in Educational Studies
Claremont Graduate University
Proceedings Submission

1. Title of the submission:
   LEARNING AND STUDY STRATEGIES: A CULTURAL PERSPECTIVE

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5. Abstract and/or full paper:
LEARNING AND STUDY STRATEGIES: A CULTURAL PERSPECTIVE

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Abstract

Students’ cultural association may affect the use of learning and study strategies. So this study aims to explore the effect of cultural differences on students’ strategic dispensation. The main objectives of the study are to investigate the study strategies Pakistani students employ while learning and to compare them with those employed by American students. Data on Learning and Study Strategies Inventory (LASSI) was collected from 465 university students in Pakistan. Independent sample t-test was applied to compare their performance on the LASSI scale with already established American norms. Analysis of data reveals that in only two out of ten subscales of the inventory, Pakistani students’ performance was better than American students. In rest of eight subscales, American students performed better than their Pakistani counterparts. This difference was significant for seven subscales which are anxiety, attitude, motivation, self testing, test strategies, time management and selecting main idea. The study implies to administer the LAASI on a large sample of Pakistani students to make a more convincing comparison.

Key words: Learning and study strategies, cultural diversity, norm.

Introduction

Efficient and effective use of learning strategies makes academic success possible. Carrel, Gajdusek and Wise (2001) define strategies as the acts deliberately selected to attain certain goals. Vermunt and Vermetten (2004) assert that structures of learning pattern may be affected by cultural differences in academic practices. Most of the researchers agree that cultural specificity should be considered when investigating students’ learning strategies (Braten & Olaussen, 2000; Richardson, 2005) as it deems indispensable to establish the generalizability of hypothetical frames for learning built up inside cognitive psychology (Braten & Olaussen, 1998). Pillay, Purdie and Boulton-Lewis (2000) describes that “as we move towards a "global village"
concept, the need for cross-cultural understanding of the relationships between conceptions of
learning and the use of learning strategies is becoming increasingly important because of the
changing cultural mix of our classrooms and society at large” (p.65).

The learning strategies which American students employ have been studied extensively
during the last thirty years (e.g., Weinstein & Mayer 1986; Pintrich, Smith, Garcia &
McKeachie, 1991; Braten & Olaussen, 1998; Iqbal, 2005) while strategic dispensation adopted
by students studying in other cultures especially in Asia has not been given much consideration.
This is one of the reasons to investigate what learning strategy profiles Pakistani university
students have, and how do their profiles compare with American students’ profiles?

A few researchers have attempted to explore this phenomenon in different cultures. For instance,
Braten and Olaussen (1998) investigated the learning strategies of 173 freshmen studying in
Norway and compared the results with the mean scores of American students. They found
incredible similarities between the two profiles with the exception of motivation subscale. In
another study Bråten and Olaussen (2000) further explored the reasons behind students’ low
score on motivation subscale by administering only LAASI motivation subscale on 15 students
and then interviewing them. They found their students to be autonomous and intrinsically
motivated. Learning strategies used by students of two groups, European Americans and Asian
Americans were investigated by Schommer-Aikins and Easter (2008). They found that difference
in use of learning strategies between both groups was significant on anxiety, motivation,
information processing, selecting main ideas and test strategies.

Olivarez, Tallent-Runnels, and Lin (1996) reported different learning strategy profiles of
Hispanic and American students. Alexander, Murphy and Guan (1998) explored the learning
strategies of Asian and American students. They administered LASSI-HS to 139 Singaporean
and 197 American grade 9 students. They reported almost similar profiles of both the groups.
Nenniger (1989) as cited in Braten and Olaussen (1998) has described that students studying in
German and Swiss universities employ learning strategies more than American students by
showing the only difference on motivation subscale. Pillay et al. (2000) administered MSLQ to
222 Australia and168 Malaysian high school students to investigate what learning strategies they
use. They found that Malaysian students scored high as compared to Australian students regarding use of learning strategies.

Iqbal (2005) investigated learning strategies of Pakistani students studying in American Universities and compared their scores with American students’ scores on LASSI scales. He administered LASSI scale on 73 students. He found that Pakistani students scored better than Americans on four scales which were motivation, information processing, study aids, and self testing. The significant difference was on three scales. Pakistani students scored significantly higher score on the study aids scale and American students scored higher on test taking strategies and attitude scales. Iqbal, Sohail, and Shahzad (2010) using the same instrument on Pakistani university students found that self testing, information processing and use of support techniques and materials were the sub scales on which the students’ score was between 75th and the 50th percentile. Their score was below 50th percentile on remaining seven subscales. Faculty wise comparison revealed a statistically significant difference only on self testing subscale.

The present study is an attempt to enrich the existing literature on persuasion of cultural association with students’ use of learning strategies. This study aims to examine the learning strategy profiles of Pakistani students and to compare these profiles with the profiles of American college students.

**Method and Procedure**

**Sample**

465 students from a metropolitan university in Pakistan, studying in different faculties, were selected as sample of the study.

**Instrument**

2nd edition of LASSI (Weinstein, Palmer, & Shulte, 2002) was adopted to collect data for the study. There are ten scales in this inventory. The scales are information processing (INF), selecting main ideas (SMI), attitude (ATT), motivation (MOT), anxiety (ANX), concentration (CON), time management (TMT), test strategies (STS), self testing (SFT) and study aids (STA). Standardized scores and national norms (USA) are given in the manual for this instrument. There
are eight items on each scale. To get total score for each scale students’ responses were added up. As there are 8 items on each scale developed on five point scale so the minimum score against each scale may be documented 8 while maximum as 40. The range of coefficient Alpha is from .68-.82.

Analysis of data

Mean score was calculated for all the scales. Independent sample t-test was applied to compare Pakistani students’ profile with that of American students.

Results

![Comparison of Pakistani and American students’ mean score on LASSI scales](image)

Figure 1. Comparison of Pakistani and American students’ mean score on LASSI scales

Pakistani students scored higher on self testing and study aids whereas American students performed better on rest of the eight scales i.e. anxiety, attitude, concentration, information processing, motivation, selecting main idea, time management and test strategies.
Table 1. Comparison of Pakistani and American students’ scores on LASSI scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean score</th>
<th>SD</th>
<th>t value</th>
<th>p value</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>USA</td>
<td>Pakistan</td>
<td>USA</td>
<td>Pakistan</td>
<td>USA</td>
</tr>
<tr>
<td>anxiety</td>
<td>25.25</td>
<td>24.09</td>
<td>6.95</td>
<td>5.46</td>
<td>3.80**</td>
</tr>
<tr>
<td>attitude</td>
<td>33.41</td>
<td>26.28</td>
<td>4.29</td>
<td>5.02</td>
<td>27.37**</td>
</tr>
<tr>
<td>concentration</td>
<td>26.97</td>
<td>26.68</td>
<td>6.01</td>
<td>4.78</td>
<td>0.90</td>
</tr>
<tr>
<td>information</td>
<td>27.25</td>
<td>26.94</td>
<td>5.66</td>
<td>5.50</td>
<td>0.97</td>
</tr>
<tr>
<td>processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>motivation</td>
<td>31.19</td>
<td>27.98</td>
<td>5.32</td>
<td>5.66</td>
<td>10.45**</td>
</tr>
<tr>
<td>self testing</td>
<td>24.53</td>
<td>25.22</td>
<td>6.15</td>
<td>4.93</td>
<td>2.07*</td>
</tr>
<tr>
<td>selecting main idea</td>
<td>28.06</td>
<td>26.60</td>
<td>6.10</td>
<td>5.54</td>
<td>4.28**</td>
</tr>
<tr>
<td>study aids</td>
<td>25.25</td>
<td>25.75</td>
<td>5.56</td>
<td>4.60</td>
<td>1.64</td>
</tr>
<tr>
<td>time management</td>
<td>26.08</td>
<td>25.21</td>
<td>6.30</td>
<td>3.87</td>
<td>2.57**</td>
</tr>
<tr>
<td>test strategies</td>
<td>29.13</td>
<td>26.08</td>
<td>5.08</td>
<td>5.10</td>
<td>10.48**</td>
</tr>
</tbody>
</table>

**p < .01, * p < .05

Results of table 1 reveal that Pakistani students scored better than their American counterparts on two sub scales i.e. self testing and study aids while it is the other way around on eight subscales. This difference is significant for seven subscales which are anxiety, attitude, motivation, self testing, test strategies, time management and selecting main idea. The difference is significant in favor of Pakistani students on only self testing sub scale. On rest of the six subscales American students have reported using more strategies.

**Discussion**

Understanding students’ use of learning and study strategies is indispensable for the implementation of an appropriate instructional intervention (Weinstein, 1994) as “teaching is only half of the story in the college classroom; helping students understand and more efficiently use their learning strategies recognizes the importance of this other half of the equation”
(Pintrich & Johnson, 1990). Use of learning and study strategies may be linked with students’ cultural association. Consequently, it is imperative to discover the strategies which students from different cultures employ to facilitate their academic needs fittingly. Following the American rules of strategy teaching unsuspectingly, we may not be able to fulfill students’ needs in a different cultural context (Braten & Olaussen, 1998). That is why this study aims at exploring the learning and study strategies used by Pakistani students to avoid this undue importation and draw the principles of strategy instruction accordingly.

The findings from this study showed the difference between learning and study strategy profiles of Pakistani university students and American students on LASSI scales. Pakistani students scored lower on eight of the ten subscales of LASSI which are anxiety, attitude, concentration, information processing, motivation, selecting main idea, time management and test strategies. They scored higher only on two subscales i.e. self testing and study aids. Pakistani university students are better on self testing which reflects their ability to review and observe the methods to comprehend in order to establish the level of perception of learnt information. They are also better on study aid subscale which indicates their ability to make resources helpful for obtaining information. This difference is significant for seven subscales which are attitude, anxiety, motivation, test strategies, self testing, time management and selecting main idea. The difference is significant in favor of Pakistani students on only self testing subscale. On rest of the six subscales American students have reported using more strategies.

On the other extreme, German and Swiss students overall have been found to report more use of learning strategies than American students except motivation (Nenniger, 1989 as cited in Braten & Olaussen, 1998). Consistent with this, Braten and Olaussen (1998) in Norwegian perspective found a large difference in the favor of American students on the Motivation subscale of the LASSI. These countries allocate a better part of their budget for education and education for masses is available over. As compare to this Pakistan is spending less than 2% of its GDP on education which is less than UNESCO’s recommendation (i.e. Minimum of 4%) (Ghani, 2008). Purdie, Hattie, and Douglas (1996) mentioned that Asian students are less assertive, less willing to ask questions in the classrooms and to explore options of thinking. They are mostly used to learn through memorization. Pell, Iqbal and Sohail (2010) also indicated that even science at elementary level is being learnt in Pakistan through rote learning. Pakistani
education system is not compatible with that of advanced countries where the students are taught learning and study strategies in most of the schools and universities. Pakistani students are not made aware of these strategies at any stage. Hence, they do use them but unintentionally and improperly.

It is recommended that learning and study strategies should be included in teacher education curriculum so that teachers could assess students’ cognitive processes. Resultantly, it would help diagnose student’ weaknesses and adopt remedial measures to make them strategic, independent and self regulated learners. Secondly, students should be made aware of these strategies at an earlier stage so that they could monitor and control their own learning. These strategies should be inculcated in their minds in such a way that they “become generated and applied automatically as skills” (Carrel, 2001, p.230). The study implies to administer the LAASI on a large sample of Pakistani students to make a more valid comparison.

**References**


From Novice to Expert: Efficient, Effective Online Course Development

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University of Arkansas – Fort Smith
From Novice to Expert: Efficient, Effective Online Course Development

Description of the Trend

A national trend among colleges and universities in the United States reflects the increasing use of the Internet as a means for delivery of instruction via online courses. The popularity of online instruction as an alternative to the traditional classroom is evidenced by record numbers of students who are enrolled in online courses. A five-year study supported by the Alfred P. Sloan Foundation defines online courses as “those in which at least 80 percent of the course content is delivered online” (p. 4). The report reveals that nearly 3.5 million students in higher education participated in online instruction in the fall of 2006. This represents a 9.7 percent rate of growth in online course enrollment as compared to a 1.5 percent growth in the total population of students in colleges and universities (Allen & Seaman, 2007). While the percentage of students enrolled in at least one online course in the fall of 2002 was only 9.7, enrollments in the fall of 2006 reached a high of 19.8 percent (p. 1). As evidenced by these figures, the trend toward the increased use of online instruction is clear.

Two- and four-year institutions reported increased student accessibility as the primary reason for increased offerings of online courses, the rate of increase varies according to institutional type (Allen & Seaman, 2007). Two-year associate degree granting institutions comprise over 54 percent of all online student enrollments with a 24 percent annual growth rate. In contrast, baccalaureate degree granting institutions have a sluggish growth rate of only 8 percent. All other types of institutions report growth rates that are only slightly lower than those of associate degree granting institutions (pp. 6-7).
Such exponential growth is unlikely to be sustained for an extended period. According to Allen & Seaman (2007) three quarters of all higher education institutions already offer online courses of some type, and the remaining one quarter report no plans to incorporate online learning in their long-range plans. As institutions reach levels of engagement in online course offerings that are commensurate with their long-term strategy plans, growth will begin to slow.

**Implications for Higher Education**

While online education is clearly an established trend in colleges and universities in America, one must question the quality of education provided by this form of instruction. Even though delivery of content through online instruction provides instant access to massive amounts of information from online sources such as libraries, museums, and computerized data bases, the cost to the time-honored principles of the collegiate ideal and development of the whole individual may be great. In order to effectively evaluate the implications of online instruction one must return to the basic mission of colleges and universities in the United States.

The collegiate ideal reflects a rich tradition in higher education through which colleges and universities have the distinct responsibility to educate the whole person. This implies that true education comes from intentional development of all areas of learning including cognitive, physical and social/emotional domains. The college, writes Alexander Meiklejohn (as cited in Goodchild, 1999) is a “spirit, a way of life, a manner of being” with a purpose designed to “start men on the way to learning” (p. 7). Accordingly, the collegiate experience is a time-
honored tradition of relationship building. In this manner students and teachers work together to find answers, discover new information, solve problems, and resolve conflicts.

When considering the role of online instruction in today’s colleges and universities, one must reflect upon the outcomes that are to be most highly valued. Obviously, the simple transfer of knowledge is not sufficient for the education of the whole individual. The inclusive goal must be the development of “interpersonal skills, group process skills, moral or ethical development, individual and social responsibility” in addition to cognitive skills (Chickering and Kytle, 1999, p. 113). If scholars accept these interpretations of the goal of higher education, they must also ask how such ideals are being realized through use of computerized online instruction. Over a century before the birth of the word-wide-web, Newman (1854) brilliantly embraced the value of face-to-face learning when he observed that no book could convey the meanings that people derive from looking one another in the eyes as they exchange ideas in everyday conversations. Without a doubt, human discourse, language and communication are more than the exchange of words; rather, they are comprised of a combination of body language, intonation, and facial expression all working together to allow true expression and transference of concepts.

In the rush to embrace technology and its unlimited possibilities for enhancing instruction, institutions must consider the rich tradition and value of face-to-face interaction between teacher and learner that develops when students and teacher interact with one another on a personal basis. The challenge for the online educator is to use available technology to develop courses that encourage discussion participants to engage in discourse, reflection, and the sharing of ideas.
Regardless of the challenge to the collegiate ideal, the trend of offering web-based or online instruction in some form by most institutions of higher learning in America today is well established. Easy access to a wide variety of courses is one of the most obvious benefits of this form of instruction. In addition, classes can be accessed at all times, so students can participate according to their own personal time restraints and preferences. Further, student evaluations of their online educational experiences are generally quite favorable (Singh, 2006). With so many positive aspects, one might assume that online education is a panacea for the fast and highly complicated life-styles of today’s college student, but other implications related to web-based delivery of courses must be considered.

Important implications for the online instructor are the characteristics and needs of the typical online learner. These traits often differ from those of the traditional classroom student (Sieber, 2005). For example, online students are frequently those with more professional experience, plus they are more likely to have families and careers. The goal for many of these students is not to obtain a degree, but to acquire the competence and knowledge necessary to rise within their professions. For these reasons, the online instructor must monitor quality from both an academic perspective and a professional one. Because a large proportion of these learners do have additional responsibilities, their academic performance is sometimes influenced by their simultaneous obligations. This creates an additional challenge for the instructor to find a balance between maintaining high standards and providing a degree of flexibility in view of the additional responsibilities these students face (Jobin & Leh, 2002).

Another consideration for student success in online education includes technological prerequisites for enrollment. These should include a minimum level of technological expertise
along with student access to the internet and other resources such as basic hardware and exceptional bandwidth (Jobin & Leh, 2002). Koch (2000) indicates that accessibility is not equal to all would-be students. Networks of fiber optic cables that provide broadband or high speed internet service tend to cluster around downtown business districts and outer suburbs where corporate offices or government campuses are located. This pattern leaves those in low income and rural areas with limited access to high speed internet connections. The result is what has been termed a digital divide or gap in internet accessibility related to income, race, geography, and education.

Accessibility in terms of students with disabilities is an additional concern for institutions of higher education. Federal legislation pertaining to students with disabilities includes:

1. Section 504 of the Vocational Rehabilitation Act passed in 1973, which requires that institutions who receive federal funding not discriminate or exclude people with disabilities.

2. The Americans with Disabilities Act (ADA) passed in 1990 which applies to programs and services offered by both public and private institutions of higher learning.

3. The Assistive Technology Act, passed in 1998 which requires that accommodations be made for individuals with disabilities as it pertains to technology.

Unfortunately, these regulations provide no specific guidelines regarding what institutions must do to make online courses accessible to students with disabilities (Edmonds, 2004).
Consequences

In spite of its popularity, questions concerning quality in online education abound. The Sloan Foundation survey report (2007) indicates the following areas of known concerns:

- When students get their degree on the Internet, they miss out on the collegiate experience targeted at development of the whole person.
- Businesses will not value the online degree as much a traditional degree with regard to potential employment.
- Students graduating from virtual colleges miss the daily interaction with their peers.
- Due to a lack of interaction with other students and the instructor, students feel isolated and uninvolved in the learning process.
- The prevailing perception of online education is that it is inferior to traditional education.

This survey also reveals that 69 percent of academic leaders believe online education will be critical for long-term planning in higher education. If this trend continues, traditional colleges and universities will find it necessary to offer quality online courses in order to remain competitive (Allen & Seaman, 2007).

Additionally, since partnering the Internet with modern course management systems makes it possible for universities to offer coursework on a global basis, faculty impact must be considered. More faculty members will be required to develop and teach online courses. This will include long-term faculty who may not have the technological skills or the enthusiasm to adapt to this form of teaching. These conditions imply that an increase in online courses may influence the number of faculty retained or hired (Dykman & Davis, 2008).
It is imperative that institutions along with the general public be cognizant of the issues surrounding online instruction in order to become informed consumers. Online instruction is not a universal remedy for the complicated life-style of the twenty-first century student. It is, however, an option that when used appropriately can be an effective part of the collegiate curriculum. With this view in mind, the following recommendations for the development of an effective online course should be considered.

Recommendations

The successful online course is one that is designed and delivered effectively. Sieber (2005) cautions that those new to online instruction often fail to consider the basic differences between the pedagogy of delivering instruction online and traditional face-to-face classroom instruction. At the most basic of levels, the instructor must be cognizant that online instruction entails much more than simply putting an instructor’s notes, lectures, assignments, and PowerPoint presentations on a web page. The online instructor must facilitate a collaborative learning environment which promotes inquiry and includes students as active contributors to the course content. Nevertheless, many institutions promote online instruction as a student friendly, cost effective, space saving method of course delivery without providing the infrastructure to support the technology and/or the instructor. Predictably, student course evaluations of this form of online course indicate high levels of dissatisfaction (DiBiase, 2004). For these reasons, it is necessary to provide training for prospective online instructors in technology application, methodology, and instructional design in relation to the online classroom.
Regardless of the learning medium, effective teaching has principles and practices that research has suggested produces the greatest learning. In the book *Effectiveness and Efficiency in Higher Education for Adults* (Keeton et al., 2002), eight principles are described that can be modified and implemented in an online course to increase effectiveness (Sieber, 2005).

Keeton describes the first step as one that creates an institutional environment that supports and encourages inquiry. One way to encourage inquiry online is to develop threaded discussions, chat rooms, and/or individual communications between class members and the instructor. These opportunities for dialogue welcome student questioning of the instructor’s views and those of other class members (Beldarrain, 2006).

The second principle is to broaden learners’ knowledge of the subject matter by encouraging them to incorporate their individual experiences into the learning. Instructors can accomplish this by designing class discussion topics that require students to apply course concepts to their own experience backgrounds.

Third, instructors should elicit students’ active and critical reflection on their growing knowledge base. Students can reflect and consider alternative interpretations of learning through collaborative assignments that require problem solving strategies and critical thinking skills.

The fourth principle that can be incorporated into online courses is the use of deliberate practice accompanied by prompt, constructive feedback. Performance should be continually assessed in online courses because students respond and participate more often when instructors are consistent in providing constructive feedback on discussions, chat room posts, and assignments.
The fifth principle includes making the course material relevant and practical by designing assignments around the needs and interests of the learner (Sieber, 2005).

The sixth principle that supports effective instruction is developing learner effectiveness. The instructor should design assignments that are directly aligned with the course objectives and that enhance the learners’ abilities and proficiencies.

Clarifying learning goals and providing the support and resources that empower students to complete them is the seventh principle. Resources and support online can be in the form of rubrics for assignments, documents, websites, and technology support numbers.

The final principle for effective teaching online is to provide an optimal balance of challenge and support that is tailored to individual students’ readiness and potential (Sieber, 2005). In other words, the instructor should know his or her audience and design the course accordingly. Obviously, a course designed for mature learners with many background experiences from which to draw will be different from one designed for traditional freshmen and sophomore students. Younger students often lack the discipline, skills, or motivation to succeed in online courses, and that is especially true if the course is poorly designed (Young, 2006).

It is the responsibility of the institution to ensure the quality of its online courses. One way to do this is for institutions to require that faculty who teach online be certified to use the technology program, such as Web ct or Blackboard, used by the college or university. In addition, institutions can implement policies and procedures that provide standards and rubrics for the structure and components of a course. Faculty development focused upon proven principles of effective teaching and development of technology skills needed for
implementation of the online program will benefit instructors, but more importantly, it will improve student learning and satisfaction with online classes (Ellis, 2003).

Recent Developments

The University of Arkansas – Fort Smith has long recognized the need for online courses to be well designed and taught by qualified faculty. A technology committee comprised of faculty who were interested in teaching online courses together with members of the Instructional Technology (IT) staff worked for several months during the 2006-2007 academic year to compile a checklist of components that they believed were essential for an effective online course (see http://www.uafortsmith.edu/Distancelearning/OnlineCourseReviewRubric). In addition, instructors planning to teach online were required to complete technology training that certified them to use Blackboard software. Once the professors were certified, they developed their online courses with support from IT personnel. The final step before the courses could be offered online related to the deans’ evaluations of the proposed courses using the aforementioned checklist. If components were incomplete or missing, online course designers were asked to revise the necessary components. Once the course content and Blackboard-accessible design shells were approved by the dean, they were added to the online class schedule.

Concurrently with the development of the UA – Fort Smith online course development criteria during the 2006-2007 academic year, the Arkansas Department of Education requested that Colleges of Education in the state plan and provide three courses to extend teacher licensure: Adolescent Growth and Development, Meeting the Needs of Diverse Learners in the Middle Childhood Setting, Middle Childhood Teaching Strategies and Classroom Management
From Novice to Expert

Techniques. These Middle Level Education (MLED) courses offered opportunities for Early Childhood Education (Pre-K – grade 4) majors to earn grades 5 – 6 licensure to teach in self-contained classrooms and Secondary Education majors to teach in middle level grades (4 – 8) in their specific content areas. Teacher/Practitioners and pre-service teachers could add the middle level endorsement by coming to campus and participating in one class during the first summer school session and two classes during the second summer session.

During the first summer (2006-2007) when these courses were offered, there were six students who participated in both summer sessions, but the following year there were only four. In an effort to recruit students for the summer classes, two middle level education professors revised and rewrote the three summer courses to offer them fully online during the summer of 2008. Course enrollment peaked at 25, 24, and 25 in the three classes during the next summer sessions. Students appreciated being able to access the online courses asynchronously during a summer when gasoline prices skyrocketed, and incomes plummeted due to frequent cuts in businesses and industries across the nation.

One of the middle level education professors had prepared web-enhanced courses and found them efficient and effective across her full-time teaching load. While largely self-taught, she participated in the required Blackboard in-service professional development sessions and worked with an experienced Web ct/Blackboard, full-time instructor on format and design principles. Since she had already organized her course content or homepage (see Appendix A) with the syllabus, weekly overviews, assignments, discussion board topics, and assessments, using the graphics recommended in the Blackboard online teacher workshops, she invited her colleague to share the same format in an effort to unify the courses. Together they worked in
one office on two computers using an each one/teach one model (Pereira, 2010) to design the courses.

They also collaborated to ensure that

- Diverse instructional strategies appealed to multiple intelligences and learning preferences (see Appendix B).
- Discussion board topics related to readings from the texts but also connected with undergraduates’ prior knowledge and experiences (see Appendix C).
- Traditional, alternative, and authentic assessments contextualized pre-service and teacher/practitioner learning in their daily classroom lives (see Appendix D).

The above examples show the variety of activities and assessments that aligned with National Middle School Association’s Specialized Professional Association-approved standards for highly qualified middle school teachers under the No Child Left Behind Act (NMSA, 2005).

As the experienced and novice online instructors worked to distribute their course content into the menu tabs and homepage (course content) links, they discussed the importance of learning by doing and developing a new attitude toward teaching. Through reading widely about methods of integrating technology into a meaningful learning experience in online classes, the two professors developed a clear understanding of the role of the online instructor as a guide, collaborator, and instigator (Murchu & Muirhead, 2005). They reviewed additional research literature that stressed the importance of encouraging online learners to perform to the best of their abilities; see the interrelatedness of the complete curriculum; and collaborate to create, innovate, and integrate learning across the content areas in middle schools (Palloff & Pratt, 2007).
They decided to offer an optional orientation for their classes the week before the first summer session began. Students welcomed the opportunity to interact with their instructors, to practice accessing the courses, and to get acquainted with their peers in the computer lab. They learned that even though most of their course work would be completed online, they were expected to collaborate to prepare *PowerPoint* presentations and websites illustrating ideal middle school philosophies and principles in their final, alternative assessments.

Watson, Gerin, and Coffey (2010) found in synthesizing nine studies conducted by 23 additional researchers and 117 faculty members with online teaching experience that faculty acceptance of distance learning plays an important role in its success in higher education. One of the motivating factors that drew the two middle level education professors to work together to teach the summer classes was the possibility of collaborating with teachers/practitioners in area classrooms in action research to determine the most efficient, effective methods of delivering instruction to teachers who were already committed to completing a minimum of 60 hours of professional development per year to maintain their state licenses.

Subsequently, they learned that the teachers/practitioners in their online classes most often completed their assignments in the evenings after their children were asleep and after their summer workshop assignments were finished. The convenience of asynchronous communication and easy access to the *Blackboard*-supported classes encouraged them to e-mail and post discussion board responses frequently and professionally. As the courses progressed, they grew in their abilities to log onto their online courses frequently; keep current with postings; read, research, and analyze; reflect and respond thoughtfully; and rely on and be responsible to their peers and instructor in the courses.
Following an analysis of 30 print and online educational journal articles related to teaching online courses, Kathy Wright, Director of Instructional Support at the University of Arkansas – Fort Smith, suggested several factors that the two professors considered as they worked together to organize and design quality online courses for undergraduate students:

- Communicate in advance with students so that they know that they must demonstrate proficient writing skills, be self-directed, and on time in submitting their online assignments.

- Plan and moderate frequent instructor-student interaction. When faculty involvement increases, distance education programs yield more positive outcomes than face-to-face instruction. However, overly involved instructors found that “hovering” decreases student interest and quality of electronic postings on discussion boards especially.

- Prepare evaluation instruments that encourage students to collaborate online to prepare authentic, team-synthesized assessments that are presented in person on campus as culminating activities heighten the level of concern and improve group interdependence and individual accountability across a six-week summer session (2008, p. 2).

The two-member middle level education team used a combination of the above recommendations and Keeton’s (2002) eight principles to guide their course preparations. Each instructor prepared a welcome page with a picture and details relevant to procedures for submitting assignments and posting online discussion board postings and responses to two peers each week per class. The procedures for all three of the classes were similar to prevent
any confusion about expectations and timely submissions. Students submitted assignments on Thursdays and Sundays by 11:59 p.m. Easy access to the course syllabus and weekly overviews assisted students in organizing their assignments and discussion board postings and responses. Threaded discussions gave students opportunities to question their instructor and their peers and to share their experiences in full-time teaching and/or from practicum or internship classrooms. They grew in their abilities to support conclusions drawn from their texts and to use facts, reasons, examples, incidents, and anecdotes from classroom observations and volunteer work in their communities in their writing.

When the students came to campus to present their PowerPoint presentations and/or websites related to the Ideal Middle School project, they were excited to share their collaborative work. Alternative and authentic assessments such as the design of the Ideal Middle School project, incomplete case studies, and simulations of professional development seminars related to strategies to use in teaching young adolescents with special needs in middle level education motivated students to develop research skills, communicate and collaborate with their simulated teaching team members, and plan together to reach a common goal. From their collaborative online discussions and cooperative planning sessions, they also developed group interdependence and individual accountability.

As they worked through problem-based learning in weekly assignments, the students reflected on what they had learned and helped each other recognize multiple perspectives especially related to a variety of types of literacy integration across the curriculum (Bullen & Janes, 2007). The picture book integrated lesson plan inspired them to find books that would appeal to fifth and sixth graders, such as Sir Cumference and the Great Knight of Angleland and
Walt Whitman: Words for America. They paired/shared lesson plans and used the Praise/Question/Polish method of evaluation in their discussion board responses (Lyons, 1981). The rubric found in Appendix E reflects the qualities of integrated literacy pedagogy anticipated in this assignment.

The ability to connect new learning with prior knowledge and experience along with encouragement to contextualize new skills in daily life lead adult learners and middle school students to use what they have learned in new and unexpected circumstances. This meaning-making is recognized as transfer of learning, but it is especially important in online teaching and learning because of the broad range of expertise that students bring with them to the courses. Some may have difficulty attaching a document to an e-mail or to the discussion board, but it is important to dignify each response and encourage new teachers and pre-service teachers with frequent feedback and specific praise. Others may be ready to engage in online dialogues with more highly competent partners or with those they know need help to master technologies that can be reviewed in teach backs in which competent students re-describe what they have learned to see if it matches their peers’ perceptions (Pask’s Conversation Theory as cited in Andrews & Haythornthwaite, 2007).

As the online courses qualify prospective middle level teachers to take the Praxis II content area tests and meet requirements to teach grades 5-6, their professors continue to grow as facilitators of best practice teaching strategies for middle level learners. They find teachers from their online classes serving as technology leaders in their schools, completing master’s degrees online, and demonstrating their online learning proficiencies for teachers/practitioners who come to campus to participate in technology-enhanced professional
development courses. The new challenge is to connect newly licensed middle grades teachers and their students with their e-learning counterparts around the globe.

Conclusion

Since nearly 20 percent of all higher education students in America enrolled in at least one online course in the fall of 2006 (Allen & Seaman, 2007), online education is obviously a well-established trend. The challenge for colleges and universities today is to address issues related to development, delivery, and public perception of online instruction. Teachers must become aware of and make accommodations for the unique characteristics of the online student. Faculty development is the key to success in online education since the effective online course requires unique skills in development and delivery of instruction. Caution must be exercised in selection of online classes because not all courses are suited for online delivery. While all of these issues are of utmost concern to higher education, the most important consideration of all is the imperative to maintain the ideal that higher education embraces not only the development of the mind, but of the whole individual. This ideal of a collegiate experience that includes collaboration, reflection, and exchange of ideas within a community of learners can be extended to the online environment when proper training and infrastructural support is available.
References


Appendix A

Homepage (Course Content) Screen Print

The three Middle Level Education classes used the same format/design.
Appendix B

Providing for Individual Differences (Weekly Overview III: July 19-25)

Objectives: The student will be able to:

- Describe ways instruction for low-ability groups might differ from instruction for average groups.
- Select an approach to individualizing instruction (contingency contracts, mastery learning, matching teacher and learner styles, or a type of ability grouping) or one that is not introduced in Henson’s textbook, research the method, and determine how to adjust it to fit your own preferences.
- Discuss things a teacher in a multicultural classroom should or should not do to adjust to his or her students’ special needs.
- Explain the importance of a teacher holding high expectations of every student in his or her class,
- Use case study analyses to share multiple perspectives of a variety of ethnic groups and then describe how a first year teacher might express high expectations, provide encouragement, and offer opportunities to use intrinsic and extrinsic rewards to motivate a diverse school population to achieve highly and subsequently improve self-efficacy.

Please read the following chapters in Henson’s text:

Chapter 7: Individualizing Instruction and Chapter 8: Teaching in Multicultural Classrooms

Discussion Board Question: Select an approach to individualizing instruction (contingency contracts, mastery learning, matching teacher and learner styles, or a type of ability grouping) or one that is not introduced in Henson’s textbook. Research the method and determine how to adjust it to fit your own preferences. Post this response to the discussion board by 11:59 p.m. on 07/26/10.

Assignment: Read the case study beside which your name appears on the list below. Then write a 3-5 paragraph essay response. Use the “Further Reflection” topics at the end of each case to guide your thinking. Post your essay to the discussion board and respond to your partner’s ideas. Submit this assignment in Assignments, Week III: Case Study Analysis by 11:59 p.m. on Sunday, July 26.

Case Studies

| Chapter 1: Substituting Involvement for Apathy | Chapter 2: Professional Learning Communities |
| Chapter 3: Planning for Student Engagement | Chapter 4: Constructivist Theory and Practice |
| Chapter 5: Classroom Micro-society | Chapter 6: Assessment and Teaming |
| Chapter 7: Doing What Makes Sense | Chapter 8: Role of Dispositions in Teaching |
Week V: Examples of Communications with Parents and Community Members

- Collaboratively planning with colleagues and participating in school activities (math, literacy, science, history nights; family night with a potluck, school-made, or catered meal; school-wide carnival; talent show; co- and extra-curricular(s); open house and student-led conferences, etc.
- Publishing a weekly newsletter (either print copy, e-mail, or Ed-line) that expresses high expectations for students, including the
  - School/Classroom rules, procedures, and policies
  - Specific description of classroom arrangement and management
  - Grading procedures with new assessment methods using rubrics and checklists
  - Specific district, state, and national standards for measuring students’ success
- Creating a teacher website with a discussion board or blog for parents but also offering the opportunity for parents to call the school telephone number during planning or conference time if they have concerns or would like to volunteer to help with a specific class project or activity
- Publicizing PTA/PTO/Parent Advisory Group meetings and holding them at different times (before work in the morning, at lunch time, or after dinner in the evening) so all parents have an opportunity to attend
- Preparing flyers about school activities for businesses to post on bulletin boards or to distribute from their counters (follow district communications policies)
- Sending encouraging e-mails, hand written notes or postcards, brief memos in agendas or planners
- Facilitating focus groups of parents, extended family members (grandparents, aunts, uncles, big brothers and sisters), business leaders, and community members
Appendix D

**Alternative Final Exam: The Ideal Middle School Project**

Instead of a traditional final exam for this course, students will complete a final project. This team effort will require middle level teacher candidates to weave the best of what is known about effective middle schools into a comprehensive plan for the ideal middle level school.

Using your knowledge of young adolescent development and middle level philosophy, organization, curriculum, assessment, and instruction, design the ideal middle school in groups of four. The school should reflect accurate research, theory, and practice regarding the middle school concepts discussed in class. However, this project also will require additional outside research and reading. Middle school designs may be presented as PowerPoint presentations or school web sites.

The following must be addressed in your school:

1. Philosophy (goals, objectives, and a mission statement) of the school should include characteristics of a true middle school.
2. School organization
   - Teaming – what types of teams? How many teachers per team? What provisions will be made for a broad range of special needs students?
   - Grade span or age groupings (i.e., grades 5-6, 6-8, 7-8, etc.)
   - Grouping of students – heterogeneous, homogeneous, same age, multi-age?
   - Scheduling (master schedule shows number of periods; flexible scheduling; block, start and stop times for school)
   - Advisory programs (type, length, frequency, who leads these, number in each group)
   - Physical location of the building (include a floor plan of building plus outdoor areas)
3. Curriculum
   - Around what standards and frameworks will the curriculum be organized?
   - What role will assessment play? What types of formative and summative assessments will be emphasized?
   - Which courses are required at each grade level? Which are electives or exploratory courses? Will AP or honors classes be offered?
4. Instruction
   - How will curriculum and instruction be meshed to achieve desired outcomes?
   - In what specific ways will instruction meet students’ developmental needs?
   - What will teachers do to address learning styles, multiple intelligences, brain research, etc.? What staff development programs will be offered?
5. Teachers (list the qualities required for teachers in a true middle school – personal characteristics, education, certifications, competencies, etc.)
6. Family involvement (show how this middle school purposely involves families beyond the PTA and other typical parent programs)

*(National Middle School Association, 2005)*
### Rubric for Evaluation of Picture Book Lesson Plan Integrated Across Content Areas

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Exemplary</th>
<th>Acceptable</th>
<th>Not Yet Ready</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instructional Goals and Objectives</strong></td>
<td>Instructional goals and objectives are clearly stated and connect directly with Arkansas grades 5-6 standards. Systematic integration across 2-3 disciplines is evident. Learners understand what is expected of them.</td>
<td>Instructional goals and objectives are stated and connect with AR grades 5-6 standards. Systematic integration across two disciplines is adequate. Learners understand what is expected of them.</td>
<td>Instructional goals and objective are stated but not easy to understand. The instructor needs to explain and connect AR standards to objectives and assessments and/or describe purpose, procedures, resources, etc. Learners may not understand what is expected of them.</td>
<td></td>
</tr>
<tr>
<td><strong>Instructional Strategies</strong></td>
<td>Instructional strategies are appropriate for learning outcome(s). All strategies are based on a combination of practical experience, theory, research, and documented best practice.</td>
<td>Most instructional strategies are appropriate for learning outcome(s). Most strategies are based on a combination of practical experience, theory, research, and documented best practice.</td>
<td>Few instructional strategies are appropriate for learning outcome(s). Some strategies are based on a combination of practical experience, theory, research, and documented best practice.</td>
<td></td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>Methods for assessing student learning and evaluating instruction are clearly delineated and authentic.</td>
<td>Methods for assessing student learning and evaluating instruction are present.</td>
<td>Methods for assessing student learning and evaluating instruction are vaguely stated and/or missing.</td>
<td></td>
</tr>
<tr>
<td><strong>Technology Used</strong></td>
<td>Selection and application of technologies are exceptionally appropriate for the learning environment and outcomes.</td>
<td>Selection and application of technologies are basically appropriate for the learning environment and outcomes.</td>
<td>Selection and application of technologies are inappropriate for the learning environment and outcomes.</td>
<td></td>
</tr>
<tr>
<td><strong>Materials Needed</strong></td>
<td>All materials necessary for students and teacher to complete the lesson are clearly listed.</td>
<td>Most materials necessary for students and teacher to complete the lesson are clearly listed.</td>
<td>Materials list is incomplete or missing.</td>
<td></td>
</tr>
</tbody>
</table>
Comparison of changes in mathematical content knowledge for teaching of middle grades teachers in a two-year research project to examine effects of two professional development models for implementing formative assessment in networked classrooms.

Melfried Olson  
University of Hawai‘i at Mānoa  

Michael Gilbert  
University of Massachusetts Boston  

Judith Olson  
University of Hawai‘i at Mānoa  

Hannah Slovin  
University of Hawai‘i at Mānoa

INTRODUCTION

We report on changes in teachers’ mathematical content knowledge while they were participants in a three-year research project funded by the National Science Foundation that investigated feasible models of implementing formative assessment in mathematics classrooms using networked technology. Although proven to be an effective instructional strategy, formative assessment has been challenging for teachers to implement in their classrooms (Ruiz-Primo & Furtak, 2006; Shavelson, R. J., Yin, Y., Furtak, E. M., Ruiz-Primo, M. A., Ayala, C. C., Young, D. B., et al., 2006; Yin, 2005). Similarly, using technology to implement formative assessment practices has also been a challenge for teachers (Owens, Pape, Irving, Sanalan, Boscardin, & Abrahamson, 2008). Viewpoints differ regarding how to assist teachers in developing facility in implementing formative assessment strategies using networked technology. Thus, our research focused on comparing the efficacy of two approaches: (1) implementing both formative assessment and networked technology simultaneously or (2) implementing formative assessment strategies prior to implementing use of networking technologies.

The project was designed to examine differences in student achievement related to algebraic concepts resulting from two different professional development (PD) models over a two-year period of time. In one PD model, teachers’ learning focused solely on formative assessment strategies, and included attention to topics related to the components of formative assessment, i.e., mathematical tasks, questioning, interpreting students’ work, and responding to misconceptions. In the other PD model, the same formative assessment components and an introduction to classroom networked technology simultaneously. As one strand of the project’s evaluation, established measures of teacher content knowledge were used to determine the effects on teacher understanding of the mathematics used in teaching. The research reported in this paper concerns data on teacher content knowledge for teaching collected at three points in the project: prior to the start of the professional development, at the end of the first year of

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1 The research reported in this paper was generated by the grant, The Effects of Formative Assessment in a Networked Classroom on Student Learning of Algebraic Concepts (DRL–0723953) funded by National Science Foundation Research and Evaluation on Education in Science and Engineering (REESE) program. The views expressed in this paper are the views of the authors and do not necessarily represent the views of the National Science Foundation.
participant training and implementation and at the end of the second year of participant training and implementation.

It is widely established that teachers need to possess a deep and fundamental understanding of the mathematics they teach. Moreover, teachers need to understand mathematical content in light of the teaching/learning dynamic. For example, when teachers differentiate problems in response to individual variances to challenge and/or provide additional scaffolding for students, they use their mathematical understanding to: (1) listen to students’ explanations of unconventional solution strategies to determine whether or not they are likely to lead to generalizable approaches, (2) probe student thinking through appropriate questioning, and (3) create or select formative and summative assessment problems that are mathematically similar to the work done in class.

Studies in classrooms have found that improving teachers’ mathematical knowledge for teaching significantly affects students’ learning of mathematics (e.g. Hill, Rowan, & Ball, 2005). While teachers’ undergraduate mathematics courses support their learning up to a point, Monk (1994) found that beyond five mathematics courses, the number of mathematics courses their teachers had taken less significantly affected students’ learning. In fact, Adler and Davis (2006) suggest that advanced courses may encourage teachers’ compression and abbreviation of mathematical knowledge. This is problematic, since unpacking mathematical knowledge can provide entry points for students to build understanding, and therefore is necessary for teaching. This notion of unpacking mathematical content has begun to focus research into teachers’ mathematical knowledge as it concerns the depth, connectedness, and explicit articulation of the mathematics of teaching (Ball, 2003; Ma, 1999). Knowing how to respond appropriately to students’ questions and developing the ability to choose or create questions and problems targeting specific mathematical concepts is at the center of the content knowledge needed for teaching (Ball, 2003). Studies involving teachers of elementary students have found that improving their mathematical knowledge for teaching significantly affects students’ learning of mathematics (e.g. Hill, Rowan, & Ball, 2005).

In this study, our interest in teachers’ mathematical knowledge is tied to the formative assessment framework that underlies the design of the PD. The formative assessment portion of the professional development drew from Ayala & Brandon’s (2008) emphasis on the ongoing communication aimed at understanding student thinking within the process. Throughout the PD and follow-up sessions, the project staff emphasized the centrality of the interaction between teacher and student. In this construct, effectively implementing formative assessment requires a teacher to facilitate a student’s understanding by building on where she is in her thinking in order to bridge the gap to where she needs to be in her understanding. This building on preconceptions is an effective path to learning (National Research Council, 2005). The aspect of formative assessment where teachers focus on how students are understanding (or misunderstanding) relies on the teacher’s knowledge of the mathematics used in teaching, and this led us to the examination of teacher content knowledge reported in this paper.
METHODOLOGY

Thirty-two seventh-grade mathematics teachers were assigned to two groups, which for purposes of this paper will be referred to as FA and NAV. During the first summer of the project, the group of teachers in FA participated in five days of professional development on the use of classroom formative assessment. During the same time, the group of teachers assigned to NAV participated in professional development on the use of classroom formative assessment using the TI-Navigator™ classroom networking system.² Project facilitators planned the agendas together with the goal of providing as similar an experience with strategies for formative assessment as possible. In all cases where practicable, the same or very similar mathematics tasks were included. The formative assessment PD in both groups was based on the same framework (Ayala & Brandon, 2008) and the targeted content of patterns and functions and algebraic reasoning addressing several Hawai‘i content standards that teachers were expected to teach during the third quarter of the school year was the same for both groups.

To measure the growth of participants’ content knowledge for teaching, the University of Michigan’s Learning Mathematics for Teaching (LMT) instrument was administered at the beginning of the first summer (Pre-Test), again after one year of participation (Post-Test 1), and finally after the second year of participation (Post-Test 2). The LMT measures have been shown to be a significant predictor of student achievement (Hill, Rowan, & Ball, 2005). Gilbert, Olson, Olson & Slovin (2010) reported on comparisons between Pre-Test and Post-Test 1. This paper reports on comparisons between the Pre-Test and Post-Test 2, that is, comparisons between teacher content knowledge from the beginning to the end of the project.

The items on the LMT test are not released, and so we will describe the mathematical content of the tasks only in general terms and will not directly refer to any specific calculations or tasks. The specific LMT test chosen was Middle School Patterns Function and Algebra – Content Knowledge. Form A was administered as the Pre-Test and Post-Test 1 and Form B administered as Post-Test 2. All items on the assessment are constructed to highlight the content knowledge that is involved in teaching. The content strands of this test include items intended to assess a teacher’s fluency with determining and interpreting patterns, functions, expressions, equations, and representations. The instrument is in the form of multiple-choice questions. The Pre-Test was given at the beginning of June 2008, prior to any professional development activity, and Post-Test 2 was given at the beginning of May 2010 at the final follow-up session for the school year. (This was also the final year for the project.) During all but the follow-up sessions for the last year, project activities were conducted in separate FA and NAV cohort groups. Project teachers had participated in five days of cohort professional development in June 2008; five half-day cohort follow up sessions and at least three coaching visits from project staff during the school year 2008 – 2009; three days of cohort professional development in June 2009; and five half-day combined (FA and NAV) follow up sessions and coaching visits during school year 2009 – 2010. Not all participants were able to attend every professional development session, although a large majority of

² TI-Navigator™ is a networking system developed by Texas Instruments that wirelessly connects each student’s graphing calculator to a classroom computer.
participants were in attendance at every session.

RESULTS

Descriptive statistics for the Pre-Test and Post-Test 2 are given for both the FA and NAV group in Table 1. The two tests had different total scores so percentages are used. The correlation between the Pre-Test and Post-Test 2 for the FA and NAV groups were 0.483 and 0.789, respectively, indicating a stronger correlation for the NAV group. Paired T-Tests between Pre-Test and Post Test 2 for the FA and NAV groups, 0.051 and 0.072, respectively, indicated significant gains in content knowledge at the 0.10 level.

Table 1
Descriptive statistics for Pre-Test and Post-Test 2 (using percentages)

<table>
<thead>
<tr>
<th>Group</th>
<th>Statistic</th>
<th>Pre-Test</th>
<th>Post-Test 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA Group</td>
<td>Mean</td>
<td>67</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>67</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>93</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>45</td>
<td>56</td>
</tr>
<tr>
<td>NAV Group</td>
<td>Mean</td>
<td>72</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>78</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>97</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>45</td>
<td>30</td>
</tr>
</tbody>
</table>

A T-Test indicated no differences between FA and NAV on either the Pre-Test or Post-Test 2, although there was a significant difference (p < 0.05) between the groups on Post Test 1, with the NAV average greater. The correlation was 0.645 between FA and NAV on Post-Test 2. The overall scores were then disaggregated to examine the results on some of the individual test items. There were five questions for which the difference in percentage correct was 20 or more, with the largest difference at 35%. Four questions on the Pre-Test and five questions on Post-Test 2 were answered correctly by all FA teachers. No question on the Pre-Test and one on Post-Test 2 were answered correctly by all NAV teachers. Table 2 shows the relationship between questions answered correctly and the range of correct answers. The FA group answered four of the questions correctly less than 50% of time on the Pre-Test and three questions correctly less than 50% of the time on Post-Test 2. For the NAV group there were three questions on both test answered correctly less than 50% of the time. Thus, there were at several questions that were more challenging for the teachers.
Table 2:
Number of questions answered correctly in range of percentages

<table>
<thead>
<tr>
<th>Range</th>
<th>Pre-Test (29)</th>
<th>Post-Test 2 (27)</th>
<th>Pre-Test (29)</th>
<th>Post-Test 2 (27)</th>
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<tbody>
<tr>
<td>91 – 100</td>
<td>6</td>
<td>8</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>81 – 90</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>13</td>
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<tr>
<td>71 – 80</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>61 - 70</td>
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<td>3</td>
<td>1</td>
</tr>
<tr>
<td>51 – 60</td>
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<td>41 – 50</td>
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<td>3</td>
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<td>31 – 40</td>
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<td>1</td>
<td>0</td>
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<td>21 – 30</td>
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<tr>
<td>11 – 20</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

The percentage correct per question for each group on each test, along with the difference between groups is shown in Table 3. The correlations between FA and NAV on the Pre-Test and Post-Test 2 items were 0.717 and 0.645. However, on the Pre-Test there were eight items for which the difference in percentage correct was 20 or greater. The largest difference in percentage was 40%. The differences are reported only as positive values.

Table 3
Percentages correct per item on each test and comparisons by group

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Test Correct FA</th>
<th>Correct NAV</th>
<th>Difference</th>
<th>Pre-Test Correct FA</th>
<th>Correct NAV</th>
<th>Difference</th>
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<tr>
<td>1</td>
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<tr>
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<td>62</td>
<td>57</td>
<td>5</td>
<td>17</td>
<td>67</td>
<td>88</td>
</tr>
<tr>
<td>18</td>
<td>15</td>
<td>36</td>
<td>21</td>
<td>18</td>
<td>80</td>
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<td>85</td>
<td>79</td>
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<td>19</td>
<td>80</td>
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<td>20</td>
<td>62</td>
<td>86</td>
<td>24</td>
<td>20</td>
<td>73</td>
<td>88</td>
</tr>
</tbody>
</table>
**DISCUSSION**

The overall score for the aggregated scores on Post-Test 2 was respectable for both groups and two teachers in the FA group correctly answered all questions, while no teacher did so on the Pre-Test. Yet, there were five teachers in each group who scored less than 60% correct on Post-Test 2. Each group had significant gains at the 0.10 level between the Pre-Test and Post-Test 2. While the mean gain for the FA group, 11, was almost twice that of the NAV group, 6, there were no significant differences between the groups on Post-Test 2.

The overall scores, however, mask differences on specific items. Table 4 presents data on the nine questions that were on both the Pre-Test and Post-Test 2. On the Pre-Test the FA group scored higher on four questions and the NAV group scored higher on five questions. On Post-Test 2 the FA group scored higher on only three questions while the NAV group scored higher on six questions. The largest gain for each group was on the same item, one in which the average on the Pre-Test was less than 40% for each group. The FA and NAV groups scored lower on four and three items, respectively, on Post-Test 2. However, both groups’ scores declined on only one of the questions. Questions labeled 3, 4, 5, and 6 were all part of the same prompt and are related to identifying the type of equation that would be derived from a given pattern. It is interesting that five of the eight scores, two for FA group and three for NAV group, on these four items declined from the Pre-Test to Post-Test 2, dropping dramatically for the FA group on Question 6.

When examining the questions in relation to whether they address content taught in the seventh-grade curriculum, we find mixed results. Questions 1, 2, and 4 dealt with linear functions and the scores on these were high, with large gains from the Pre-Test to Post-Test 2 for both groups on Question 2; a large gain for the FA group and a small gain for NAV group on Question 4; and a moderate gain for the NAV group and moderate loss for the FA group on Question 1. These items align with seventh-grade standards in Hawai‘i. Question 9, examining the solution for an absolute value equation, which is also within the seventh-grade curriculum, was answered correctly 50% of the time or less on each testing, with the NAV group increasing and FA group decreasing from the Pre-Test to Post-Test 2. Question 7 examines solving an equation where division by zero must be considered. This content is not in the seventh-grade curriculum but had the highest gain from the Pre-Test to the Post-Test for each group.
Table 4:

Comparison of scores and gains on common items on the Pre-Test and Post-Test 2

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Test</th>
<th>Post-Test 2</th>
<th>Comparisons of Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Correct</td>
<td>Gain</td>
</tr>
<tr>
<td></td>
<td>FA</td>
<td>NAV</td>
<td>FA</td>
</tr>
<tr>
<td>1</td>
<td>92</td>
<td>79</td>
<td>87</td>
</tr>
<tr>
<td>2</td>
<td>54</td>
<td>57</td>
<td>73</td>
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<tr>
<td>3</td>
<td>77</td>
<td>57</td>
<td>73</td>
</tr>
<tr>
<td>4</td>
<td>77</td>
<td>86</td>
<td>100</td>
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<tr>
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<td>77</td>
<td>57</td>
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<td>7</td>
<td>15</td>
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<td>8</td>
<td>62</td>
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<td>67</td>
</tr>
<tr>
<td>9</td>
<td>38</td>
<td>29</td>
<td>33</td>
</tr>
</tbody>
</table>

The findings are interesting in light of the content and structure of the professional development that included two summer professional development experiences for a total of eight days, ten follow up sessions over two years, and also coaching for two years. With the emphasis on formative assessment focused on content directly related to the seventh-grade curriculum and the connection between this work and that assessed on the LMT, one might have suspected a larger gain between the Pre-Test and Post-Test 2. However, three considerations are in order. Some of the items on the assessment were less directly related to the seventh-grade curriculum, but still within the realm of expected teacher knowledge. Also, teachers’ prior conceptions of mathematics knowledge are just as difficult to change as are the prior conceptions of seventh-grade students. While the comparison of the same questions give us a starting point, the clustering of questions does not take into account the different modes in which the problems are presented. For example, while one question might look at linear functions from a table, another question might be based on a model or a word problem based in context. It is not surprising that scores on these items are not identical. Further work is being conducted to examine which parts of the professional development in the project may have contributed to positive changes, overall and on specific items, and which may not have played a large role.

REFERENCES


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Title of the submission: The Impact of School Structure on Vietnamese Senior Students’ Post High School Education & Career Aspirations

Topic Area: Education Policy and Leadership

Presentation Format: Research Paper

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Abstract:
In this qualitative study the researcher examined the impact of school structure on Vietnamese senior students’ post high school education & career aspirations. The study sample included 95 students from four different types of public high schools in Northern Vietnam. These included regular urban public high schools, public tracking high school, the center for continuing and technical/vocational education; and regular rural public high school. Based on previous studies, the conceptual framework of this study drew from the influence of the contextual factors of the larger system around the students. Data were collected from individual semi-structured interviews with the students.

Using the qualitative data analysis program, ATLAS.ti, the researcher analyzed how the structure of each type of school influenced the students’ decision-making process and their future choices regarding post high school education and career aspiration. The results showed that there was a disparity between the students of center for continuing and technical/vocational education and the students of the other public schools in terms of the career aspiration and post-secondary educational choices. However, there was a much deeper gap between the students that were from the tracking school compared with those of the regular public schools in terms of the students’ ability to make the well-informed decisions about their future post high school. In conclusion, the researcher suggested an intervention program in the public high schools system in Vietnam in order to help the senior students make sound decisions for their future.
The Impact of School Structure on Vietnamese Senior High School Students’ Post High School Education & Career Aspirations

Thuy T. La

This paper reports the findings of school structure influences on Vietnamese senior students’ post high school educational and career aspirations. Using a qualitative approach, the author examined how these four different types of public high schools in Northern Vietnam: regular urban public high school; public tracking high school; center for continuing and technical/vocational education; and regular rural public high school affected students’ choices of post high school education and career aspiration.

The theoretical framework for this study was based on three conceptual themes prevalent in the research of students and their academic and career choices. These themes are contextual factors, individual factors, and gender. Contextual factors are factors over which students have no control, such as socioeconomic status, school structure, school support, parental and community support, cultural beliefs and peer influences. Individual factors refer to students’ personal values and beliefs, feeling of self-efficacy and academic achievement. Gender, given its unique position in relation to these two groups of factors, becomes a theoretical framework. In this paper, the researcher specifically presents the results on how the school structure had an impact on Vietnamese senior high school students’ post high school aspirations regarding their secondary education and their careers.
Previous research has found that the type of schools students attend, the socioeconomic status (SES), and societal beliefs have considerable influence on their career and academic decision-making (Aypay, 2003; Dang, 1992; Davey, 1993; Gaunt, 2005; Moenjak & Worswick, 2003). Researchers (Moenjak & Worswick, 2003) showed that SES was a factor in the choices of an individual’s general or vocational education. They found that the rate of earnings returned for general and vocational education and the factors affected Thai students’ choices of vocational or general education. The sample population, aged between 15 and 60, was drawn from the Thailand National Labor Force Survey for the years 1989 to 1995. The sample included individuals who had the highest level of education in upper secondary education or vocational education and who were employed in the time frame of the study. The researchers’ empirical model showed that the individuals of higher SES status, regardless of gender, were more likely to pursue higher vocational education than general education. However, in the recent years, fewer individuals chose vocational education because of greater access to tertiary education.

Research also suggested that students who had socio-economic advantage intended to choose non-technical vocational schools more often than students who came from lower socio-economic families (Guant, 2005). The results were based on the analysis of characteristics of socioeconomic background and the academic standing of the students who enrolled in Career and Technical Education (CTE) programs; the students’ perceptions of career and technical education; and the factors that influenced students’ in their decision-making process in career and technical education. Using survey research, the researcher studied a sample of 451 senior public high school students in Michigan. The results showed that non-CTE students had higher grades in comparison with the CTE
students. The results also revealed a significant number of non-CTE students lived with both their parents while the CTE students lived primarily with one parent, relatives or other adults, and the economic situations of the non-CTE students were overall better than the CTE students (Gaunt, 2005, p. 80). The findings suggested that senior high school students in both CTE and non-CTE programs perceived that career and technical education has positive image. The students perceived that “CTE is needed for students of all abilities” (Gaunt, 2005, p.105). Several factors were identified that significantly influenced students’ CTE decision-making including: parents and friends, a tour to the CTE center at 10th grade, the time to travel to the CTE center, and the opportunity to receive college credits (Gaunt, 2005, p.116).

Living in an urban area is an advantage for high school students when it is the time for them to make their choices of general or vocational schools. Aypay (2003) studied the factors that affect the students’ choice of vocational school or general high school in Turkey. Data was collected on background variables, personal and academic variables and parental involvement. The findings showed that there were differences between general and vocational high school students in terms of background, academic variables, family characteristics and occupational expectations. Students in the urban areas were more likely to go to vocational schools. The findings also suggested that mothers’ work had positive influence on students’ vocational school preferences and that academic factor, occupational choices, and living in an urban area had a positive effect on students’ choices of general or vocational high school.

Having limited vocational skill is a factor that contributed to the youth’s career decision-making. Dang (1992) suggested that a pressing concern for the youth in rural
Vietnam is that a majority of them do not have vocational skills. In the rural areas, the traditional belief is that there is no need for people to learn about farming and raising cattle because this is knowledge and experience is passed down by previous generations. This extends to a general diminishment of the importance of education and limit opportunities for any formal schooling. Many youth in rural areas do not have vocational skills and are very unfamiliar with technology. Thus, they are often unprepared for non-agriculture work and unequipped to deal with technology. Finding a job and retaining a job becomes a pressing concern for rural youth. Many youth need jobs but they do not have the vocational skills to qualify for a job. The researcher suggested that solving this problem would require new policies to change the social and employment structure to expand educational opportunities in rural areas. This study emphasized that it is essential that rural youth be provided opportunities for their vocational training and for obtaining employment (Dang 1992).

The change toward market economy plays a powerful influence on students’ educational and career decision-making. Regarding the relationship between students’ occupational aspirations and interests, Davey (1993) found that the majority of students showed a high level of consistency in the interests reflected by their desired and expected occupations, however, other students tended to choose careers with higher income over their interest. This is consistent with a study of Vietnamese high school students. In a study of 300 senior class students in the northern part of Vietnam, using qualitative approach, (Tran, 2002) found that the students identified three main preferences when choosing a career. First was a career with high-income, second was a career that suits one’s ability, and third was a career that is highly valued by the society. This suggests
that most high school students aspire to a career based on the economic reasons rather than on their own interests.

Ngo (2005) identified a number of factors that he believes contribute to the career decision-making of Vietnamese people: the diploma doctrine, the decision between job or income; the career belief; family and society's perspective on career; schools and business organizations and entrepreneurs. Ngo (2005) pointed out that in Vietnam, as other countries, the pressure of getting a diploma exists in education, training and the workplace. The diploma doctrine plays a profound influence on the Vietnamese peoples’ decision-making regarding vocational orientation and vocational education (Ngo, 2005, p. 178).

As Ngo (2005) suggests, historically, the diploma doctrine originated from Confucianism and feudal education. Researcher pointed out that a diploma consists of two important elements, professional certification through training and education, and social status. Traditionally, Vietnamese people have held strong beliefs that society values people with higher educational status. This factor has had great impact on the decision-making of many people regarding their career and educational plans. It is why many high school seniors chose to go to college rather than attend vocational and technical schools. They regarded vocational education lower status in society. Ngo (2005) stated that career conception is a complicated in Vietnam because it is an abstract idea. This is especially true for the people in the metropolitan areas where there are different kinds of jobs and people have difficulty making career decisions (Ngo, 2005, p. 178). Social norms, such as what is considered a career, what is not, what it means to be successful or not successful, what is a noble job, what is not, gender, age, beliefs,
ethnicity all influence a person’s decision about his/her career (Ngo, 2005). Overall, previous studies suggested the more support students receive, the higher the family’s SES, and students from urban areas tend to choose higher education and professional careers, while those from rural areas, homes with lower SES or little parental support choose to go to work or pursue a vocational occupation.

In this study of the school structure influence on Vietnamese senior high school students’ education and career aspiration, the researcher interviewed students from the four types of schools, urban high school, tracking high school, center for continuing and technical/vocational education, and rural high school. There were total of 95 students. The four types of schools were selected for the study since they are representative for the general public high school system in Vietnam. Although using the same national curriculum, these schools differ in the approaches they deliver the curriculum to their students and in the organization of the programs and students’ placement. In the regular high schools, including rural and urban high school (trường phổ thông trung học công lập), students take general courses dictated by the national curriculum. Students have to pass an entrance exam by the provincial Department of Education in order to enter this school and matriculate for three years. Students do not specialize in a specific area of study.

In the tracking high schools (trường phổ thông trung học chuyên) which are similar to American magnet schools, students take a specialized course of study over and above the general curriculum. The standards are higher and more rigorous that than of the national standard. Students must pass an advanced admission exam organized by the provincial department of education instead of a regular high school entrance exam.
Students in the tracking school are expected to achieve above average academic progress and participate in the national and/or international academic contests. The program of study lasts three years. Depending upon the school, the specialized study academic study areas vary. In this study, the selected three tracking schools offered different subjects to their students. Two tracking schools offered six tracking subjects: Mathematics, Physics, Chemistry, Biology, English, and Literature. The third tracking school offered nine tracking subjects: Literature, Mathematics, Computer, Physics, Chemistry, Biology, Russian, English and French.

The center for continuing and technical/vocational education (trung tâm giáo dục thường xuyên và dạy nghề) is exclusively for adults who want to pursue a high school diploma but did not pass the entrance exam for the general public school, or for adults who are older than the general high school students’ age. The curriculum is nationwide but the standard is less rigorous and shorter in comparison with the regular high school and tracking high schools. The matriculation period is shorter as program runs two years.

All nine schools were chosen based on the diversity of their locations in terms of socioeconomic situations, and their school types. They range from urban and rural general education schools to vocational education. Tables 1, and 2 below present the demographic information of the participants.
Table 1: Participant

<table>
<thead>
<tr>
<th>Numbers of students</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>63</td>
<td>Urban residents</td>
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<tr>
<td>32</td>
<td>Rural residents</td>
</tr>
<tr>
<td>48</td>
<td>Regular public school students</td>
</tr>
<tr>
<td>25</td>
<td>Center for CE &amp; VO students</td>
</tr>
<tr>
<td>24</td>
<td>Tracking school students</td>
</tr>
</tbody>
</table>

Table 2. School enrollment (school year 2007-2008)

<table>
<thead>
<tr>
<th>School type</th>
<th>Total number of students</th>
<th>Total number of seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular public high school in urban</td>
<td>5506</td>
<td>1871</td>
</tr>
<tr>
<td>area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tracking school</td>
<td>4513</td>
<td>1553</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>2250</td>
<td>374</td>
</tr>
<tr>
<td>Center for Adult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular public high school in rural</td>
<td>4861</td>
<td>1680</td>
</tr>
<tr>
<td>in rural</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The researcher sought to determine whether upon their high school completion the school structure influenced students’ education and career aspiration, and which type of school provided more support to their students regarding their educational and career
choices. The analysis was based on the interview transcripts using a multi-level coding with the use of Atlas.ti software, a qualitative data analysis program. Analysis revealed the most influential codes to the research questions: the School Support, and Teacher Advice.

The results showed that there were extremely limited student support programs in the regular public high schools helping them make post high school educational and career choices. Occasionally, the school would invite parents and community members to talk with students about careers, however this rarely occurred. For example, in school A, Province A, students had a one-time opportunity in a year shortly before their high school graduation exam to attend a meeting about career and educational opportunities from several community members. Majority students perceived lack of student support an obstacle to their ability to make a sound decision for their future. However, a small number of students did not see this as a problem. As this student put it.

“My school might have the vocational, technical and career guidance activities, but I don’t really care about because I have already chosen a career for myself.” (P31: HS0321, male student, regular urban high school, interview transcript)

Other students credited their teachers with providing information and support. One student said: “In my school, there are some teachers who help us with educational and career guidance. They help us choose a suitable school and a career… based on their knowledge about our ability” (P 3: DHA0424, male student, interview transcript). “Sometimes teachers will talk with us and give us helpful advice”. (P 4: DHA0524, male student, rural public school, interview transcript)
Among the four types of schools, students in the tracking school received more support from their schools and their teachers than their peers in other schools. More than half of students in the tracking schools indicated that they received advice from their teachers in making decisions for their future. The tracking high schools also provided support through organized meetings for their students. The students reported that tracking high schools and the centers for continuing and vocational/technical education provided more support and advice for students more than the regular urban and rural public high schools. Students in the tracking high schools and centers for continuing and vocational/technical education high schools mentioned that they had some form of vocational, technical and career guidance in their high schools. As this student stated about her vocational school:

The center for continuing and vocational/technical education has many different vocations we can pursue, such as tailoring, cooking, auto repair. Students can immediately get a job and earn money after they take these [vocational] courses at my high school. I think my school show that going to college is not the only choice. Students can support themselves financially by taking vocational courses (P80: CHS0413, female student, interview transcript, center for continuing and vocational/technical education).

However, a majority of students indicated that they did not received adequate support from their schools to help them in making their post high school’s education and career decisions. As this student said:

In my school, sometimes we have meetings and some people in community are invited to talk to us about career, but the meetings are too infrequent and vague. I
want more information about educational planning and career possibilities. For example, I want to know if I study this field, what will be taught in the college, what I can do with that kind of degree. At this time, I know just a little about some careers, basically from people who are my acquaintances (P30: HS0312, male student, interview transcript, tracking high school).

A rural public school girl echoed similar sentiments:

I think students in urban areas have more advantages than we do here. We even do not know what to do if we go to college. What can we do with those degrees? We just want our school administrators to provide us with more updated information about universities and colleges, and more materials so that we can read and learn about those schools in order to make our choices about our educational plans and career” (P114: HS0114, female student, rural public high school).

Students in urban and tracking schools expressed different choices when compared with the students in the center for continuing and vocational/technical education and rural schools. Students in urban public high school and tracking high schools chose careers that were oriented toward the economic sector, accountant, banker, economist, finance specialist, foreign trade, and polytechnic engineer. Other popular careers were law, travel, architecture, research, diplomacy, translation, customer officer, marketing agent, and journalism. On the other hand, students in the rural schools and centers for continuing and vocational/technical education chose the careers oriented toward social sectors. They aspired to become medical doctor, construction engineer, business administration, beauty
salon worker. Less popular careers among this group were actress, actor, interior designer, nurse, cook, auto electricity mechanic, entertainer, and agriculture specialist.

In summary, students in the urban and tracking high schools aspired to the careers that required at least four-year college degrees. These students need to take entrance exam to prestigious colleges, in order to pursue and be successful in their careers. On the other hand, students in the rural public high schools and centers for continuing and vocational/technical education tended to choose careers that do not necessarily require a college degree. Except for few students that aspired to become medical doctor, business administrator, and as construction engineers, majority students chose the professions that they only need to attend some professional training instead of going to four-year college.

Students in the urban areas reported to have more access to information and resources regarding educational and career plans they aspired to. This understandably leads to having more advantages in knowing which colleges or vocational technical schools they could choose to study, or which careers are available and popular in society. Rural students, on the other hand, have limited resources and limited information access. More than ninety percent of students in rural area do not have access to computers or printed media. They mainly learn about the educational and career opportunities from their schools and their peers.

The findings from the study suggest that unless students can see the benefits of taking vocational and technical education for their future plans, they will not perceive it as a viable career path or option to pursue. The results suggested that an intervention program is necessary to help Vietnamese senior high school students change their values and beliefs about educational and career choices. The intervention will require new
practices at schools, both in the middle and high school levels. These intervention should include the need to have a counselor with adequate knowledge about vocational and technical education, and with adequate skills to help support, provide guidance, information for students to aid them in their educational and career decision-making process. The intervention should involve middle school and high school teachers in a training program specialized in helping teachers gain the knowledge and skills necessary to advise their students in planning for their futures. It is suggested that counseling program and teacher professional training in vocational and technical education and career guidance training should begin as soon as possible when students begin their middle school. Through appropriate teacher and counselor training, and activities such as workshops or seminars for parents and students on topics of educational and career choices, this intervention will assist students and parents to become more aware of current educational and career opportunities and to be able to help the senior high school students make well-informed decisions regarding their future upon high school completion.
References:


Tran, Q. T. (2002). Định hướng giá trị nghề nghiệp của học sinh lớp 12 trung học phổ thông một số tỉnh miền núi phía Bắc (The orientation of career values of senior high school students in some Northern provinces of Vietnam). *Tạp chí Tâm lý học (Journal of Psychology), 8*
1. **Title:**

The impact of professional development on the learning outcomes of teachers and their ELL students

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6. **Abstract:**

This presentation explores the relationship between the professional development (PD) experience of teachers and the learning outcomes of their ELL students. Through a 15-week online course, teachers in K-12 learned the Actual Community Empowerment (ACE) Reading methods and applied them to 1-7 selected ELL students for their case studies. In Fall 2009 and Spring 2010, 44 teachers participated in our PD courses and implemented ACE Reading programs with 103 students. The teachers’ learning outcomes were measured by their portfolios and survey responses submitted at the end of the semester. The students’ outcomes were measured by reading fluency for younger students and also by reading comprehension for older students. The overall data demonstrates that the PD course has a positive effect on the teaching practices of the teachers as well as the reading achievement of students across a range of grade levels, schools, and contexts. A short video clip on a tutoring session will be presented, and representative data from teachers’ responses and case studies will also be shared.
The Road Less Taken:

A Qualitative Study of Christian Homeschooling in Taiwan.

Abstract

In the homeschooling literature, a wide range of studies have been conducted to investigate homeschooling in the United States; however, only a few studies found are related to homeschooling in the Eastern Asian contexts. With regard to homeschooling as an increasingly popular educational choice in Taiwan, particularly among Christian families, this study attempts to examine how Christian homeschooling works in Taiwan by investigating the intentions, challenges and implications of homeschooling practice. The qualitative research method of Elliot Eisner’s educational criticism is used to collect and analyze the data. Through this qualitative inquiry, several important themes emerged from this study, including learning by homeschooling, family involvement, time flexibility, character training, uncertainties about the future, and the combination of family, religion, and education in homeschooling, among others. Furthermore, this study indicates the challenges of homeschooling and discusses this educational choice as the road-less-taken in Taiwan.
Introduction

Among various kinds of alternative education in the USA, homeschooling has been prevalent for decades. Between 1999 and 2003, both the number and the proportion of homeschooled students increased: there were approximately 1,096,000 homeschooled students in 2003, an increase from the estimated 850,000 students in 1999 (Princiotta & Bielick, 2006). In response to this phenomenon, numerous studies have been done on homeschooling in the United States since 1919, according to Dr. Robert Kunzman’s review (2009). However, based on the results of the database of ProQuest Dissertation & Theses (PQDT), only a few studies found are related to the homeschooling in the East Asian contexts, particularly in Japan, South Korea, and Taiwan¹. Therefore, this study is designed to explore how Christian homeschooling works in an East Asian context like Taiwan and what kind of challenges the homeschoolers face in their homeschooling. It attempts to reveal the practice of Christian homeschooling in Taiwan and will hopefully contribute towards the enrichment of the relevant literature.

Research Questions

With regard to homeschooling as an increasingly popular educational option in Taiwan, especially among Christian families, the following primary questions are used to guide and this study:

1. What are the reasons and goals of Christian parents in Taiwan to choose homeschooling for their children?
2. What are the important themes which emerged from this study?
3. What are the educational implications of Christian homeschooling for education in Taiwan?

Methodology

The qualitative research method of Elliot Eisner’s educational connoisseurship and criticism (Eisner, 1998 & 2002) is used to collect and analyze the data. Educational connoisseurship and criticism requires the researcher to play both roles: to appraise the qualities of homeschooling as an educational connoisseur and to make the appreciation public as an

¹ By the end of 2009, the only dissertation found about Japanese homeschooling is “A case study of the drop out problem in Japan and homeschooling as a possible policy response” (Aso, 2005), which is case study that suggests Japanese educational policy makers should consider homeschooling as an alternative to alleviate the persistent drop-out problem in Japanese schools. The only dissertation found about Korean homeschooling is “Contested motherhood: Self and modernity in South Korean homeschooling” (Jung, 2008), which is an ethnographic study of how the homeschooling mothers transform their motherhood and develop their potentials through homeschooling in South Korea. There is no homeschooling study found in relation to homeschooling in China or North Korea in the East Asia area.
educational critic. The structure of educational criticism, including description, interpretation, evaluation, and thematics are applied to appraise the information of homeschooling. Besides, the qualitative research technique of participant-observation is largely employed in this study. Along with the observations, the results of interviews with the homeschooling parents are also used for data analysis.

**Data Sources and Expected Outcomes**

Four voluntary Christian homeschooling families in Taiwan were studied. Only one of the families is presented for in-depth analysis in this paper, while the others were used as other data sources in triangulation to increase the validity of this study. I chose the family who has been homeschooling their four children for ten years.

<table>
<thead>
<tr>
<th>Family #1</th>
<th>Phil &amp; Chelsea</th>
<th>1. Cindy (♀): 13 year-old, 7th grade</th>
<th>2000-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2. Lily (♀): 10 year-old, 4th grade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Jimmy (♂): 7 year-old, 2nd grade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Tony (♂): 5 year-old, preschool</td>
<td></td>
</tr>
</tbody>
</table>

After explaining my study to the homeschooling parents and then obtaining their consents, I spent almost the whole week to interview the parents and to observe their homeschooling. In addition to the scheduled visits, I was invited by them to join their family activities, including biking and family worship time.

**Discussion of Emergent Themes**

After analyzing the data, several emergent themes are found in this study, including learning by homeschooling, family involvement, and uncertainties about the future (not in the order of importance).

**Learning by Homeschooling**

Homeschooling is not simply an educational experience for the homeschooled children; it is also a great learning experience for the homeschooling parents based on my interviews and the observation. The parents are also in the process of learning to better their homeschooling. For the homeschooling schedules, for example, Chelsea’s family had a less structural schedule when they started homeschooling, as they used to cross out the items on the to-do lists (only the subjects were written). However, they found it would be more efficient if they added the timetables on their daily schedules, so their time schedules became more structural with both subjects and time written.
In addition, the parents can also learn something new from or with their children in homeschooling, literally. In this family, I noticed that Chelsea was learning skating from her daughter and Phil was learning the violin with his son in the first family.

**Family involvement-Housework**

Chelsea kept working after marriage, but she quit her teaching job after the parental leave for her oldest child. She mentioned that her family chose their current home in accordance with their homeschooling. It seems the homeschooling mother thinks more highly of education and the time with her children than of her careers. So she would give up her teaching career for education as she indicated that the time the parents could spend with their children is limited.

The parents also train their children to do housework at home. Chelsea’s children always have to do the housework together (except for the youngest) after lunch during the week. In contrast, it is not uncommon that many parents in Taiwan would do all the housework in order to save time for their children to study or do schoolwork. In homeschooling, homeschooled children are given more opportunities to do housework than schoolchildren.

Based on my observation, the homeschooled children tend to have a positive and caring attitude toward younger children. The three oldest children in this family enjoy waking up their youngest brother and playing with him. The older children are also willing to help their younger siblings in times of need. When the youngest boy wanted to go to the bathroom or need some help, the older sibling would be active to give him a hand. Because the homeschooled children spend most of their time at home, they are given more opportunities to observe the growing process and the needs of a younger sibling. Thus, homeschooling allows the children to be focused on the family and be familiar with the child development process.

**Time Flexibility**

In the book, *The Christian Home School*, Gregg Harris indicates that one of the strong advantages in homeschooling is “the flexibility it allows in the educational process” as he explains, “In school, teaching is strictly confined to the classroom setting and the prescribed hours of attendance. In the home, however, there are constant learning opportunities” (Harris, 1995, 61). Likewise, time flexibility is demonstrated to be one of the greatest advantages revealed by the homeschooling family I studied.

The use of time can be individualized for children’s learning. Time flexibility is also related to the characteristic of one-on-one instruction in homeschooling. This individualized
instruction has become a considerable advantage of homeschooling. Compared with schoolteachers who have to take care of a class of students, these homeschoolers have more time flexibility for individualized instructions to fit each child’s needs in teaching and learning.

In addition to time flexibility in learning, homeschooling is flexible for family time. The focus of children is on the family and they are following the family’s schedule, rather than the schools’. The family may go for trips during the school year according to their family schedule.

**Freedom to Include Religious Education and Character Training**

In Taiwan, religious education has been omitted consciously as “null curriculum” in schools in Taiwan (Gong, 1998) owing to various political and cultural factors (Tung, 2004). In order to maintain the separation of church and state, religious education is officially prohibited in public schools of Taiwan (Huang, 1994), not to mention Christian education. Thus, many Taiwanese homeschoolers resort to homeschooling in order to provide their children a better religious or moral education (Lee, 2005; Kung, 2005).

In my study, the parents revealed the advantage of being able to cover religious education and character training in their homeschooling. Their religious education include daily reading of the Bible, memorizing biblical verses, attending Sunday services, joining church groups and activities, and giving tithes. The homeschooling mother hopes to mold her children’s character based on the teaching of the Bible through homeschooling. The homeschooled children are asked to give tithes, as one of the Christian religious practices for example, after they receive pocket money or salary. Moreover, the parents also agree that the reading of the Bible along with the character training should be prioritized to the study of knowledge, as the homeschooled children have the Bible reading on a daily basis.

The family simply uses the school curriculum at home. They can get textbooks from local public schools for free, though they are not given answer keys or teachers’ guides. Nevertheless, the homeschoolers have the freedom to select or change the content of the school curricula based on their needs or beliefs.

**Burnout Situations**

On the recommendation of the mother, I added a crucial question about how the homeschooling family deals with burnout situations, because she saw many families were unable to continue homeschooling because the parents did not deal with their fatigue in homeschooling properly.
In facing burnout situations, Chelsea said she would spend quiet time in the morning to regain her energy and refresh her motivations for homeschooling, “Every morning I have a walk and pray in the garden for about 30 minutes before kids get up by 7:00 am. If I’m too tired to get up earlier, I’ll take Tony [the youngest child] out for a walk in the evening instead. By doing so, it decreases my frustration and distress levels. It’s kind of exercise too….. “ Chelsea also mentioned that on Saturday morning (except for the weekend I visited, because her husband attended a church event, Fathers’ School), her husband would take care of all the children, so she could go to the prayer meeting in church and renew her strength then.

As an educational minority group in Taiwan, the homeschoolers strive to look for resources and support. They also have to keep strong motivation for homeschooling and to deal with their burnout situations effectively, so that they can continue in spite of the challenges or pressure encountered.

Uncertainties about the Future

The parents think highly of their homeschooling and they would like to homeschool their children through the 9th grade, if possible; however, it is found that they have uncertainties about the homeschooled children’s future education in Taiwan, especially for senior high school and higher education. Chelsea shared that her oldest daughter went back to school in the 6th grade and then she graduated from elementary school with honors (as one of the top students in her class). Chelsea pointed out a fact: if the girl had remained homeschooled at that time, she would not have received any award when graduating from elementary school. Chelsea expressed her appreciation for doing homeschooling as a calling entrusted by God, but she is also concerned whether her children can go back to regular public schools without any administrative problems in Taiwan in the future. She further indicated, “I’m often wondering whether diploma is important or not, because it may be risky to homeschool in Taiwan. We’re so concerned that our decision to homeschool may ruin my children’s future.”

In Taiwan, it seems both the homeschoolers and the homeschooled children have to make a choice by themselves when it comes to education: whether they choose to continue homeschooled or not. In contrast, schoolchildren can simply follow what their teachers prepare for them: taking exams after exams and passing the centralized exams to get into top schools and receive diplomas as an advantage for getting a good job. The homeschooling families in Taiwan also may need to face the pressure because of choosing homeschooling, as people around
(relatives, schoolteachers, and the public) may not always understand or accept homeschooling as a desirable educational choice. Accordingly, the homeschooling families in Taiwan have to think their educational choice thoroughly; in addition, they need to keep clear and strong motivations for their homeschooling decision, as it is revealed in the family I studied.

Support Groups

The family participates in a Christian homeschooling association in Taiwan. In addition, all of them also join church services on Sunday and various church groups as well as activities, such as the family groups, worship team training, Sunday schools. It is noticeable that church life has become a crucial part of these homeschooling families both in their family life and homeschooling. Constructive aspects of the family relationships are reinforced, such as love, respects, obedience and responsibility etc.

For all of the children (except for the youngest), they participate in diverse homeschooling study groups or enrichment classes. While waiting for their children in classes, some homeschooling mothers have also established relationship and share their homeschooling experience as well as resources with one another.

Chelsea mentioned that she has learned from other homeschooling familise, including the parts of teaching and discipline, for a more effective homeschooling. For example, she’s learned to prevent her children from saying bad words by spraying vinegar on their tongues if her children do so. She also consulted with more experienced homeschooling parents how to teach certain subjects in more effective ways.

Family-Religion- Education are Combined Together in Homeschooling

The parents mentioned that the primary reasons for their homeschooling include religious education and family concerns. Phil used a metaphor of putting stones of different sizes into a bottle to explain his idea about homeschooling: the order should be big stones first, then small ones, and last sand. “During the homeschooling days, we can put the biggest, the most important stones as the foundation first. Both my wife and I feel that we don’t put the big stones properly in our children’s lives yet,” Phil said. When asked what the big stones are, Phil pointed the following out: good character, loving relationship among siblings, passion for learning, and development of individual talents.

According to the literature review, the religiously motivated parents in the USA tend to consider secular humanism and student immorality as characteristics of public schools, so they
choose to take the responsibility of education and intend to operate home schools as a better educational environment for their children (Knowles, Marlow & Muchmore, 1992, p. 196-197). In a similar way, the parents in my study also shared the idea that the responsibility of children’s education is in parents, not in the government.

In addition to the awareness that educational responsibility for children is on parents, these homeschooling families also emphasize a family-centered lifestyle. The family has regular family religious activities, including attending Sunday service together and weekly family worship time on Sunday night. The parents indicated the important influence of family on children while they are growing; therefore, they would like to take advantage of time with their children and to be actively involved in their children’s education.

Furthermore, being family-centered and Bible-based are the two most fundamental characteristics of homeschool education in the family. In other words, homeschooling is chosen and developed by these families to be a holistic education merged with family-centered education and religious education. In terms of being holistic, the parents agreed that character training along with reading the Bible as a part of religious education is more significant than academic learning. The idea of “studying is the only noble thing to do” under the influence of Confucian tradition is still prevalent in the Taiwanese society; accordingly, school students place their main focus on academic study and receive test-taking skill training. Contrary to the focus on studying and test-taking in school, the homeschooling parents prioritize the character training and learning of the Bible in their homeschooling. To be more specific, their character training is primarily based on the teaching of the Bible.

The parents also have to cooperate and support one another throughout their homeschooling operations as they share the homeschooling duties as well as housework. In this family, the father is responsible for teaching the children math and abacus calculation (along with grocery shopping and making breakfast), while the mother takes care of teaching the rest of the subjects, including Chinese, English, history etc., along with making meals and doing laundry. The divisions of homeschooling teaching may vary in different families; however, the leading of the family worship and the ultimate decision making are always done by the fathers in each of the homeschooling families, as they are following the teaching of the Bible, “For the husband is the head of the wife as Christ is the head of the church…” (Ephesians 5:23).
In conclusion, the combination of education, family (family-centered lifestyle), and religion (Christian belief) in homeschooling can be illustrated as a Venn diagram below:

![Venn diagram](image)

Figure 1: A: Religion; B: Education; C: Family; the center: Homeschooling

**Social Relationship**

On top of diploma issue, another commonly asked question is socialization in homeschooling. Based on my observation, the family has a positive parent-child relationship and that between the siblings. The parents think that the foundation of social relationship is in family. As they indicated: they believe that once their children can get along with their family members who they can not choose, they can get along with any friends who they may be able to choose.

One of the most important socialization lessons for the homeschooled children is to share the space with their siblings. For instance, when Cindy was playing the piano in the living room, her youngest brother was playing with his toys quietly by himself. Meanwhile, two other siblings, Lily and Jimmy, were studying by themselves regardless of the sound from the piano. The homeschooled children have to learn to perform different tasks at the same time sharing the space.

Besides, I also noticed the homeschooled children know how to coordinate when there is time conflict in sharing the space. For example, I observed when Lily was listening to the English CD by using the audio equipment in the living room, her brother, Jimmy, chose to work on his English at the dining table.

In addition to good relationship at home, the homeschooled children seem to have a good relationship in school when they are back to school. Cindy went back to school for a whole year.
According to Chelsea, she got along with her classmates during the time in school. As mentioned, the homeschooled children also participate in study groups and relevant activities. Since all of these study groups are mixed-aged, the older children are exposed to many opportunities available for taking care of the younger ones as part of their socialization development in various study groups and activities.

**Conclusion**

Though homeschooling is not the mainstream educational choice in Taiwan, it is worthy of notice that it is becoming increasingly popular. More parents show their interest in homeschooling and some of them already chose homeschooling as a better educational way for their children. Besides, good character, loving relationship among siblings, passion for learning, and development of individual talents. These reasons and the increasingly popular homeschooling movement can be taken as an opportunity to examine public school education in Taiwan and hopefully to improve some of the existing deficits in school.

In addition, many homeschooling parents interviewed indicated that the focus of school education in Taiwan is primarily academic performance and test-taking skill training. It would be a great waste if education is limited to the studying of books as emphasized in Taiwanese traditional education.

In conclusion, the Christian parents attempt to raise faithful children with good character and high motivations for learning through homeschooling. Besides, the family continued to homeschool for time flexibility, freedom to provide their children with religious education, and the fact that homeschooling is family-focused. Nevertheless, the homeschoolers are also concerned about their children’s future in the educational environment in Taiwan because they expressed a sense of uncertainties for whether their children are able to go back to regular public schools without any problems with administration, particularly above the 9th grade.

The findings of this study about Christian homeschooling, including the emphasis of a family-centered education, the close relationship between family members, and the fact that socialization is not a problem in homeschooling, also provide new empirical evidence for a better understanding or further acceptance of homeschooling in Taiwan.

The homeschooling parents in this study are not anti-school or holding unschooling attitudes; on the contrary, they are highly concerned about their children’s education. They are adding or prioritizing something good in education with an attempt to make it more holistic by
means of homeschooling. It is significant to clarify because the relationship between regular schools supported by the government and self-dependent homeschoolers should not be competitive or in a tension. The ideal scenario is to have a cooperative and supportive relationship between schools and parents (homeschoolers) for the best profit of children, particularly for the homeschooled children, as they choose a less-taken road (homeschooling) in Taiwan.
References


A Study of 8 Fundamental Moral Characteristics among Thai Undergraduate Students

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Abstract
The objective of this study is to explore the eight fundamental moral characteristics of undergraduate students in order to benefit instructional model development. The eight moral characteristics are diligence, frugality, honesty, discipline, politeness, cleanliness, unity and generosity. The study findings rank these eight moral characteristics from the highest to the lowest as follows: politeness (4.35), generosity (4.14), honesty (3.96), unity (3.90) cleanliness (3.883), discipline (3.72), diligence (3.48) and frugality (3.46). With the moral characteristic data provided by this study, teachers can develop instructional models and activities inside and outside of the classroom in a more targeted manner.

Introduction
The Thai Ministry of Education has established an urgent policy reforming the education system with moral characteristics having priority over knowledge. With a sense of awareness of the sufficiency economy philosophy, harmony, peaceful actions and democratic practices, it is believed that students will mature into content, knowledgeable, morally sound individuals. To this end, educational institutions of all levels are required to instill in their students the following eight fundamental moral characteristics:

1. Diligence: A diligent person is the one who is determined to engage in positive and proper endeavors. He is hardworking, perseverant, willing to face obstacles and appreciative of the work he is in charge of.
2. Frugality: A frugal person is the one who leads a simple life and in awareness of one’s status. He thinks before spending and knows how to save.
3. Honesty: An honest person is the one who remains true to his duties and profession. He is punctual and carries out his duties to the fullest.
4. Discipline: A disciplined person is the one who acts within the boundary of regulations imposed by the educational institution, other agencies and the nation.
5. Politeness: A polite person is the one who acts humbly in accordance with the circumstances. He is the one who is not aggressive.
6. Cleanliness: A clean person is the one who keeps his body and mind clean.
7. Unity: A united person is the one who has his mind open to the opinions of others. He is aware of his role as a good listener and follower.
8. Generosity: A generous person is the one who does not concern himself with only himself and his business. He is considerate to others.

Teachers are important individuals who can influence changes of behaviors in the students. One of their responsibilities is to instill in the students an appreciation of moral characteristics and morality, as well as the proper values. The same is true for teachers at the university level. In fact, it is even more important for them to help in this area inside and outside of classrooms. Teachers need to pay attention to their students and be perceptive to signs indicating the urgent need for intervention in order to ensure that the students are not lacking any moral characteristic. The following ideas should be observed by the teachers when engaged in this effort:

1. All teachers are a role model for moral characteristic. They are a living instructional material the students can readily imitate.
2. Moral characteristics should be taught integratively in other lessons. All learning activities need to incorporate a basic moral characteristic such as diligence, honesty and frugality.
3. A supportive environment is required for the development of moral characteristics. Praises and recognition provide valid meaningful incentives to encourage most students to elevate themselves to the social norm of the institution.
4. The politeness, gentleness and kindness offered by the teachers will help the students open up and develop moral characteristics more easily.
5. Teachers need to be perceptive and able to identify normalcy or signs of threat in the students in order to implement a preventive or corrective measure in a timely manner.

Given the above reasons, the researcher is interested in the study of eight moral characteristics of undergraduate students in order to obtain the data necessary for the development of instructional activities and virtuous, competent students in accordance with the policy of the government.

**Study Design and Data Collection**

This is an exploratory study where the researcher studied all conceptual frameworks, literature and textbooks on the eight moral characteristics; analyzed the contents, and, developed an evaluation questionnaire which is then used with 50 students. The Cronbach confidence obtained is 0.97. The 100 copies of data collected from undergraduate students were analyzed using a standard statistical
software which yielded percentage, average and standard deviation. The researcher collected the data by herself.

**Findings**

The data collected reveals the eight moral characteristics of undergraduate students as follows:

Table 1: Average of eight Fundamental Moral Characteristics

<table>
<thead>
<tr>
<th>Eight Fundamental Moral Characteristics</th>
<th>Average</th>
<th>Order from the highest to the lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diligence</td>
<td>3.48</td>
<td>7</td>
</tr>
<tr>
<td>2. Frugality</td>
<td>3.46</td>
<td>8</td>
</tr>
<tr>
<td>3. Honest</td>
<td>3.96</td>
<td>3</td>
</tr>
<tr>
<td>4. Discipline</td>
<td>3.72</td>
<td>6</td>
</tr>
<tr>
<td>5. Politeness</td>
<td>4.35</td>
<td>1</td>
</tr>
<tr>
<td>6. Cleanliness</td>
<td>3.83</td>
<td>5</td>
</tr>
<tr>
<td>7. Unity</td>
<td>3.90</td>
<td>4</td>
</tr>
<tr>
<td>8. Generosity</td>
<td>4.14</td>
<td>2</td>
</tr>
</tbody>
</table>

The study has found that students have politeness the most and frugality the least. Therefore, all those who are involved with the management of education at the higher education institutions need to collaborate into the technical and the extracurricular activities with the hope to help students become aware of the need to be frugal and mindful of one’s status so that they will learn how to save, spend, rationalize and lead a simple, modest way of life.

**Summary and Discussion**

The study findings rank these eight moral characteristics from the highest to the lowest as follows: politeness (4.35), generosity (4.14), honesty (3.96), unity (3.90) cleanliness (3.83), discipline (3.72), diligence (3.48) and frugality (3.46). Apparently, the teachers and the institutions need to realize the need to promote the eight moral characteristics in the students as required by the Ministry of Education. They have to establish a guideline with activities inside and outside of classrooms to encourage the desired behaviors of savings. The educational institutions need to define their roles clearly and position themselves as a good model for the students. They need
to have a policy highlighting the significance of the sufficiency philosophy, with practical activities and programs to help encourage income generation and savings, as well as activities with relevant third parties. Another moral characteristic with average below 3.5 is diligence. The teachers and the institutions need to work together and help the students become determined, hardworking, perseverant, willing to face obstacles and appreciative of the work they are in charge of. The eight fundamental moral characteristics cannot be taught efficiently in class. Nevertheless, one can arrange for encouraging ambience and environment to help create awareness in the students.

Recommendations

Based on the study findings, the researcher has recommendations as follows:

1. Recommendations from the research

   Students should be developed in terms of frugality, diligence and discipline. The guidelines suggested by the researcher are as below:

   1.1 Policy: Higher education institutions need to plan for the development of the desired moral characteristics. The administrators need to be determined to succeed, aware of the significance, focused on academic and extracurricular activities, and, build a network of collaboration with the community (e.g. savings program and income generation program). The ambience and the environment within the institutions must be accommodating to the development of discipline and diligence in the students.

   1.2 Curriculum: Develop integrative curricula where students are encouraged to cultivate their intellectual potentials with discipline and diligence so that they will know how to allocate their time for study and other activities. Students should be encouraged to explore themselves and to enroll in courses where the sufficiency economy philosophy is explained.

   1.3 Activities: In order for the moral characteristic development activities to be efficient, the institutions need to create a mutual understanding with all concerned parties and concentrate on more proactive and diverse activities such as demonstration, exhibition, sales of local products and awareness creation program.

2. Recommendation for future research

   2.1 Conduct a research to identify the format of activities that will help develop the eight fundamental moral characteristics.
2.2 Conduct a research to improve the curricula towards an integrative model for the elevation of the eight fundamental moral characteristics.

References


Website

Ministry of Education
http://www.moe.go.th/

Government Policy
http://www.onec.go.th/policy/policy_g.htm

Office of Basic Education Commission
http://www.obec.go.th/index.htm

Office of National Education Commission
http://www.onec.go.th

Source: http://www.vcharkarn.com/

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Assessment of Healthcare Faculty Interest in Internet-based International Education Collaboration and Exchange: A Pilot Study

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Abstract

The education and training of students to become culturally competent and globally aware is a priority in higher education. Faculty hold the keys to international experience for students by offering an international curricular focus, coursework, and enrichment projects. Utilization of the Internet as a portal for international collaboration holds promise to broaden the ability of faculty to facilitate global education and research. This pilot study assesses the current participation in, support of, and barriers to Internet-based international collaborations of 34 faculty from 13 different countries. A high level of personal experience with Internet collaborations utilizing primarily e-mail and online chat was reported by 82% of the faculty. Common barriers cited to Internet-based collaboration were the lack of administrative and financial support to begin or maintain the activity. An overwhelming majority (90%) of the respondents indicated the need for an Internet-based portal for the purpose of international collaboration and education.

Introduction

In this time of global economic expansions and innovative technology, it is important for educators and students to be aware of the similarities and differences among the various cultures and nationalities. Achterberg provides a compelling argument that today’s higher education graduates must be globally prepared, regardless of study discipline. Thus our focus must expand beyond student competence in their individual domestic disciplines to encompass all skills necessary to communicate with various people groups with which they may be interacting. To this end, Brustein states five major challenges facing higher education: 1) redesigning the curriculum, 2) achieving faculty buy-in, 3) financing study abroad, 4) integrating international students, and 5) rethinking how foreign languages are taught (p. 382). He went on to say “Without global competence, our students will be ill-prepared for global citizenship, lacking the skills required to address our national security needs, and unable to compete successfully in the global marketplace” (p. 382). Effective implementation of global perspectives need to be woven through all aspects of higher education and embedded in the curriculum through activities designed by enthusiastic faculty and recognized at all levels including the discipline, academic, department and institution.

The term internationalization, (describing physical border-crossing activities) is a term that is more currently replaced by the term globalization due to world-wide trends and global competition. Globalization can be viewed in four different perspectives: 1) geographical, 2) authority, 3) cultural, and 4) institutional. Edwards speaks of the leading role American educational institutions play based on a number of factors, including the use of English language globally. However, others confront the problems encountered when studying in environments that are very different from one’s home country, such as opposing philosophical views of the world and variations among long-standing social traditions.

Historically, international education has primarily focused on faculty and/or student exchanges or internships in foreign countries. These types of exchanges typically vary from one year of education to a short term designated assignment. One common objective of all types of exchanges was to promote cultural immersion, thereby enhancing the student’s cultural competency. “Cultural competence may be defined as a set of academic and interpersonal skills that allow service providers to increase their understanding and appreciation of cultural similarities and differences within and between groups so that they are able to draw on a particular community’s values, traditions, and customs in developing effective and appropriate interventions” (p. 16).

In an effort to prepare students to compete globally, educational institutions have encouraged some form of international education in the curriculum. However, face-to-face interactions and culture immersion has been somewhat hindered due to international travel and security concerns. Other obstacles to international exchange include financial concerns, family commitments, and other circumstances that require academic studies and professional training activities to be place bound. For example, foreign language instructors may choose to live for a period of time in a foreign country to develop both “cultural and linguistic competence” (p.1) to better prepare even the non-language major student who may, at some point in his/her career, find a need to work, study, and live in a foreign country and/or within a different culture.

Other career disciplines are also exploring the need for and implementing international collaboration opportunities. In the area of science, graduates may find themselves collaborating with individuals from various countries, traveling to other countries for conferences, or both. Guest, Livett and Stone found that science students who do participate in exchanges do so in fulfillment of the nonscience components of their degrees. In a study of science graduate students, Ynalvez and Shorum found the students to be more domestically collaborative than internationally. Two over-arching reasons for science students not to participate in exchange programs could be lack of awareness of exchange programs and cost. Faculty support the idea of international experience, however, they do not support it as compulsory (p. 386). As higher education trains executives and technicians, “the main growth is in globally mobile degree in business studies and computing” (pg 7). International collaboration in organizational behavior and management is evolving from reading others research to designing projections and practices that are of global nature, but can be applied locally.

The Runestone project was a virtual international collaboration, involving students and faculty from four educational institutions in three different countries (USA, UK and Sweden), where computer science students were assigned problem-solving tasks.
projects to be remotely coordinated among student groups to include representatives from each institution. The primary objective of this project was to provide the students with international contacts and prepare the participants with skill sets to interact on a professional level with colleagues from different cultures and educational backgrounds.\textsuperscript{16} Among the problems reported by students were the six-hour time difference, delays in response time, procrastination, poor communication, lack of technical skills, and differences in motivation (p. 130). Also cited was the lack of facilitation on the part of the group leader, which suggests that perhaps faculty did not have the time to devote to this type of educational exercise (p. 131).

The University of Pittsburgh Global Academic Partnership Program (GAP) is an example of another Internet-based academic portal. The strong international support of this University led to the design of the GAP to entice faculty to become “engaged in the efforts to internationalize the campus” (p. 387).\textsuperscript{2} GAP supports the exchange of interdisciplinary research and information between faculty and their international counterparts thus minimizing the barrier of the participants’ time needed to develop and maintain such a portal.

Another University of Pittsburgh product is the “Supercourse” which provides "freeware" streaming voice-video presentations via the Internet for medical, nursing, dental, and veterinary schools. Similarly, the Association of Schools of Public Health (http://www.aphs.org/document.cfm?page=1084) is currently in the early process of establishing globally accepted curriculum for global health programs and competency requirements for masters-level global health programs. The need for and work toward core health education competencies is also exemplified by the Galway Consensus Conference. This consensus group is the joint effort of the International Union for Health Promotion and Education, the Society for Public Health Education and the US Centers for Disease Control. First organized in 2008, the purpose of this group is to stimulate dialogue among those who represent the various domains of global health care.\textsuperscript{17}

In area of healthcare, faculty, students, and clinicians have experienced various opportunities to be involved with international exchanges. Ease of travel and relocation throughout the world has prompted health professionals and health educators to more carefully examine their sensitivity to the differences in cultures. Cultural competency is also being integrated into curricula and professional activities to better prepare the health professional. Typically, student/faculty health practitioners primarily practice short-term immersion into other cultures and countries as advisors or educators to improve health through programs such as “train-the-trainer” courses or to extend “helping hands” in disaster situations. Other health professionals travel more for personal quest to “see the world.” At the other end of the spectrum is the use of telemedicine and teleconferencing where patients may be “treated” by a specialist via computer technology and practitioners can “consult” with little regard to geographic borders.

To more fully assess types of internationalization in the healthcare field, a search of the literature, using keywords allied health, education, global collaboration, and associated phrases was conducted. Results were primarily related to global health education reported through international student and/or faculty exchange. There appears to be a plethora of data describing international experiences related to nursing education programs in the United States (US). The primary objectives for international experience were developed for the purpose of enhancing the student’s professional, cultural and personal development. This practice has been ongoing among nursing programs for a number of years.\textsuperscript{18-21} According to Goldberg & Brancato,\textsuperscript{22} “nursing is a universal profession challenged by global issues, … by discussing mutual knowledge and developing a shared mission and objectives, nurses in an international partnership can assist in affecting changes for nursing practice, education, and research” (p. 30). In more recent years, medical schools have implemented similar experiential opportunities to increase the future practitioner’s awareness of cultural differences.

The field of dentistry has likewise employed similar international exchanges as the medical field though on a much smaller scale. In an effort to improve dental hygiene practice in Australia from a global perspective, Luciak-Donsberger and Aldenhoven\textsuperscript{23} found varying levels of education as well as professional autonomy. This gave the international dental hygiene community a baseline assessment needed to understand similarities and differences. International research collaborations were examined by Catalanotto et al\textsuperscript{24} who found that dental-related global collaborations were primarily based on individual relationships between faculty from different countries working on specific grants. Dental faculty and practitioners have advocated for the development of a global oral health course intended to broaden the student’s understanding of global oral...
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health needs and programs. This would be a positive step towards global awareness for future dental professionals leading to possible international exchanges.

A position paper was developed by a work group from the American Dental Education Association Leadership Institute advocating for an increase in global collaboration and standardization in dental education. With unmet national and international oral health needs, rapid growth of “dental tourism” and the reality of the dental materials and supplies produced by international companies, a global mindset is essential. These authors go on to say “An ideal approach to the globalization of dental education is for all countries to work together to identify common challenges, share experiences, and pool intellectual resources” (p. 409).

Existing mechanisms of international pooling of intellectual resources include the MedEdPortal (www.mededportal.org) designed to be a depository of peer reviewed educational materials for both the medical and dental educators. In 2006, the World Health Organization formed the Global Health Workforce Alliance. The goal of this group, representing “governments, civil society, international and regional institutions, professional associations, academia and the private sector” was to create a “joint platform for consolidated action on the health workforce crisis” (www.who.int/workforcealliance/about/history/en/index.html). One of the members of the alliance is the Global Health Education consortium (http://globalhealtheducation.org/SitePages/Home.aspx). The objectives of this group of health care educators include international exchange opportunities for faculty and students as well as development of culturally sensitive health education modules to be shared globally. Another member of the alliance is the Global Healthcare Information Network (www.ghi-net.org). The goal of this organization is to serve as a repository of health information which can be freely accessible to medically underserved areas world-wide.

The interest and involvement of university faculty plays a key role in the globalization - or lack thereof - in higher education. Stohl makes a strong argument that “Our challenge is to convince faculty that their scholarship and teaching will benefit from these (globalization of higher education) efforts by considering the risks and reward structure within our institutions and faculty structure” (p. 359). He goes on to explore the difficulties in engaging faculty in his institution to embrace globalization and found that the international educational or research activities in his institution were done by one or two key faculty. Through years of work to internationalize his campus, he came to the conclusion that it was the lack of faculty interest and involvement that killed student interest. Though barriers to globalization in education were not specifically discussed, the associated need for time and funding may be an underlying reason for low faculty involvement. Stohl made a strong appeal to capture faculties’ attention and convince them that globalization is in their students’ and professional best interest.

Another potential deterrent to participating in global exchange is the current international climate of economic and political instability. Also, institutional funding for international exchange is dwindling within the US. Given the current economic and political environment, educators are looking to technology to connect students and faculty regardless of time and place. Globalization is today a reality owing to advances in information technology and the innovation of businesses worldwide. Where exchange programs to develop cultural competency may not be feasible, an Internet-based collaboration and exchange portal may provide a pedagogical alternative.

The Internet has increased the ability of individuals throughout the world to link with each other without the time and expense associated with traveling. It has also enabled the public to receive information from other media resources such as television and newspapers. Recently a number of different organizations have banded together to collect and disseminate educational materials through open Internet access (See Table 1). Most of these organizations further explain on their websites that educational research, collaboration and exchange are promoted, as well. The focus of information varied from agricultural/environmental issues to public health information. There were no website portals that included allied health in its focus population found, however. For purposes of this discussion, allied health professions will be defined as persons “involved with the delivery of health or related services pertaining to the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management, among others. Allied health professionals, to name a few, include dental hygienists, diagnostic medical sonographers, dietitians, medical technologists, occupational therapists, physical therapists, radiographers,
respiratory therapists, and speech language pathologists” (www.asahp.org/definition.htm).

Beyond nursing and medical school student international exchange, little information was found in the literature related to exchange programs or Internet-based educational portals for the allied health student and/or faculty. The global sharing of educational curriculum, research and exchange among allied health programs will not be without challenges. Miller and Gallicchio suggest that primary obstacles may be the international variations on educational and training standards from one country to the next. Nevertheless, “the new millennium brings the potential for an integrated clinical, research, and educational collaborative environment that must consider economic, demographic, environmental, social, epidemiological, political, and technological change.” (p. 236).

Given the need to increase international collegiate collaboration, we wanted to gain insight into current international activities of faculty from various countries. Though we were aware of face-to-face exchange programs, we did not know the level of interest or current use of the Internet for international collaboration activities.

The purpose of our study is to determine the following:

1) Is there current participation in any type of Internet-based educational collaboration and exchange on an international level?
2) What are the perceived barriers related to integration of Internet-based educational collaboration and exchange?
3) Is there an interest in Internet-based global educational collaboration and exchange on an international level?

Purpose of Study

The purpose of this study was to investigate present usage; perceived barriers to Internet-based educational collaboration and exchange on an international level; and personal interest in Internet-based international education.

Methods

Procedure

A twenty item, multiple choice/short answer questionnaire written in English language and translated to the Arabic language was developed by the researchers. The instrument was tested for content construction by three international faculty and received institutional human subjects approval. The survey was distributed to consenting university healthcare faculty who were attending various professional meetings in Europe and the Middle East. Once completed, the survey was placed in an envelope and handed back to one of the researchers. The surveys were free of personal identification and therefore anonymous. Two demographic questions identified the respondent’s primary job description and country of residence. The remaining questions addressed 1) the respondent’s personal level of experience with global collaboration/exchange; 2) degree and types of institutional participation in international collaboration; 3) significant barriers to international collaboration and actions implemented to overcome these barriers; 4) level of interest in participating in an Internet-based international collaborative effort; 5) types of activities one might like to utilize via Internet-based international collaboration; and 6) identification of web-sites currently being utilized for international collaborative efforts. The quantitative results were analyzed utilizing frequency distribution. Respondents’ short answers were assessed for common themes by question and reported as representative quotes.

Results

Respondents

This study was conducted using a convenience sample of 34 university faculty attending one of three international conferences held in Zagreb, Croatia; Cairo, Egypt; or Rome, Italy. In addition, surveys were administered during face-to-face meetings held in Palermo, Italy, and Ljubljana, Slovenia. These international conferences and meetings garnered responses from 13 different countries including: Canada, Croatia, Egypt, Greece, Germany, Italy, Netherlands, Romania, Saudi Arabia, Slovenia, Sweden, the United Kingdom, and the United States. The professions represented by participating university faculty included dentistry, dental hygiene, medicine, public health, epidemiology, and social work.

Existing Level of International Collaboration

Personal Experience

When responding to personal levels of experience with global collaboration, 41% (n=14) reported a
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high level of personal experience with global collaboration, 27% (n=9) reported a moderate level of experience, and 32% (n=11) reported a low level or no experience (see Table 2). Personal experiences described were, for the most part, personal international visits or face-to-face interactions. Over 82% (n=28) reported a high or moderate level of experience with Internet-based collaboration, primarily utilizing e-mail and web-based chat. When asked about personal experience with web-based curriculum, only 9% (n=3) had a high level of experience while 67% (n=23) reported either low or no experience with this medium (see Table 3).

Institutional Participation and Reported Barriers

International collaboration activity was high (94%) among the institutions represented by the participants. Types of activities included workshops, distance learning, research projects, teacher and student exchanges and projects. Institutional activities utilizing the Internet were primarily online courses or continuing education. Those respondents who had indicated their institution had participated in international collaboration were asked whether the following barriers were encountered: administrative support to develop; administrative support to maintain; financial support to develop; and financial support to maintain. The responses were fairly consistent across the four categories. Program development, program maintenance, and financial support for program development was reported by 56% (n=19) of the respondents. A slightly greater number (65%, n=22) reported financial barriers to maintain international collaboration activities.

One respondent commented on their institutional barrier experience stating “This is an important area, but [it is] not seen as an institutional priority.” Another simply said “Work, work, work.” Lack of time, work load, computer literacy problems and lack of proficiency in foreign language were also cited as personal barriers that hinder more involvement with international collaboration.

Though there were a number of barriers reported, faculty also noted numerous actions taken to overcome the problems or barriers cited. Creative problem-solving and determination were exemplified by statements that included:

“Some of the fees were delegated to applicants.”

“We applied for additional grants and finally supported the collaboration within the University.”

Several respondents expressed a strong need for faculty and staff training and development to cope with the additional workload involved with international collaboration. Some respondents simply commented “none” when asked what actions were taken to overcome the stated barriers.

Interest Level for International Internet-based Academic Collaboration

Respondents were then asked to indicate perceived level of interest their institution had in Internet-based international education. Of the 29 educators who answered this question, 29% said their institutions had a high level of interest, 50% moderate, and 6% indicated a low level of interest. When asked to describe their personal level of interest in Internet-based academic collaboration and international education, high levels of interest were expressed in both topics with respondents reporting 47% and 53% respectively (see Table 4).

Imagine an Internet-based Portal for Collaboration and Education

When asked if they envisioned the need for an Internet-based portal for the purpose of international collaboration and education, 90% responded in the affirmative. Respondents provided a wide variety of activities they would like to see included in a portal such as: the exchange of curriculum, research projects, evaluation resources, innovative approaches to teaching, lectures, seminars, guideline dissemination, chat and exchange of behavioral techniques. One respondent described the need for “academic research project ‘matchmaking’” by bringing together units and researchers in the IT [information technology] education field”. The verb “exchange” was repeatedly used to express their interest in how the Internet could facilitate international collaboration and education. Typically, respondents described one or more activities for this question possibly affirming the high level of interest reported in the previous question.

Even with a high level of interest, educators have some concerns with an Internet educational web portal. As with reported institutional barriers, faculty expressed that they would not have enough time to utilize this tool. Examples of faculty comments were “Time... e-mail is busy enough” and “[It] must not
substitute everything else.” Other comments identified personal preference issues such as “I prefer personal contact for initial discussion”, “User friendliness is a concern” and simply “Privacy”. Acceptance by other faculty members was voiced by some, described as “It might be restricted by the more traditional faculty members” and “Barriers with professors or universities and students” Language and time zones were also listed as potential deterrents.

Though 43% of respondents indicated that they were not aware of any existing Internet-based educational portal, 50% reported that they were aware of one or more and went on to list existing sites. The Association of American Medical Colleges and the American Dental Education Association’s MedEdPortal was mentioned along with Blackboard and Tobacco Free! Curriculum as examples of existing Internet educational portals. Awareness of other sites was indicated although the exact name or web address was not known.

Several respondents expressed interest in obtaining the results of this study and requested a re-print of the findings once published. Overall, the depth of responses provided to the open-ended questions reflected a high level of interest elicited from this group of voluntary respondents.

**Discussion**

The purpose of this study was to investigate present usage; perceived barriers to Internet-based educational collaboration and exchange on an international level; and personal interest in Internet-based international education.

**Present Usage**

Overall, the majority of the respondents had experience with international collaboration and primarily face-to-face. Although the majority did have experience with the Internet, e-mails, and other forms of electronic global communication, close to half of the participants reported low or no experience with web-based curriculum. Likewise, when asked about what was available in web-based curriculum, the three sites stated were generated from American sources (MedEdPortal, Blackboard, and Tobacco Free! Curriculum). This may demonstrate a lack of awareness or familiarity with similar web-based healthcare curriculum sites originated from and utilized in other countries.

**Perceived Barriers**

Over half of the respondents indicated barriers to international collaboration as being institutional in nature, such as program development, program maintenance, and financial support. As with other pedagogical projects, faculty members need to have the time and resources to develop, implement, and evaluate. The written comments by the respondents provide even greater evidence of these barriers as primary concerns with international collaboration. Once initial contacts are established, it is difficult to maintain these relationships when there is a lack of financial commitment needed to support these exchanges.

Other reasons for non-participation or discontinuing international activities are more on personal and professional levels such as language barriers, lack of computer skills, workload, and time. Reflecting the comments of Stohl stressing the importance of motivating and encouraging faculty, participants also expressed the need for “Keeping up the spirit and finding the right enthusiastic person” as an important aspect of continuing international collaboration. Faculty are gate-keepers for student interest in and opportunity for international experiences. An important strategy for the expansion of Internet-based education and collaboration may lie in ease of faculty access to an allied health Internet portal to better facilitate international collaboration.

**Personal and Perceived Institutional Interest in Internet-based Education**

Encouragingly, over half of the respondents reported a high level of personal interest in Internet-based international collaboration and a need for an Internet-based educational portal. During survey collection, several participants expressed enthusiasm and excitement in the concept of an Internet-based educational portal which was reflected in the range of projects suggested including curriculum exchange, research activities and just chatting with faculty in other countries. The opportunity to easily exchange information and resources with faculty having similar interests across the globe may be an important element needed to encourage faculty buy-in. Faculty involvement must be nurtured and supported in order to implement international collaboration in higher education.
Future Directions

The literature affirms the need for secondary and post-secondary education to include cultural competency to better prepare the graduate for global citizenship. The utilization of Internet portals, such as the GAP or MedEdPortal, could be an answer to solving some of the restriction placed on face-to-face international collaboration. Several of the restrictions could be eliminated through institutional initiatives. First, the issue of time and money required to move faculty/students from one place to another would be addressed, although it does limit the richness of cultural immersion derived when one can actually live and work in a foreign country. Second, a wider range of individuals could be reached and served through a global network. Third, administrative support for an Internet collaboration portal may be enhanced by the knowledge that the individual faculty member would not be physically absent - reducing the need for coverage of faculty academic responsibilities. However, supplementary administrative support in non-financial avenues such as acknowledgement in merit, tenure, and promotion documentation should be addressed. Workshops for faculty and staff members could be offered to enhance the pedagogical resources available via Internet in the classroom. Undergraduate and graduate students are often more competent with computers than faculty members due to their life-time exposure and socialization with technology; these individuals should be utilized in reverse roles. Grants and other funding sources within an institution, a profession, and a geographic location or culture need to be investigated along with federal and international agencies that support international education.

Conclusion

The literature affirms the need for secondary and post-secondary education to include cultural competency to better prepare the graduate for global citizenship. This pilot study sought to assess the current participation in, support of, and barriers to Internet-based international collaborations through a convenience sample of 34 dentistry, dental hygiene, medicine, public health, epidemiology, and social work faculty from 13 different countries. The results suggest that there is an interest in developing an Internet-based educational collaboration and exchange at the international level.

The interpretation of the findings, however, is not without limitations. This paper was written from the perspective of university faculty teaching in the United States and may represent a single country bias. Another limitation is the self-reporting methodology used in the surveys. The results can only be as accurate as the input from the respondents. The misinterpretation of the question, given the multi-nationality of the respondent group, is also a possible limitation. For example, there may have been differing opinions and perceptions (subjective interpretation) when choosing from the “high, medium, and low” survey selections. Results were limited by participants’ level of interest in full completion and submission of surveys. Lastly, this convenience sample does not represent the entire global population of university educators. Admittedly, university faculty who are able to attend an international conference may enjoy a greater level of university support and experience than faculty who lack adequate resources to attend such meetings. Internet communication has the potential to provide resources to a more diverse population of allied health educators.

This study provides a unique and interesting snapshot of health care faculty level of interest in globalization of education via the Internet. As this concept is moved forward and adopted by faculty and institutions, new models of education, collaboration and research can be developed and expand this important endeavor. A follow-up study to include a more expansive cross-representation of international allied health educators is recommended. Further studies to collect data on personal and institutional facilitators to Internet-based international education collaboration and exchange are also suggested.
References


27. Stohl M. We have met the enemy and he is us: The role of the faculty in the internationalization of higher education in the coming decade. *JSIE.* 2007;11(3-4):359-372.


Table 1. Examples of identified educational resource websites

<table>
<thead>
<tr>
<th>Association of Schools of Public Health</th>
<th><a href="http://www.asph.org/document.cfm?page=1084">http://www.asph.org/document.cfm?page=1084</a></th>
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</thead>
<tbody>
<tr>
<td>EUN Community</td>
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<tr>
<td>Global Health Education Consortium</td>
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</tr>
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<td>Global Health Workforce Alliance</td>
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</tr>
<tr>
<td>Health Professions Network</td>
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</tr>
<tr>
<td>Health Sciences Online</td>
<td><a href="http://hso.info/about/about.html">http://hso.info/about/about.html</a></td>
</tr>
<tr>
<td>MedEdPORTAL</td>
<td><a href="http://mededportal.org">http://mededportal.org</a></td>
</tr>
<tr>
<td>National Institute for Health and Clinical Excellence</td>
<td><a href="http://www.nice.org.uk">http://www.nice.org.uk</a></td>
</tr>
<tr>
<td>Patrick J. “The Internet is THE information superhighway”</td>
<td><a href="http://www.pitt.edu/~super1/assist/john.htm">http://www.pitt.edu/~super1/assist/john.htm</a></td>
</tr>
<tr>
<td>Tobacco Free!Curriculum</td>
<td><a href="http://www.sah.siuc.edu/tobacco">http://www.sah.siuc.edu/tobacco</a></td>
</tr>
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<td>Universitas 21</td>
<td><a href="http://www.u21health.org">http://www.u21health.org</a></td>
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<td>World Bank Group</td>
<td><a href="http://ddp-ext.worldbank.org/ext/GMIS/gdmis.do?siteId=2&amp;menuId=LNAV01HOME1">http://ddp-ext.worldbank.org/ext/GMIS/gdmis.do?siteId=2&amp;menuId=LNAV01HOME1</a></td>
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<td>Worldwide Universities Network</td>
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Table 2. Personal Experience - Face-to-Face

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<tr>
<th>Face to Face Experience</th>
<th>Percent (n)</th>
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<tbody>
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<td>None</td>
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<tr>
<td>Low</td>
<td>29 (10)</td>
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<tr>
<td>Moderate</td>
<td>27 (9)</td>
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<tr>
<td>High</td>
<td>41 (14)</td>
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<td>Total</td>
<td>100 (34)</td>
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<tr>
<td>Web-Based Experience</td>
<td>Percent (n)</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>None</td>
<td>29 (10)</td>
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<tr>
<td>Low</td>
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<tr>
<td>Moderate</td>
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<tr>
<td>High</td>
<td>9 (3)</td>
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<tr>
<td>Total</td>
<td>100 (34)</td>
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</table>

Table 3. Personal Experience - Web-based curriculum
<table>
<thead>
<tr>
<th>Perceived Institution Interest Level</th>
<th>Percent (n)</th>
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</thead>
<tbody>
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<td>Low</td>
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<td>Moderate</td>
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<td>High</td>
<td>29 (10)</td>
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<tr>
<td>Total</td>
<td>85 (29)</td>
</tr>
<tr>
<td>Missing</td>
<td>15 (5)</td>
</tr>
<tr>
<td>Total</td>
<td>100 (34)</td>
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<table>
<thead>
<tr>
<th>Personal Interest Level</th>
<th>Percent (n)</th>
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<tbody>
<tr>
<td>Low</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Moderate</td>
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<td>High</td>
<td>53 (18)</td>
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<tr>
<td>Total</td>
<td>100 (34)</td>
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Effects of Multidimensional Concept Maps
Web-based Courseware on Fourth Graders’
Learning of Computer Program

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Abstract

This study explored the effect of multidimensional concept maps (MCMs) on fourth graders’ learning performance of computer program. In order to evaluate the effect of MCMs on students’ learning performance in a computer program, computer learning websites with MCMs and Novak concept maps (NCMs) were set up. The participants were 103 students from three classes of fourth grade at one elementary school at Changhua County in Taiwan. One class was assigned as MCMs group, while the other two classes were assigned as traditional linear textbooks (TLTs) control group and NCMs group individually. Four weeks of computer teaching were conducted on the three groups. The results indicated that students in the MCMs group produced significantly higher learning achievements compared to those in the TLTs and NCMs groups, and students in the NCMs group had higher learning achievements than those in the TLTs group. Furthermore, when TLTs, NCMs and MCMs students’ learning satisfaction on computer program were compared, MCMs students had significantly higher satisfaction with computer program than TLTs and NCMs students, while NCMs students were more satisfying with learning computer program than TLTs students.

Keywords: Cognitive Overload, Computer Program, Concept Maps, Disorientation, Multidimensional Concept Maps Web-based Courseware
1. Introduction

After 1990’s, the technology of computer software and hardware have been rapidly developed with the current trend - utilizing internet to convey information. Beneath the world wide web (WWW), multimedia and hypermedia can transfer and present innovative approaches in teaching and learning. These new approaches will be the pioneer to broaden the path of e-learning in the future. E-learning activates teaching and learning in traditional classroom, in which learning takes place in a computer connected to internet without the limitation of time and space (Harris, 2001).

However, learning via the world wide web might lead to certain problems as cognitive overload, disorientation, learner’s over-control, and knowledge structure can not be integrated (Chiou, Huang, & Hsieh, 2004; Dias & Sousa, 1997; Liu, 1994). Such problems would reduce learning achievements (Beasley & Waugh, 1995; Begoray, 1990; Chang, Sung, & Chiou, 2002; Conklin, 1987; Dias & Sousa, 1997; Komers & Lanzing, 1997; Lee & Baylor, 2006; Liu, 1994; Tripp & Roby, 1990). In order to solve the above problems and enhance learning achievements in e-learning, good navigational methods will be necessary in the courses of e-learning. For instance, e-learning materials presented by navigation maps or concept maps could reduce disorientation occurring in nonlinear learning structure of hypermedia and improve learners’ learning achievements (Chiou et al., 2004; Chang et al., 2002; Lai & Waugh, 1995).

The navigation map is regarded as table of contents presenting the hierarchical structure of the hypermedia document. Each table links up the hypertext with the original linear-presented text (Chang et al., 2002). Therefore, the main frame of the navigation map is linear with text-based format; accordingly, this e-learning approach can merely improve learner’s disorientation to a limited extent (Calvi, 1997; Dias & Sousa, 1997).

Concept map, proposed by Novak in 1972, is the representation of two dimensions and the illustration of hierarchical connection among concepts which facilitates learners to diminish learner’s disorientation as browsing linear-organized materials (Chang et al., 2002) and integrate and organize knowledge in learning processes (Chiu, 2008, 2009; Novak & Gowin, 1984). However, the concept map still remained in two dimensions for last four decades (Beyerbach, 1998). Traditional concept map presented knowledge structures in a plane dimension had difficulties in coping with great amounts of concepts or complex combinations of concepts and possibly led to cognitive overload (Chiou et al., 2004; Huang, Shiu, Wang, & Chang, 2005). Multidimensional concept map systematically reorganizes different plane concept maps and arranges complex and difficult ideas to other dimensions in order to
simplify it. With the function of hyperlink in internet, the multidimensional concept map provides the teaching material and extends its depth and breadth towards learning achievements (Chiou, et al., 2004; Huang et al., 2005).

Since internet and technology has been generally adopted in teaching, many previous studies showed that e-learning materials designed by concept maps could successfully eliminate learner disorientation and enhance their learning achievements (Chang et al., 2002; Ferry, Hedberg, & Harper, 1997; Kennedy & McNaught, 1997). While various complex concepts embedded in two-dimensional concept map can not be presented in one frame, learners’ cognitive overload may occur and therefore reduce their learning efficiencies and achievements (Chiou, et al., 2004; Huang et al., 2005). The multidimensional concept map in this study is developed to solve these problems. Therefore, this study aims at comparing the presentations of multi-dimensional concept map, Novak two-dimensional concept map, and traditional linear e-learning materials, and their effects on primary school students’ learning achievements and interests in computer courses.

2. Theoretical framework

2.1. Multidimensional concept maps’ application for e-learning

Multidimensional concept maps apply design of divided and conquer (Bshouty, 1995), showing a simplified concept map version of the traditional Novak concept map. It is the method which separates the original difficult and complex concept map into several parts of the map, as shown in Figure 2 (Chiou, et al., 2004; Huang et al., 2005). For display of knowledge structure, psychologist Miller (1956) addressed the human brain short-term memory capacity limitation theory. It clearly points out that the human brain short-term memory capacity is seven, plus or minus two, which also means that the short-term memory capacity for numbers (or vowels, syllabus, phrases) are plus and minus 2 from 7. In Miller’s short-term memory limitation theory, Novak two-dimensional concept map have its flaws and weaknesses. Thus, this study’s concept map system tends to follow Miller’s (1956) short-term memory capacity limitation theory and indicate each screen picture in an easier method. Each picture does not exceed students learning capability; enabling students learn and understand in an easier way for a better learning efficiency. This method is applied onto web-based courseware structuring process. It can simplify the complexity on the screen picture. Students can learn in a proper progressed schedule (Chiou, et al., 2004). The following is introduced as the structuring steps of the multidimensional concept maps.
2.1.1. Establish individual fundamental learning unit for multidimensional concept map e-course material

Figure 1 is the traditional Novak concept map e-course material. The traditional Novak concept map arranges all concepts in the single screen picture of the computer, which will cause the screen picture to be unable to hold the intact course content. The learner will not study unless utilize and spur the roller bearing way. When course knowledge must increase and upgrade constantly as time, Novak concept map will be unable to change flexibly to maintain the integrality of course knowledge. Thus, it is difficult for the learner to understand intact course knowledge structure. However, the multidimensional concept map e-course material, according to the design principle of divided and conquer, resolves the complicated concept map into the specific small unit, and then classifies and recombinates the knowledge in accordance with the actual demand process, and finally carries out the deepened and broadened function design. Figure 2 is the multidimensional concept map e-course material. It classifies and recombinates all concepts through network hyperlink skill. The learner’s main study screen picture is a basic conception unit of some simpler, easier study, and according to the learner’s unit test score or learning interests, he (or she) can learn advancedly in the deepened or broadened learning unit picture.

Figure 1. Traditional Novak concept map e-course material.
2.1.2. Establish the broadened learning function for multidimensional concept map e-course material

As Figure 3 shows, concept A represents a concept of inclusive nature in the main learning picture. Concept B and concept C are also concepts of rather inclusive nature. If concept A, concept B and concept C are material-related, then they can be used the hyperlink function to transform to broadened learning on its hyper-plane. Also, by broadening linking, each topic concept can develop to one complete knowledge frame, rather than pieces of individual nodes. Hence, learners are able to learn the complete and entire knowledge structure. Learners already have the ability to understand the basic and fundamental concept A on the main learning picture. Learners can also, after the concept A, learn according to their interests and learn, through the techniques of hyper-link, the broadened concept B and concept C.
2.1.3. Establish the deepened learning function for multidimensional concept map e-course material

When learners get well learning performance for the topic concept A and show interests of deepened learning over a certain group of concept nodes, multi-dimensional concept maps can be learned deepened according to learning paths. As Figure 4 indicates, the concept E which belongs to Concept A represents only as the elementary introduction. For learners that are of higher achievements, concept E can give a broadened learning path through its hyper-link function. Concept E can be taken to another new screen picture so that the complexity can be reduced on the picture, which also enables learners to choose learning unit dependence on their abilities.
3. Method

3.1. Research design

This study attempts to apply multidimensional concept map to e-learning, and investigates its effect on learners’ learning achievements and learning satisfaction. This study further adopts quasi-experimental method to explore whether there are differences of learner’s learning achievements and satisfaction among diverse approaches such as traditional teaching approach, Novak concept map, and multidimensional concept map.

Three classes taught by one of the authors were randomly chosen through elementary fourth grade. They were assigned respectively to traditional teaching control group, Novak concept map group and multi-dimensional concept map group. The Novak concept group applies the Novak concept map e-course material. The multi-dimensional concept map group applies the multi-dimensional e-course material. Traditional control group applies the regular traditional linear e-textbook material. The dependent variable of the study is learning achievement and learning satisfaction measurement. Learning achievement is tested based on the participants’ course objectives while the learning satisfaction measurement is based on the surveys done.
by students in order to understand students’ opinions on using the concept map materials. The main research structure is listed in Figure 5.

![Figure 5. Research structure.](image)

### 3.2. Participants

The participants of this study were students from an elementary fourth grade at Changhua County in Taiwan. Three classes were chosen randomly. They were divided into three groups, traditional teaching control group, Novak concept map group and multi-dimensional concept map group. The total number of students is 103. Traditional teaching control group has 33 students. Novak concept map group has 35 students. Multi-dimensional concept map group has 35 students.

### 3.3. Design of teaching material

This study conducts the design of the teaching material in accordance with its purpose of this study and the outcome of reviewing literature records. The multidimensional concept map, in accordance with the short-term memory theory, can be decomposed from the larger and complex map into smaller and simpler components. It will exhibit different subjects of the e-learning concept map programme through recombining the smaller components, which can also offer an easier and suitable way for learning and it simplifies the learning outcome. Design of teaching material is listed in Figure 6.
The first type of courseware applies traditional linear textbook material; that is, using on-line textbook to set up the courseware. The second type of courseware applies Novak concept map method to handle editing teaching materials, as shown in Figure 7.

Figure 6. Teaching material design process.

Figure 7. Novak concept map courseware partial illustration.
The third type of courseware uses digital courseware of multidimensional concept map. It classifies and recombines the teaching materials that Novak concept map materials built, which can simplify the complexity of the materials that the computer screen appears, as shown in Figure 8.
The instrument which this study uses in the process of the materials’ editing is the second section of the internet course material from the fourth grade of elementary school, network navigator – the browser. As for the set-up of learning websites, it mainly uses Microsoft Office FrontPage 2003 to process editing. The learning websites’ main function is to provide students to learn with the material of the second section of the internet course, network navigator – the browser.

3.4. Teaching experiment and the procedure of activities
3.4.1. Experiment procedure

This study’s teaching experimental procedure is shown in Figure 9.

Figure 8. Multidimensional concept map courseware partial illustration
3.4.2. Procedure and purpose of the teaching activities

This study’s teaching procedure, from the pre-teaching phrase to the final teaching experiment, is generally divided into three stages.

Stage one of teaching activities:
This stage is the pre-teaching preparation phrase. It mainly includes three working items:

a. set-up Novak concept map web-based courseware.
b. set-up multidimensional concept map web-based courseware.
c. set-up traditional linear textbook web-based courseware.

The main purposes in the stage mainly include:

a. set-up e-learning material for internet learning.
b. multidimensional concept map material can recompose Novak concept map material and simplify the complexity to be fitted onto computer screens.

Stage two of teaching activities:
This stage is the pre-test phrase before the official teaching experiment. It mainly involves two working items:

a. grouping.

---

**Figure 9. Teaching experiment procedure.**
b. conducting pre-test computer basic skills.

This stage has two main purposes:
a. placing students randomly into three groups of traditional linear textbook, Novak concept map and multidimensional concept map.
b. conducting pre-test, evaluating three group’s pre-course knowledge.

Stage three of teaching activities:
This stage is the official teaching experiment. It mainly involves four working items:
a. students learn the ‘network navigator – the browser’ unit through computer.
b. the three groups proceeds post-test.
c. filling out post-learning satisfactory level survey.
d. interviewing students sampling.

The purposes of this stage mainly include:
a. experimental group and control group proceed unit learning.
b. comparing the learning outcomes of the three kinds of courseware.
c. interpreting the learning satisfactory levels of the three kinds of courseware.
d. interpreting students’ opinions on the experimental teaching activities.

3.5. Experimental Instruments
3.5.1. Pre-test

The purpose of conducting the pre-test is to understand whether the ability of the experimental group and control group to learn this particular subject is any different before this teaching experiment. The pre-test handles the traditional teaching group, the Novak concept map group and multidimensional concept map group’s average grades in the first semester. The pre-test testing questions are the results of different reference books in accordance with the course learning objectives. The test is finalized after the computer information panel of the faculty discussed different factors including the academic levels of the student. The credibility reference of the test draws from the Kuder-Richardson reliability, formula calculated as 0.82.

3.5.2. Post-test

When the teaching experiment is finalized, to understand student’s learning outcome, the learning achievement testing is designed. The purpose of post-test is to compare three groups of students’ absorption degree to content of studying after teaching. The test is also finalized after the computer information panel of the faculty discussed different factors. Its credibility also draws from the Kuder-Richardson reliability, formula calculated as 0.85.
3.5.3. Teaching materials satisfaction survey questionnaires

The teaching materials satisfaction survey questionnaires are finalized from the reference of Chiou et al. (2004), totaling 15 questions. The questionnaires rate on a five-point Likert scale from ‘strongly disagree’ to ‘strongly agree’. The scoring scope ranges from (+5) strongly agree to (+1) strongly disagree. The questionnaires are given to three groups of students. The questions are generalized for the three groups; for example, question 2 says, “I am fond of this material helping me learn about the Internet”. The questionnaire also uses factor analysis method to form the three factors such as the teaching material content, the knowledge characterization, and individual differences. The result of degree of reliability analysis of the three groups shows Cronbach’s Alpha of the traditional linear teaching control group is 0.707. Cronbach’s Alpha of Novak concept map control group is 0.777 while the Cronbach’s Alpha of multi-dimensional concept map group is 0.893. Students were asked to fill out satisfaction questionnaires after post-test was finished. The main purpose of the questionnaire is to understand whether there is an eminent learning satisfaction differences in regard to the traditional teaching control group, Novak concept map control group and multidimensional concept map experimental group of students after carrying out the teaching experiment.

4. Result

4.1. The effect of various e-course material display methods on learning outcomes

4.1.1. Pre-test scores comparison

The main purpose of the pre-test is to see whether the computer pre-course knowledge and levels of the traditional linear control group, Novak concept map control group, and multidimensional concept map experimental group are the same. The pre-test result shows that the traditional linear group’s average score is 80.91, Novak concept map group’s average score 80.59. The multi-dimensional concept map group’s average score is 81.29. One-way analysis of variance (ANOVA) shows the result in Table 1. It shows that the pre-test scores of the three groups do not have a significant difference, $F(2, 100)=0.019$, $p=0.981$, which shows computer pre-course knowledge and levels of the three groups of students are approximately the same before the experiment.
Table 1. Analysis of variance in pre-test scores for traditional linear, Novak and multi-dimensional concept map group.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatments</td>
<td>8.937</td>
<td>2</td>
<td>4.469</td>
<td>0.019</td>
<td>0.981</td>
</tr>
<tr>
<td>Error</td>
<td>23128.442</td>
<td>100</td>
<td>231.284</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23137.379</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.2. Post-test comparison

The main purpose of the study is to compare using traditional linear textbook, Novak concept map, and multidimensional concept map e-materials to conduct practical teaching and see whether those teaching methods could cause different learning results. After the teaching experiment it shows that the traditional linear textbook material group’s average score is 81.97. The Novak concept map group of students’ average score is 86.43. The multidimensional concept map group of students’ average score is 90.00. ANOVA is further applied to analyze whether there is an eminent different between the scores of the three groups. The result is shown as in Table 2, which shows that a significant difference exists between the three groups’ post-test score, $F(2, 100)=21.733, p<.01$. It shows that using different digital course materials to conduct teaching will cause students to get different learning achievements.

Table 2. Analysis of variance in post-test scores for traditional linear, Novak and multi-dimensional concept map group.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatments</td>
<td>1097.760</td>
<td>2</td>
<td>548.880</td>
<td>21.733</td>
<td>.000**</td>
</tr>
<tr>
<td>Error</td>
<td>2525.541</td>
<td>100</td>
<td>25.255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3623.301</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p<.01

To further understand different course average scores are caused by which factors between groups, this study uses Turkey HSD method to conduct a post hoc comparison. Table 3 shows that, with the different application of different digital course teaching strategy, the difference in means for post-test scores between the multidimensional concept map group and Novak concept map group is 3.571 point, $t(68)=2.973, p<.05$. It means that the multidimensional concept map material group academically performs better than the Novak concept map material group. The difference in mean scores between Novak concept map group and the traditional
linear teaching control group is 4.459 point, $t(66) = 3.658$, $p < .01$. It shows that the Novak concept map group academically performs better than the traditional linear teaching control group. The difference in mean scores between the multidimensional concept map experimental group and the traditional linear teaching control group reaches 8.030 point, $t(66) = 6.587$, $p < .01$. It means that the multidimensional group performs far better than the traditional linear teaching group. Hence, the students who use the e-course material based on concept maps can perform better than those who use material based on the traditional linear textbook. Furthermore, using the e-course material based on multidimensional concept maps can benefit students’ academic achievements more than the material based on the Novak concept maps.

Table 3. A post hoc comparison of post-test scores among traditional linear, Novak and multi-dimensional concept map group.

<table>
<thead>
<tr>
<th>Different material</th>
<th>Difference in means</th>
<th>Standard error</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novak concept map</td>
<td>Traditional linear</td>
<td>4.459</td>
<td>1.219</td>
<td>3.658</td>
</tr>
<tr>
<td>Multidimensional concept map</td>
<td>Traditional linear</td>
<td>8.030</td>
<td>1.219</td>
<td>6.587</td>
</tr>
<tr>
<td>Multidimensional concept map</td>
<td>Novak concept map</td>
<td>3.571</td>
<td>1.201</td>
<td>2.973</td>
</tr>
</tbody>
</table>

* $p < .05$  ** $p < .01$

Since the pre-test scores among three groups are not entirely equivalent, and to avoid pre-test scores interfering the effects of experiment, this study uses the post-test scores as a dependent variable, the groups were an independent variable, the pre-test scores are a covariate, conducting one-way analysis of covariance (ANCOVA). It achieves the actual difference among the three group’s post-test scores excluding the pre-test scores interfering. As Table 4 shows, the main effect of the ANCOVA reaches the significant statistical level, $F = 31.231$, $p < 0.01$. This result indicates that post-test scores among the three groups achieve prominently different level after the pre-test scores are controlled.
Table 4. Analysis of covariance in post-test scores for traditional linear, Novak and multi-dimensional concept map group.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate</td>
<td>782.033</td>
<td>1</td>
<td>782.033</td>
<td>44.895</td>
<td>.000**</td>
</tr>
<tr>
<td>Main effect</td>
<td>1088.028</td>
<td>2</td>
<td>544.014</td>
<td>31.231</td>
<td>.000**</td>
</tr>
<tr>
<td>Error</td>
<td>1724.479</td>
<td>99</td>
<td>17.419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3611.864</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01

4.2. The effect of various e-course material display methods on learning satisfaction

This study further compares the opinions of students’ on the teaching carried out by traditional e-digital material, the Novak concept map digital material and multidimensional concept map digital material. Learning satisfaction survey shows the average score of the multidimensional concept map group is 67.91, the Novak concept map group’s is 64.63, and traditional linear teaching control group’s is 61.88. To understand whether the degree of learning satisfaction resulted from different teaching strategies reaches significantly different level, this study continues to conduct the ANOVA on the three groups’ degree of learning satisfaction. The results are shown in Table 5. As the table shows, the three groups’ learning satisfaction points reach significantly different level, $F (2, 100) = 14.813, p<.01$, showing that different e-digital material can influence students’ learning satisfactory levels.

Table 5. Analysis of variance in learning satisfaction scores for traditional linear, Novak and multi-dimensional concept map group.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatments</td>
<td>621.668</td>
<td>2</td>
<td>310.834</td>
<td>14.813</td>
<td>.000**</td>
</tr>
<tr>
<td>Error</td>
<td>2098.429</td>
<td>100</td>
<td>20.984</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2720.097</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01

To further understand the discrepancy levels among the three groups, a post hoc procedure using Tukey HSD method is conducted. The results are shown in Table 6. It shows that the difference in mean scores of learning satisfaction between the multidimensional concept map experimental group and the Novak concept map control group is $3.286, (t(68)=3.001, p<.01$, reaching significant level. It shows the multidimensional e-course material has a higher satisfactory degree than the Novak concept map e-course material. The difference in average scores of learning satisfactory degree between the Novak concept map group and the traditional linear
material group is 2.750, \( t(66)=2.473, p<0.05 \). It shows that the Novak concept map group has a better learning satisfaction than the traditional linear teaching group. The difference in mean scores of learning satisfaction between the multidimensional concept map group and the traditional linear teaching group even reaches 6.035 point, \( t(66)=5.427, p<0.01 \), indicating that the multidimensional concept map group has an even better satisfaction level than the traditional teaching group. Hence, it proves that students have a higher degree of learning satisfaction toward the e-course material based on concept maps. Also, using the e-course material based on the multidimensional concept maps can even better promote students’ learning satisfaction than the e-course Novak material.

Table 6. A post hoc comparison of learning satisfaction scores among traditional linear, Novak and multi-dimensional concept map group.

<table>
<thead>
<tr>
<th>Different material</th>
<th>Difference in means</th>
<th>Standard error</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novak concept map</td>
<td>Traditional linear</td>
<td>2.750</td>
<td>1.112</td>
<td>2.473</td>
</tr>
<tr>
<td>Multidimensional concept map</td>
<td>Traditional linear</td>
<td>6.035</td>
<td>1.112</td>
<td>5.427</td>
</tr>
<tr>
<td>Multidimensional concept map</td>
<td>Novak concept map</td>
<td>3.286</td>
<td>1.095</td>
<td>3.001</td>
</tr>
</tbody>
</table>

*\( p<.05 \)  **\( p<.01 \)

4.3. Students’ interview outcomes analysis toward teaching material

The purpose of interviewing is to understand in depth how each individual student feels and thinks about the teaching material. This study applies stratified random sampling method, placing students into three strata of advancing the most, the moderate and the least advancement. Some of the shy students only nod instead of answering during the interview. The greater part of students’ answers were roughly the same. Below is a section of conversation between the teacher and student.

1. The Novak concept map teaching group

The following is dialogue between the teacher and the student with moderate advancement.

Teacher: *Do you like the computer course during this period of time?*
Student: Yes, I like it.
Teacher: *Why do you like it?*
Student: I like computer courses.
Teacher: *Then what is special about the course’s teaching material?*
Student: It looks a little complicated.
The following is dialogue between the teacher and the student with the most advancement.

*Teacher:* What impressed you the most in the computer course during this time?

*Student:* The concept map in the course.

*Teacher:* Why?

*Student:* The content that the teacher teaches is all on the screen.

*Teacher:* Do you think the computer class got easier or it is the same as before after you learned the concept mapping?

*Student:* I think it got easier

*Teacher:* Then would you use the mapping anywhere else after you learned it?

*Student:* Yes, it helped homework become better organized

2. Multidimensional concept map teaching group

The following is dialogue between the teacher and the student with moderate grades advancement.

*Teacher:* Do you like the computer course during this period of time?

*Student:* Yes, I like it.

*Teacher:* Why do you like it?

*Student:* The teacher uses a different type of teaching method.

*Teacher:* Then what do you think is special about the course material?

*Student:* I don’t have to learn a lot at a time to remember the course content.

The following is dialogue between the teacher and student with the most grades advancement.

*Teacher:* What impresses you the most during this time period’s computer course?

*Student:* The concept map that the teacher uses in the course.

*Teacher:* Why?

*Student:* I remember at once in class and will not forget it.

*Teacher:* Do you think the computer class became easier or it is the same as before after you learned the concept mapping?

*Student:* I think it became easier.

*Teacher:* Then would you use the mapping anywhere else after you learned it?

*Student:* Yes, it helped homework become easier.

Combining different students’ opinions, this study sums up two results. First, the reason why students prefer the Novak concept map teaching is that the teaching material of the course is well-stated. However, students still tend to mention the teaching material being somewhat complicated. This result proves this study’s discussion point of views. Novak concept map uses two-dimensional model to feature knowledge structure. The larger or more complicated concept components which are
limited to fit onto the computer screen might create problems of cognitive overload for students. Second, the reason why students are fond of the multidimensional concept maps is that the material is easy to understand. This result corresponds with the motive of the study, which is the fact that the multidimensional concept map teaching material can simplify the fashion of expressing its knowledge. Thus, concept map is able to promote student's interests. In addition to enjoying computer courses, students are able to grasp the ideas of concept maps, which results in a more positive attitude toward computer courses due to the fact multidimensional concept maps make the course content even easier for them to understand. While students have more control over grasping the notion of the multidimensional maps, computer courses have become easier for them.

5. Conclusion

Summing up the outcomes of experiments, this study has the following conclusions:

1. Using multidimensional concept map e-course material for teaching process can enable students to academically perform better than Novak concept map and traditional linear e-course material. Novak concept map e-course material can perform better than the traditional linear e-course material.

2. As for learning attitude, students’ learning satisfaction levels are higher using multidimensional concept map material than using Novak concept map. The level of Novak concept map is higher than the traditional linear e-course material.

3. Students prefer the concept map material because its course material is easy to understand. However, as for students preferring multidimensional concept maps material than Novak concept maps material, the reason is that the multidimensional concept map can simplify knowledge structure features better than Novak concept maps.

References


Teaching, 26(1), 54-57.
LEADING INNOVATION AND CHANGE (School Improvement through accredited Continuing Professional Development)

In order for schools to become more effective there has to be professional leadership at all levels within the institution. These leaders need a shared vision and agreed goals in order to transform their school into a professional learning community as characterized by an environment fostering cooperation, emotional support, personal growth, and a synergy of efforts.
This study investigates the impact of accredited leadership CPD in the form of Masters Degrees delivered in schools; developing communities of practitioner learners among groups of teachers. The course is premised on the General Teaching Council for England’s assertion that professional learning offers teachers the opportunity to take a leading role in school improvement and in developing their own and others’ practice. The programme is designed to allow educators in school to challenge and change working practices in ways that enhance the efficacy of their institutions. Participants provide evidence of managing educational change through systematic consultation, collaboration and leadership. Within each school a minimum of 5 teachers engage in systematic enquiry in support of leading innovation and change initiatives in order to have impact on practice and to develop a climate for ongoing professional development. Participants include staff at all levels in the school structure including head teachers, experienced teachers and newly qualified teachers. Delivery is facilitated in diverse school settings and requires teachers to reflect systematically and to work collaboratively within their institutions. In addition individuals' research informs strategies for teaching and learning and enables teacher practitioners to undertake action research in areas relevant to their own roles. Research addresses the development priorities within their organisations and individual research projects are linked to the School’s Improvement Plan. All participants are involved in the generation and dissemination of professional knowledge. This knowledge exchange further emphasizes the significance of participants’ professional values, concerns, priorities and actions in sustaining school improvement. It is too early to state quantitatively that there are sustainable improvements in pupils' curricular grades or achievements. However, feedback from teachers indicates strongly that pupils’ learning experiences within the curriculum are being enhanced and that there are noted increases in pupils’ capacity to learn in different subjects. Sustained continuing professional work over time is enabling teachers to experiment, to share and apply findings to their practice, particularly relating to pupils’ learning. Collaboration in teams both within schools and across schools (networks) is helping schools build social and intellectual capital. Sustainable outcomes included increased self confidence, motivation and awareness of themselves as learners among the teacher
participants. Furthermore, the intended developmental outcome of improving the efficacy of schools, particularly in relation to enhancing pupils’ capacity to learn is being met throughout the diversity of school settings. Supplementary outcomes include research and knowledge exchange that enhances the work of the whole school; improving learning capacity, meta-cognition and attainment and also increased staff moral and retention, which is in turn causing a transformation of their professional roles.

Key Terms: Teacher professional development, learning communities, education policy and leadership, sustainable improvement, practitioner research, improving learning, school efficacy.
Competitive Shooting: A Correlational Analysis Between Flow and Imagery

Lead Author:

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Abstract

The purpose of this study was to examine the relationships that exist between competitive shooters, flow, and imagery. The Event Experience Scale (FSS-2), developed by Jackson & Eklund (2004) was used to determine if a flow experience, as defined by Csikszentmihalyi (1975) existed during their competition. The Sports Imagery Questionnaire (Hall, Stevens, & Paivio, 2005 was used to assess the amount of imagery shooters used during their competition.

The data was collected from participants at the national competition of the International Defensive Pistol Association. Each participant randomly volunteered to be a part of the data collection for the study. Participants in the study filled out each questionnaire within 1 hour of having completed the course of fire for the competition.

The Pearson Bivariate Correlation Statistic was used to analyze if a relationships existed between the shooters score, total FSS-2 score, and the mean sports imagery score. A two tailed test of significance was chosen when running the analysis. The analysis revealed no statistical correlations between the items examined. Discussion for further research is presented.
Title of submission:

Use of Nutritional Supplementation among University Recreation Users

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(abstract on following page)
Abstract:

Use of nutritional supplements and ergogenic aids among various user groups has been well documented over the years. One area that is lacking in current research is the use of these nutritional supplements among campus recreation facility users. This population is a prime target market for those in the sport supplement industry. There are many reasons people participate in campus recreation facilities and most would benefit from the use of nutritional supplementation if the claims made by the manufacturers of these supplements is true. However, the nutritional supplement industry is not very strictly regulated and the potential for risk to users is ever present. Obviously the risks vary among manufacturers and also with the type of supplement being taken. It is in the best interest of anyone contemplating taking a nutritional supplement to research the risks, benefits and potential side-effects. It would be beneficial for campus recreation administrators to have an understanding of what types of nutritional supplements their patrons are taking and the risks involved with such. It would also be of benefit to have an understanding of where the patrons obtain information regarding nutritional supplements so that nonbiased educational interventions can be developed with the goal of reducing risks associated with patron of these products. 200 users of a campus recreation facility were surveyed using an instrument designed by Scofield & Unruh (2006) to assess the prevalence of use of nutritional supplements, the types of supplements being used, and where they obtain their information regarding these supplements.
Results on the ACHA-NCHA II at a Midsized University in the Southern United States

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Abstract  
The purpose of this presentation is to report the results of the NCHA II for a midsized (estimated enrollment of 20,000) university in the Southern United States. An additional purpose includes comparing the national results to those of the midsized university in the Southern United States and draw conclusion about any similarities and differences found. The American College Health Association (ACHA) is the nation's principal advocate and leadership organization for college and university health, represents a diverse membership that provides and supports the delivery of health care and prevention and wellness services for the nation's 18 million college students. The ACHA-National College Health Assessment II (ACHA-NCHA II) is a national research survey organized by the American College Health Association (ACHA) to assist college health service providers, health educators, counselors, and administrators in collecting data about their students' habits, behaviors, and perceptions on the most prevalent health topics. The ACHA-NCHA now provides the largest known comprehensive data set on the health of college students, providing the college health and higher education fields with a vast spectrum of information on student health. The categories included on the ACHA-NCHA II include General Health of College Students, Disease and Injury Prevention, Academic Impacts, Violence, Abusive Relationships and Personal Safety, Alcohol, Tobacco, and Other Drug Use, Sexual Behavior, Nutrition and Exercise, Mental Health and Sleep.
A “Deaf” Society In A Musical World: Contemplations Of Awareness
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Hawaii International Conference On Education

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**Introduction**

Ancient Chinese philosophers found that through the act of listening, humans could educe creativity and help develop an awareness and interconnection with the universe (Lawson, 2009). Greek philosophers, such as Plato in his work the *Republic*, found that a balance between physical and intellectual education was a primary precept to an ideal city (Bloom, 1968). Many ancient philosophers, both Greek and Chinese, have proposed that education should be concerned with more than just nurturing the intellect; education should place an equal value on the body, mind and soul. This sentiment is alive and well 2500 years later in the writings of the philosopher and educator Jiddu Krishnamurti (1992): “education should be concerned with the totality of life and not with immediate responses to immediate challenges” (p. 84). As a music educator, I feel that the role of music within North America has become a way to propagate a mentality that is ‘deaf’ to the acoustic environment; this deafened society is only aware of a constrained meaning of music.

In studying modern education and curriculum, I am inundated with an overemphasis on the use of visual stimuli, such as writing, as the primary tool towards engaging the learner, while the other four senses, such as hearing, are overlooked. Due to society embracing a technological focus, music education has become classified by parameters that concentrate on producing students that can best benefit from an economic-based system; this system facilitates a continual cycle of *desire* to obtain commodities and achievements. I feel that in the process of the categorization of music, music education has become a part of a quota to fulfill within the curriculum and a vehicle to educating students in a self-centered manner, void of a bodily, spiritual or environmental awareness. One of the main tenets of Buddhist teachings is that life is perpetual dissatisfaction or *suffering*, and the origin of this discontent or discomfort is from an obsession with human *desire* (Singer, 1993). The implications of a desire-driven mentality on music education have created a restricted awareness or deafness to musical sound. I will delve into and question
the relationship between the cycle of desire/discontent within modern society and how it affects music education. I will then pose potential ways to open our awareness of our musical environment by finding equilibrium between our perceptions, intellect and embodiment of our musical practice, without getting ensnared in our obsession with desire.

History, Perception & Musical Sound

Philosophical Perspective

The importance of musical sound derived by nature and humans has been a continuous theme in ancient Chinese writings: “No other culture seems to have valued sound as a heavenly source for and barometer of proper governance” (Lawson, 2009, p. 22). Ancient Chinese texts also discuss music’s ability to “enhance circulation in the physical body and sharpen the sense organs” (Wang, 2004, p. 100), and from this I deduce that sound has the ability to provide a connection between the mind and body. Daoist philosophers deemed music as having the capacity to expand intelligence while augmenting the human connection with nature⁴, as “listening is one of the best means for understanding our profound physical interconnectedness with the natural world, and the ability to listen is the source of human creativity and intelligence” (Lawson, 2009, p. 21).

While ancient Eastern philosophy values music for its various educational abilities, a quick glance at my own community and I observe a deterioration of the connection between music and human life. A majority of the populous is naïve to music’s ability to shape disposition or strengthen a connection with the physical environment, due to being exposed only to a limited styling of music within their own education and experience. How can we expect children and subsequently adults to see the value in music unless we change the way they perceive it⁵ (Regelski, 2006)? The popularity of music in education “is directly related to the public perception of the value of music” (McCarthy, 1999, as cited in Gluschankof, 2004, p. 183). Schools place a higher value on knowledge that can be empirically tested or externally
recorded than on knowledge that cannot be externally recorded. This lower valued knowledge encompasses many of the skills, such as cooking, music performance or navigation, which are respected by orally based cultures (Rasmussen & Akulukjuk in McKenzie, Hart, Bai & Jickling, 2009).

As a music educator, I suspect that music education and appreciation within society has become a dying field. Music education curriculum within K-12 has changed from actually learning the art of music to learning about music (Fung, 2010). It seems that modern curriculum values an education that provides students with the tools and skills to be successful in the economic based society, and the perceived lower value of music forces it to no longer be viewed as educationally viable.

Music education has become a means to an end – a checkmark on the required curriculum list. Within Regelski’s (2004) work it becomes evident that educators are reluctant to incorporate music into curriculum, as music can be an alienating activity due to the lower value placed on music. This lesser quality assigned to music is reflected in how children are educated about the value of music. If musical awareness was incorporated into everyday life, we could change our perceptions of musical sound by our newfound comprehension of our acoustic environment.

**Subjective Perception & The Limitations By Defining Musical Sound**

Mothers sing lullabies, children sing songs, and music can be found in almost every culture, yet how that musical sound is perceived and valued can vary. “No society yet studied is without music” (Perris, 1985, p. 1), yet it appears that the role of music within modern society is limited to early childhood educational curriculum and entertainment. We have aestheticized music as an entity on its own, to the point that we ignore the rest of its value (Regelski, 2006). How can we separate the sounds of music from their expression and embodiment? Words do not convey an entire communicative account; humans rely on body language and expression as complementing data and just "like words and morphemes, songs are form-meaning units to be included in any complete language description" (Turpin & Stebbins, 2010, p.
1). Music isn’t simply sounds combined into patterns and frequencies; modern Western culture seems to have lost the ability to hear the deeper levels of musical sound, due to an over categorization of reality. Modern society defines items, thoughts, and actions into discreet categories, using binaries and empirical research (Boyce-Tillman, 2004). Do we really need to deconstruct music into scientific terminology to validate it? In our quest to define each detail of life, turning to physics, biology and psychology to summate our universe, we may have lost crucial information within the dissection. Musical sound has limitless definitions, but due to the rigidity of the parameters of modern computer language, musical sound has been forced into the confines of binary audio signals (Dannenberg, 1993). Science can only explain the aspects of music that we can quantify; yet what about what we cannot see, perceive or understand?

Music is a subjective perception, as “music is an observer relative” (Regelski, 2004, p. 21). While music can be defined as “organized sound” (Swanwick, 1979, p. 8), the definition limits the potential of what is considered music; if pitched organized sound is a possible definition of music, then music could be found in the howl of a dog, while a tambourine would be considered noise (Swanwick, 1979). In this process of classifying music, subjective interpretations challenge the very perceived definitions (Regelski, 2004). John Cage, a minimalist composer, composed a piece named 4’33”, which consists of four minutes-thirty-three seconds of a pianist at a piano bench, playing nothing at all. The auditory environment of the hall, the creaking of the chairs, the coughing and the breathing of the audience, and all the other sounds that occur create a musical score of silence. This piece of music shows that improvisation is a test in randomness; we build something out of nothing. This composition was instrumental yet controversial in changing the perception of what was defined as music back in 1952, as the piece itself posed the question of whether it was music or not.

A trained musician and a layperson may have different interpretations of the sound of wind, yet
both would be justified in their own way, due to their perceptions being shaped by experience, expectations and physiological differences. The sound of the wind can be construed as noise, a function of the weather, or even a catalyst for a symphony of connected sounds. Envision the sound of wind rustling through trees creating a creaking noise that is accompanied by the crackling of dried leaves; by opening our acoustic awareness, I posit that we can build a new set of tools to interpret our acoustic environment instead of simply remaining deaf to our surroundings. “Human beings have a fundamental need to experience a sense of connectedness to the natural world” (Wilson, 1996, p. 16), and by finding a way to connect our minds, bodies and musical practice, without expecting musical learning to help us achieve materialistic goals, our understanding of music education could potentially change.

Buddhist Teachings, Desire & Music

Smith & Novak (2003) discuss how the human condition is perpetually seeking happiness and the avoidance of suffering, and that with the Buddhist teachings of the Four Noble Truths, a student can learn how to find the path to enlightenment. The Four Noble Truths can be found repeatedly through the fundamental teachings of Buddhism. Within the Pāli canon, the Four Noble Truths are described as the “four convictions of life” (Smith & Novak, 2003, p. 31). The First Noble Truth is that life is dukkha, which is a discontent, uneasiness or suffering due to various aspects of human life, from pain, despair, or anguish (Singer, 1993; Smith & Novak, 2003). The Second Noble Truth is the cause of suffering, which is tanha – desire, craving or attachment. Tanha or desire describes the human “drive for private fulfillment” (Smith & Novak, 2003, p. 38). In the Third Noble Truth, it may become possible to eliminate suffering from one’s life. The Fourth Noble Truth is to follow the Path to eliminate suffering (Tsering, 2005). The Path, as noted by Smith & Novak (2003) is “a series of changes designed to release the individual from ignorance, unwitting impulse and tanha” (p. 39). Buddhism is not simply about rejecting material goods, but rather using them as building blocks for “mental and spiritual ecology” (Hattam, as cited in Eppert &
Wang, 2008, p. 129), instead of as trophies of accomplishment. Within this paper, I focus on the Second Noble truth – *desire*, as the instigating factor in modern society’s restricted view and grasp of music education. In this desire to place an extrinsic value on and quantify music education, it is possible that there are aspects of musical sound and the acoustic environment that have been lost in the commotion of our consumerist lifestyles.

**Modern Education, Society & Musical Awareness**

**The Search For Attainment of Achievement and Commodities in Society**

The belief that the consumption of goods, happiness and achievement are intrinsically tied together as the primary tenet of the modern Western World is a mindset that is even infiltrating formerly comparatively ascetic societies. This mentality reinforces a cycle of desire, desperation, and need of stuff\(^8\), which then results in what Buddhist teachings would call *suffering*. The *suffering* and desperation for happiness are concealed by the societal obsession with obtaining excessive commodities and achievements; this could be categorized as consumerism\(^9\). The early 19\(^{th}\) Century author Thoreau noted this sense of desperation:

“*The mass of men lead lives of quiet desperation. What is called resignation is confirmed desperation. From the desperate city you go into the desperate country, and have to console yourself with the bravery of minks and muskrats. A stereotyped but unconscious despair is concealed even under what are called the games and amusements of mankind*” (Thoreau, 1962, p. 117).

Desires and subconscious urges form a large part of how our personality and actions are expressed. The id, ego and super ego\(^{10}\) are the three constructs of the human psyche, according to Sigmund Freud. The id contains urges, drives and avoidance of pain, the ego is a somewhat conscious process that helps organize our reality, and the super-ego contains the sense of right and wrong, providing the mind with the
potential for spirituality, while keeping desires under control (Habicht, 2001; Strunk, 1960). Using the premise of Freud’s theoretical constructs of the id, ego and super-ego, is the id simply winning the fight against the ego and superego? Buddhist teachings could describe this situation as a struggle between the id desiring material goods, yet through the insecurities of acquiring these goals or goods, the ego classifies these feelings as anxiety and fear (Eppert in McKenzie, Hart, Bai & Jickling, 2009). In the search to avoid suffering, the mind forms new perceptions that are once again transmitted to the mind as a different form of suffering; this perpetuates a cycle of discontent that only leads to a self-centered fixation on relieving the feelings of suffering and unhappiness once again.

**Self-Centered Values**

With increasing urbanization there seems to have been a shift from a collectivist culture to an individualistic existence where obtaining achievements takes precedence over a sense of community. My own experience with modern group activities, such as soccer or orchestra, have found a promise of community and collective well-being, yet prestigious awards are handed out for the elite performer, while most co-operative awards have become the booby prize of the world of group activities. While this self-centered view is not blatantly broadcasted, it is the underlying theme to a majority of activities in modern society, including music education. Choir and orchestra classes seek to win competitions and obtain the highest rankings, and while a sense of comradery is evident due to the nature of the activities, the overwhelming need to compete and produce the ‘best’ performer prevails.

Music education only caters to a small population of learners, a "musical elite among the general population" (Regelski, 2006, p. 5), and within that selection of music students, only a narrow selection of music history is taught (Sands, 2007). Only information that has been deemed appropriate by authors, editors and publishers gets included within the textbooks. There is a “misleading portrayal” (Sands, 2007, p. 57) of the definition of music, and while I do not have a conclusive definition, I know from my own
experience as a music composer, that the definition of music that is derived from textbooks only contains a limited scope of the musical experience.

There is no wonder there is a difficulty in illustrating the value of music, when current music education is overpowered by individual success. In this respect, I propose that music rarely is able to sate the need for material or attainable commodities that are hailed within our industrial economy. In observing modern media, it becomes apparent that musical celebrities have little connection to their music, mass-producing music to attain their acceptance. If music and music education have been reduced to an obsession of achievement, then the value and role of music in human lives have become ambiguous. This is in line with Buddhist philosophy, as in my opinion this yearning to attain achievements and material goods are a futile exercise. I have witnessed children who are no longer interested in learning music for their well-being or even the amusement and joy they might find, rather they are stuck in perpetual loops of demanding the training and tools to become famous and to then gain riches. From my perspective, the futile aspect of this endeavor is found in the reality that even once gaining fame or fortune, there will always be another desire to pursue; happiness and achievement always just out of grasp.

A bird chirping, a jackhammer, a car driving by honking, these sounds could potentially be construed as the music of urban environments, yet in our focus of making money to feed our consumerist subsistence, we typically define those sounds as environmental noise. While one cannot ignore the basic needs for shelter, food, and security as emphasized by Maslow’s hierarchy of needs, our obsession with obtaining our desires goes beyond the demand of basic necessities. This consumerist order of our economic society dictates a mindset that demands us to work to obtain perceived happiness. The question now becomes, how can we disentangle from our consumerist lifestyles, how have they affected our educational institutions, and has that affected how we perceive our acoustic world?
The Purpose of Music Education: Drones or Aware Citizens

“The great secret of education is to use exercise of mind and body as relaxation one to the other” (Rousseau, 2007, p. 176), yet modern day education focuses specifically on the subjects and skills that will make the students successful in the industrial world, not more attuned to their environmental, emotional or corporeal well-being. Are we trapped in Plato’s cave of subjective reality, unable to see the truth of music’s potential? Modern society possesses a narrow scope of what defines music education, which seems to be keeping us figuratively and literally deaf to the possibilities of musical sound.

Just as ancient Chinese and Greek philosophers, such as Plato, hypothesized in their writing that “improper music can result in disobedience and contempt” (as cited in Wang, 2004, p. 91), current educational researchers note “music can help create a good moral environment that […] channels emotions and shapes the soul” (Kilpatrick, 1995, p. 30). The content and intentions of music education then not only become relevant to the educational system, but significant when considering what types of music education children are exposed to.

There has been recognition of the limitations of traditional schooling by organizations or businesses that are "concerned that students are insufficiently prepared for the increasing demands of the workplace and globalization" (Regelski, 2006, p. 3). I postulate that the purpose of modern education is to produce efficient and productive worker drones to fuel the economy rather than to help educate students in their growth and transformation into mindful and knowledgeable citizens.

Drawing on the lessons found in Plato’s Republic, excessive desire or lack of moderation is the downfall of an ideal citizen as it interferes with self-control and rational pursuits (Bloom, 1968). Instead of taking the positive lessons from Plato’s ideal city, our society has embraced a narcissistic mentality that has infiltrated our educational system. One could argue that Plato sought an ideal city of citizens that were drones that followed the rules of moderation and provided to the needs of the guardians. I would contend
that Plato’s ideal education of his citizens incorporated an education of the intellect, spirit, and body, which varies greatly from our society’s developing focus on sheer intellect for contributing to the cycle of economic productivity.

Modern schools have become a place to inculcate the “necessary skills and social relations for the functioning of a socio-economic status quo” (Schmidt, 2005, p. 3), where children are only given the basic tools of music education to fulfill the curriculum requirements. In my experience, this format does not promote a life-long dedication to music, but provides a superficial application of music to a child’s life. By obsessing over the superficial aspects of music education, an elusive goal is consistently fabricated, removing the joy and the potential for growth from the experience and replacing it with a carnal desire for achieving a boastful accomplishment. Is the purpose of learning musical improvisation to become famous, or to learn and master the instrument, benefiting from the positive psychological and physiological responses that are elicited by musical sound?

Musical Awareness

A music composer or performer has the ability to practice the Buddhist concept of impermanence, by not becoming attached to particular theme, sketch or motive. A composer may write hundreds of versions of a piece of music, only to throw away them all. It is a meditation in imagination and creativity. Modern society seems to thrive on getting things correct the first time, yet if something is achieved the first time without error, there is no room to learn from or perceive it differently. Value is not placed on the transformation of one's character/mind/spirituality, only on their accomplishments. Where is there room to create a connection between the environment and the self?

It is possible to foster a connection between curriculum and one’s awareness of their acoustic environment. Positive experiences with nature help develop aesthetic development, and creating a relationship with the natural environment at an early age can potentially help shape the learner’s mental
construction of their environment (Wilson, 1996). When given the opportunity, a child’s plasticity will allow them to use their natural environment to create music, dance and art. Yet, due to the assumptions of our society, children aren’t given the chance to discover the potential of their acoustic environment. From an early age, children witness what their culture defines as music, and form attitudes and values about what are relevant (Wilson, 2007), it is up to educators to facilitate an alternative definition.

**Noise & Becoming Aware of the Environment**

Song as a form of communication and music has been altered by the abundance of noise within the urban environment (Halfwerk & Slabbekoorn, 2009). While Halfwerk & Slabbekoorn (2009) were researching the effects of urban noise on bird songs and communication, they noted drastic changes in bird songs due to city noise. If birds and animals have altered communication patterns due to the excessive sounds of urban environments, it is plausible that there are ramifications on the adaptation of human communication.

Noise is a part of our everyday society, yet how we interpret and become aware of “noise” is dependant on our readiness to perceive things differently. Eastern philosophy has traditionally made it a lifelong process to open the mind to the environment and note the importance of music, yet modern culture seems to have systematically ignored this in developing educational curriculum. Humans have become accustomed to noise, constant drones of sounds from the hum of electricity, or the sound of people talking. Due to this continual input of sound, urbanized societies have become habituated to ignore their environment and have been desensitized to details that they once might have heard. The saturation of the acoustic environment is not limited to non-musical sounds, musical sound is a constant drone in metropolitan societies. The ears cannot be muted or blindfolded; they are subject to hearing sounds broadcast around them. In this sound-inundated culture, it is essential to find a way to contend with the sounds that the ears are bombarded with. By learning to awaken the senses, to let go of cravings and to
embrace the uncomfortable notion of silence, it could become possible to finally become aware of the acoustic environment, as “[when] we are afraid to touch our suffering, we will not be able to realize the path of peace, joy and liberation” (Hanh, 1998, p. 45).

**Lack of Respect and A Narrow Scope for Music Education**

By teaching children at an early age about their acoustic environment, we are providing them with the groundwork for a life long transformative learning that they will need to avoid becoming numb to their sense of hearing. Rousseau’s *Emile, or On Education* (2007), highlights the difficulty with putting an educational curriculum into practice: “thus one kind of education would be possible in Switzerland and not in France; another would be adapted to the middle classes and not to the nobility” (p. 9). Finding a way to accommodate different learning styles, cultures and curriculum continually poses a problem for educators. Incorporating music education into a curriculum that finds little value to the topic thus becomes a daunting task.

“Contemporary research confirms the view that young children learn most efficiently when they are engaged in interaction rather than in merely receptive or passive activities” (Katz, 1987, p. 2), yet a majority of music education curriculum does not seem to attend to this research assumption, with written learning of notation and instrumentation leading the curricula agendas. Children spend more than 95% of their time indoors (Cohen, 1984), where they miss out on experiencing an acoustic environment outside of the confines of urbanized noises. Finding a balance between traditional and non-traditional music education could benefit the learners, for instance, allowing children to explore sounds and music outside of the traditional seated context of the music class through exploring a multisensory education outdoors could help them refine their sense of environment through sound (Deans, Brown & Dilkes, 2005).

Modern society’s understanding of music, which as already noted has its limitations and constraints, regiments music education curriculum. Within grade school, children are taught music only to
fulfill the required curriculum; upon reaching the teen years, music education is only for those who are able to excel; upon adulthood, music seems to have no place within the average workplace, aside from background music. Creativity is stifled to make room for efficiency and productivity, the keystones to an urbanized and consumerist culture. Instead of asking music educators, ‘how can we use music education to further our consumerist agenda and our reproduction of social and economic dependence?’, the question of music education should be, ‘how can we break free of the parameters and limitations of our society’s definition of music?’. I propose to answer this by taking advice from a Daoist teaching:

“Who can (make) the muddy water (clear)? Let it be still, and it will gradually become clear. Who can secure the condition of the rest? Let movement go on, and the condition of the rest will gradually arise” (Lao Tze, 1997).

By giving up the assumption that the current definition of ‘music’ is correct, and letting the music simply exist without the agitation or expectation of definition, a true definition and understanding will arise.

**Conclusion**

In the perpetual search for happiness through material goods and achievements, modern society has become deaf to the sounds of their acoustic environment. While ancient Chinese and Greek philosophy reinforced the potential influence of music on the development of values and disposition, the cravings and desires of a commodity-driven society have shaped music curriculum to educate students to become productive economic contributors. As Buddhist teachings explain, this continuous desire to obtain goals and commodities will only result in a Sisyphean cycle of suffering or discontent. Figuratively and literally stepping outside of the noise of the urban environment could provide students with an opportunity to hear a completely novel acoustic environment, and create their own awareness of musical sound, free of the limitations of categorization. While I do not have a definitive answer on how to change modern
society’s priorities, I feel that through understanding what our society currently values, and how that is limiting our ability to perceive a grander scope of musical sound, music education has the potential to develop a curriculum of a musical awareness that could incorporate all the senses.
References


Footnotes

1 By the term “acoustic”, I am referring to the sense of hearing that is performed by the human auditory system. While sight, smell and taste can be definitively explained, the molecular basis of touch and hearing is still vague (Kung, 2005). The human ear is capable of differentiating between pitch, rhythm and quality of sound, and also has the ability to hear a wide range of frequencies (Bowsher, 1975). Sound is a vibration that is transmitted through a medium that then creates an oscillating sound wave that is then received by the listener’s ear. Upon the ear receiving the sound wave, it is then translated into nerve impulses that are perceived by the auditory cortex in the brain (See Bowsher, 1975). This perception of sound by the brain is then translated into something we can understand: music.

2 The term “deaf” refers to the human inability to hear or use the sense of hearing. Within the context of this paper, “deafness” refers to the human desensitization or numbness and inability to be aware of their acoustic environment, rather than a physiological inability to hear.

3 For the ease of brevity, I will primarily use the term suffering within this paper to encompass this concept of human discontent or dissatisfaction.

4 The term nature within this paper references the non-human world, which can encompass the biological environment through the technological and mechanical environment. (See Abram, 1997).

5 The use of the term “our”, “us” and “we” within this paper denotes human beings living within North America, with a focus on those involved in the traditional education system. The author is included within this term, as the author is subject to the same cultural and societal influences that are discussed within the paper.

6 Jarvis (2008) defines Western society as those who live in the Western hemisphere of the world, more specifically North America. Western society is also “a consumer society and argues that the need of global capitalism to sell its commodities in the market place is the fundamental force behind consumerism” (Jarvis, 2008, p. 12).

7 The Pāli canon is the collection of scriptures of Buddhist teachings (See Smith & Novak, 2003)

8 Within this paper, the term “stuff” refers to the a range of items, from commodities, material goods, emotional desires, or anything that could be classified as something that humans would want to obtain or desire.

9 The word “consumerism” is a controversial term, as there are various definitions and uses. For the purposes of this paper and its arguments, the term consumerism is assumed to encompass the theory that the excessive consumption of commodities, goods and services is fueled by an economic and social desire and attachment to these goods.

10 Freud’s conceptual model of the human psyche has been used as the basis for psychological and personality theory for over one hundred years. While various philosophers, psychiatrists and researchers have made their own alterations to Freud’s initial definitions and explanations, the use of the terms, ego, superego and id are still commonly used (See Dallmayr, 1993).

11 Pinal-Cabra (1993) notes, “the booby prize [is] awarded to the person who comes last in [a] competition” (p. 105). Also, the term booby prize can mean a prize given to an idiot or a dunce (See Wikipedia, 2010).

12 Maslow’s hierarchy of needs are constructed of five psychological factors that humans seek, starting with 1) physiological: breathing, food, sex, and water, 2) safety: protection and safety in one’s home, job security, and security from war etc., 3) love: friendship, family, intimacy, and belonging, 4) esteem: self-esteem or self-respect, and 5) self actualization: making use of one’s skills, gifts and experience, to attain one’s ultimate potential. (See Hagerty, 1999).
13 Within Plato’s *Republic*, Plato discusses a metaphor of a cave: There are individuals imprisoned in an underground cave for their entire lives, where they face a wall. There is a fire within the distance that only illuminates the shadows. The prisoners come to know the shadows and distant voices as reality. If a prisoner was brought into the sunlight, Plato believed that the prisoner would be confused at first to see the world, but come to know that the shadows were not in fact the reality (See Bloom, 1968). This is important to this discussion of musical awareness, as our sensations shape our perceptions of reality, yet we must question whether or not we are seeing the reality outside of the cave, or rather only viewing the hypothetical shadows.

14 There are three classes of citizens within the *Republic’s* ideal city. The people were valued for their role of contributing to the greater good, and were expected to exhibit the virtue of moderation. The warriors were the defenses against internal and external enemies, and were expected to exhibit the virtue of courage. The leaders of the city were the guardians, who were the elite class that made decisions; they exhibited the virtues of wisdom (See Plato, 399a, as cited in Bloom, 1968).

15 Within Buddhist teachings, the concept of impermanence is a focal point; existence is continually changing, in a constant state of fluctuation. Learning to acknowledge the existence of a moment, yet finding a way to release one’s reliance on it can lead towards understanding true reality. Through the practice of impermanence, a true awareness of the internal and external self becomes cognizant in the practitioner. If our desires were simply attachments to impermanent events, items or cravings, this desire would likely cause further suffering or discontent (See Burton, 2004). In regards to music education, if existence is continually changing, then there are unlimited possibilities to how music could be taught; each moment moving forward contains a new and unique opportunity.

16 Sisyphus is a character in Greek mythology, which had a punishment of perpetually rolling a rock up a hill, only then to have the rock roll back down the hill, and then to have to roll the rock up the hill once again. This task is a demonstration of exercise in futility, with no apparent end or achievement (See Homer, 1999).
Research objectives:

This study is intended to add to the thin research base that considers teacher and pupil responses to global education at the upper elementary level. Merryfield (2002) provides a frame for global education which includes addressing stereotypes, highlighting multiple perspectives, and experiencing cross-cultural learning through technology. This frame provides the basis for exploring the experience and outcomes of two fifth grade classrooms, in South African and the United States, sharing global education curriculum via technology.

At the turn of the millennium, the National Council for the Social Studies called for effective social studies programs that includes global and international education in line with the “transnational, cross-cultural, multi-cultural and multi-ethnic interactions” (NCSS, 2001) that impact the daily lives of average citizens. Social studies educators have long highlighted the necessity of global education in the K-12 classrooms, teacher preparation, and professional development programs in order to prepare the next generation for an increasingly interconnected world (Merryfield, 1998, 2002; Myers, 2006; Thornton, 2005; Wilson, 2001). Over the last decade much of the research on global studies has been focused on the teachers’ experience in the K-12 classroom, with very little research considering the impact of global education on pupils. The empirical work that does exist largely focuses on high school classrooms with very limited attention given to the use of global education in intermediate or middle school settings (Zong, Wilson, Quashiga, 2008). This study addresses the questions of whether and how students and teachers alter perceptions of identity, culture, and global education while participating in shared curriculum through technology, with classrooms in other nations. This ongoing qualitative research is continuing and expanding over the next academic year to include classrooms in Hong Kong and Ireland, as well as the classrooms from South Africa and the United States included in this initial project.
Proposed Methodology:

This qualitative study was conducted in two 5th grade classrooms, one in the United States and the other in South Africa. Students and teachers participated in a six week unit focused on addressing national stereotypes, culture, and identity. Students responded to a series of writing prompts, with responses shared within classrooms and in online exchanges in a limited access website. Each class also sent representations of their schools, community, and culture to their partner school in an artifact exchange. Finally, students took part in an online meeting with their partner school through skype. Teachers to part in pre- and post unit, semi-structured interviews intended to document their understandings of global education, as well as their experience in shared curriculum through technology. Data sources included student artifacts and discussions, online responses, skype exchanges, and teacher interviews. Data was read in three ways: in the chronological order in which the data was produced; organized according to whether data was generated by student, teacher, or researcher; and by type of data sources (artifacts, observations, surveys). Memos were made through each reading and themes identified from recurring topics. Matrices were generated to further develop and collapse themes, as well as identifying key evidence from the data.

Outcomes:

Preliminary analysis of data indicated that findings in three broad areas: program implementation, pupil learning, and professional development in teaching. Key issues in program implementation included differences in technology available in classrooms, access and restrictions in technology use in schools, and challenges posed by calendar/time differences. Programs were supported by the teacher investment in the project and administrative support for global connections. Finally, tensions from demands of mandated testing in both schools posed challenges with time constraints and lack of flexibility in curriculum content.

In considering pupil learning, data indicated that students at this level had preconceived notions about other cultures/partners nation that had been developed through media rather than school experiences. Contrary to suggestions in current literature, students were capable of discussing and grappling with issues of culture and stereotypes. Students also demonstrated new understanding of their own cultural context and the role media plays in promoting stereotypes. Further, data suggests that students at this level did not have other authentic experiences that promoted in-depth understandings of culture and stereotypes despite school level concerns with preparation for 21st century global education.

Teachers reflected on the experience as collaborative professional development that enriched their content knowledge and authentic use of technology, pressing them to work outside the boundaries of current knowledge and skills. Teachers also utilized the opportunity to consider issues of social justice that connected local challenges of equity to global concerns and their role in whether and how these issues could be addressed in the intermediate classroom.
Title:
Seeing what was said: Using audio recording and visualization software in language teaching

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Abstract
Over the course of the last decade, there has been a discernable upswing in the amount of literature describing the importance of pronunciation in second and foreign language learning as well as the positive effects language learners receive when exposed to target language pronunciation instruction. In order to facilitate ways of bringing pronunciation instruction into the language classroom, the present article details the rationale for using audio recording and visualization software (ARVS) with language learners, presents some of the more common functions found in most ARVS, and reviews some of the more useful freeware ARVS.
During the height of the audiolinguistic method of language teaching, a considerable amount of attention was paid to pronunciation instruction. This was because effective language learning was thought to come about by learners mastering how to assemble the building blocks of language (e.g., vocabulary, phonemes, morphemes). Thus, mimicry and repetitions were mainstays of many lessons. In time, however, the audiolinguistic method gave way to other teaching methods, most recently those that focus on developing communicative competence in language learners.

When audiolingualism fell, it took pronunciation instruction with it. Most institutions expunged explicit pronunciation training from their curricula. As a result, in most cases, learners were only taught pronunciation if it happened to be the focus of a course (e.g., Phonetics 101) or if learners' pronunciation was so unintelligible or problematic that remediation was required (Makarova, 2000). Why pronunciation instruction was discarded so quickly has left some researchers like Celce-Murcia, Brinton, and Goodwin (1996) baffled, for, as they state, both empirical and anecdotal evidence exists to show that there is a threshold level of pronunciation for non-native English speakers. Speakers who fall below this threshold will have communication
problems regardless of the extent of their knowledge and control of English grammar and vocabulary.

Indications exist, however, that point to a possible comeback in pronunciation instruction. First, research conducted within the last decade has shown that language learners are actually concerned about their pronunciation (Kikuchi, 2005). This is understandable, for as Kashiwagi and Snyder (2003) note, studies investigating language learner beliefs have found that language learners give high priority to improvement of their pronunciation. High priority topics for learners become high priority topics for instructors.

Second, it has been realized that it becomes essential for learners who interact with other L1 users via the target language, either in the workforce or for personal business, to have reasonably intelligible speech as well as oral communicative development (Morley, 1991). In fact, dedicated L2 (second language) students expect their teachers to help them reach target language pronunciation levels because they know pronunciation may be the deciding factor for an employment position (Riney, Takada, & Ota, 2000). It has been found that non-native speakers’ pronunciation, if not intelligible to a certain degree, can have a negative impact on their job prospects (Carlson & McHenry, 2006; Sato, 1991, as cited in Munro & Derwing, 1999). This final point should be of immense concern to language instructors who are preparing their students to work in an increasingly global society.

Finally, there has been a discernable upswing of pronunciation research conducted over the last decade, particularly research involving the effects of pronunciation training. Since the late 1990s, researchers have discovered that learners can actually improve their pronunciation of the foreign language under study if
provided pronunciation training, especially if they are initially familiar with the target language’s pronunciation (Derwing & Munro, 1997; Derwing, Munro, & Wiebe, 1998; Kashiwagi & Snyder, 2003; Kenworthy, 1987; Munro, Derwing, & Morton, 2006).

Considering that improved pronunciation and increased intelligibility can also boost learners’ confidence in speaking situations (Avery & Ehrlich, 1992), it seems logical for instructors to find ways to make pronunciation instruction a mainstay of foreign language courses, particularly those involving speaking, listening, and intercultural communication.

**Rationale for recording**

A wealth of instructional material exists should instructors become interested in adding a pronunciation component to their teaching. However, instead of (or in addition to) using another textbook in class, it might be more edifying – not to mention more enjoyable – for all concerned to see students’ pronunciation as well as hear it. To this end, instructors should consider utilizing audio recording and visualization software (ARVS), much of which is inexpensive or freely available for computer operating systems typically found in homes and classroom environments.

Computers in the classroom have long been praised for their ability to make information psychologically and cognitively accessible (cf. Pennington, 1996). In this way, by using ARVS, learners can be exposed to their own and others’ pronunciation in new and exciting ways. For instance, as it is possible to digitally record and archive utterances, students’ pronunciation can be recorded and saved at the beginning and end of a course. Playing back the recordings for comparison purposes makes it easier for students (and instructors) to mark their pronunciation progress.
More importantly, ARVS allows for sophisticated yet illuminating analyses of human speech. These analyses are carried out by examinations of (a) waveforms, (b) spectrograms, and (c) pitch contours, for these present visual experiences of exactly what was pronounced and provide a clearer understanding of what needs to be done for pronunciation improvement.

**ARVS functions**

The first function to be discussed is the waveform. Most ARVS will automatically record and display input via a waveform. Waveforms show the pulses produced when the vocal cords vibrate. Generally speaking, waveforms do not make it easy to interpret utterances (i.e., to see which phonemes were uttered), but they do display both frequency and amplitude of sounds, that is, the speed and loudness of utterances.

The second function, the spectrogram, presents more information than waveforms, as they indicate the formants of produced speech. Formants are the prominent bands of frequency that determine the phonetic quality of a sound, most notably that of vowels. Reading formants from spectrograms allows viewers to interpret things like vowel height and backness and can indicate if two phonemes (e.g., /r/ and /l/) were pronounced similarly or differently.

The audiolinguistic method made much use of pronunciation instruction that involved practice with minimal pairs, that is, words that differ from each other by only one sound (e.g., “light” and “right”). Though minimal pair drills have been criticized for focusing only on *segmentals* (i.e., single consonants or vowels), as such drills involve practice with individual words spoken without context outside of connected speech,
some researchers nevertheless assert that pronunciation problems between non-native speakers are most striking at the segmental level (Jenkins, 2000) and that training with minimal pair instruction still has a positive effect on pronunciation (Derwing & Munro, 1997; Rubrecht, 2007). Spectrograms, which can be viewed and “transcribed” to indicate what phoneme was uttered when in a word, have been found to be extremely useful in pronunciation instruction and can even bestow positive motivational effects (Dandou, 1991, as cited in Nakai, 2005).

The third function, pitch, is categorized as a suprasegmental feature, or that which lies above the segmental level (e.g., tone, stress, intonation). As defined by Ladefoged (1993), the pitch of a sound is the audible property that allows one to place it on a scale from high to low without any consideration of its acoustic properties. Changes in pitch cannot be used to distinguish words in English but they can affect the meaning of an utterance (consider that the name “Lisa” would sound different when uttered in a roll call, when one is trying to get that person’s attention, and when one is calling that person in a taunting manner, even though there is no variation in the uttered segmental features). Because looking at and counting waveform peaks is tedious and time-consuming, ARVS with pitch contour displays allows for quick and easy visual representations of utterance frequencies. Viewing pitch contours therefore makes it possible to get an indication of how an utterance was spoken and allows for a higher degree of accuracy in the interpretation of the intention behind it.

Though it is widely believed that suprasegmentals are more important to intelligibility (i.e., the degree to which an utterance is understood) than segmentals, few studies actually support this belief. Because those who recognize the benefits of pronunciation instruction acknowledge the positive effects of practice with both
segmental and suprasegmental features (Derwing, Munro, & Wiebe, 1998) and support instruction that balances the two (Celce-Muria, Brinton, & Goodwin, 1996), instruction with ARVS should ideally include both spectrograms and pitch contours.

**Putting ARVS to use**

Because many institutions have classrooms or language laboratories furnished with desktop computers (not to mention the ubiquitous nature of laptops and other portables), most teachers are equipped to use ARVS in the classroom, the only technical problem being which software program to use. Before engaging students in pronunciation learning activities that will increase their awareness of pronunciation as both a speaking and listening component of communication and help all involved visually diagnose any extant pronunciation problem areas, it is necessary to acquire one or more ARVS programs. The following is a brief explanation of the positive and negative aspects of some of the better or more commonly known free ARVS available for download.

Program: [Audacity](http://audacity.sourceforge.net/download/)

Platform: Mac, Windows, Linux

Details: Most people know this audio recording program, as it is free and available for all major platforms. Audacity has the power to import from and export to a variety of formats, and it comes replete with numerous built-in effects (e.g., change speed, fade out). Playback and editing is easy and intuitive. This is an ideal program for simply recording and visually inspecting sound input via waveforms or for recording and later importing into another program.
Drawbacks: Its spectrogram and pitch visualizations are almost worthless, as the resolution of these displays is embarrassingly sub-par. Also, unstable (read: latest) versions tend to be prone to glitches and crashes.

Program: Sonic Visualiser (http://www.sonicvisualiser.org/)
Platform: Mac, Windows, Linux
Details: This program displays waveforms as well as various types of spectrograms, that is, regular spectrograms, melodic range spectrograms, and peak frequency spectrograms. What makes this program noteworthy is its ability to allow the user to compare data by overlaying one set of data onto another or display the same data in multiple ways simultaneously. Its simplicity and adjustability of displays (spectrograms can be viewed in “Fruit Salad” colors!) make it worth checking out.

Drawbacks: This program cannot record audio, and spectrogram layers or panes are initially displayed up to 21000Hz, which is far higher than necessary to look at the formants of consequence to human speech. These displays can be tweaked to show target ranges more clearly, but this must be done manually for each imported file.

Program: Spectrogram (http://www.visualizationsoftware.com/)
Platform: Windows
Details: This program (currently at Version 16.0), true to its name, presents spectrograms. That’s it. Display parameters can be adjusted but are initially capped at a sufficient 6000Hz. Spectrograms can be viewed in various ways. Though simple and straightforward, its most outstanding feature is its ability to save screen images of viewed spectrograms, making printouts for students effortless.
Drawbacks: This program is a one-trick pony. Users are best off recording samples with other software, import them, and then let Spectrogram do its thing.

Program: Sonogram (http://www.christoph-lauer.de/)
Platform: Mac, Windows, Linux, others
Details: Few other free programs support a fuller range of algorithms for examining recordings (more than most instructors would ever need). Identifying formants is easy because spectrograms are presented in large displays (up to 4000Hz) that can be color adjusted.
Drawbacks: Without letting users record sounds and with a user interface that lacks polish, this program might be best off in the hands of seasoned veterans. Furthermore, it requires the Java and Java Media Framework installation to run (downloadable at http://www.java.sun.com), so some additional steps are required before the software can be used.

Program: Praat (http://www.praat.org/)
Platform: Mac, Windows, Linux, others
Details: Praat is a program that does nearly everything. In addition to spectral and pitch analyses, Praat will actually draw lines on top of spectrograms, indicating their formants and pitch peaks. This feature, above all others, makes this program outstanding. With its ability to record, some instructors may not use anything else.
Drawbacks: Like many robust programs, Praat has functions that even a full-fledged phonetician would not venture near in regular classroom situations. These should be avoided, as the general interface is not as intuitive as it could be.
Program: Raven Lite 1.0 (http://www.birds.cornell.edu/brp/raven/RavenOverview.html)

Platform: Mac, Windows, Linux

Details: Saving what might be the best for last, Raven Lite is a program that can record, play back, and present views of both waveforms and spectrograms (real-time displays are shown during signal acquisition). It allows the viewing of multiple windows simultaneously, it can import from and save recordings in most common sound file formats (e.g., AIFF, WAV, MP3), and it can also open and visualize tracks from audio CDs if necessary. Best of all, it includes intuitive controls (most of which are in convenient moveable toolbars) that allow for editing, cropping, magnification, and the fine tuning of spectrogram views so that nearly any spectrogram can be read with ease. There is also a full-featured version, Raven Pro, which provides configurable views and advanced analysis tools.

Drawbacks: As Raven was intended as software meant for analyzing animal sounds (particularly birds), displays reach 21,000Hz. Not an insignificant amount of time is often required to whittle spectrograms down to a manageable size and make them viewable so that useful information can be extracted from them. Licenses for the pro version run as high as $800, but discounts are available to researchers, instructors, and students, the latter on a per-semester basis.

Conclusion

The aim of this article was to present readers with a list of free ARVS that may be used for pronunciation instruction purposes. Certainly, other programs exist (some of which are shareware, others require a fee), but the ones listed here are
nevertheless powerful and if used in tandem should be more than adequate for most instructors’ needs. The only major remaining topic of concern revolves around instructors obtaining a decent microphone for recording purposes, but high-quality ones can be acquired easily and cheaply. That should sound good to anyone’s ears.

Biodata

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References


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High Stakes Tests and Mandates: Improvements or Hype?

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Background of the Problem

In an attempt to hold the public education system responsible for providing equal educational opportunities to all students regardless of ethnicity or socio-economic status, a series of reforms were implemented during the mid-20th century. Arguably, the most significant statute governing the role of the federal government in education has been the law known as No Child Left Behind (NCLB) implemented by the Bush Administration to address the low expectations for non-mainstream students and children of poverty.

The NCLB law has resulted in the federal and state government assuming increased authority over local educational communities giving the state and federal government the authority to oversee school funding, curriculum, and assessment. The advocates for taking power away from local communities believe that this is the only way to ensure equal educational opportunity. Those who oppose giving the state more power over educational policy believe increased state power will lead to sanctions such as withholding resources (funding) from local education agencies (LEAs) if students fail to meet the state academic standards.

A review of the debate over legislative policies from both points of view suggests there is a certain degree of legitimacy for each interpretation. An analysis educational accountability policies in four states (i.e., New Jersey, Massachusetts, Vermont, and Connecticut) found that although policy makers had intended to make the public education system more equitable, the result of abiding by these policies has created a significant gap between aspirations and results (McDermott, 2007).
Statement of the Problem

In K-12 education, standards-based initiatives focus on student achievement. Advocates of mandated tests view this as a viable means of informing the public on how well their students are doing. Standards-based reform polices such as NCLB, have resulted in using standardized tests to measure how well students in each grade of every school in the United States perform in reading and math. The rationale for testing was to determine the number of schools in the nation whose students were making “adequately yearly progress” in reading and mathematics (CEP, 2010). However, some researchers have suggested using multiple measures because using one test to measure student achievement would not provide an accurate assessment and would result in “an over reliance on a single outcome measure, lack of validation of tests, an undue emphasis on quantitative measures, and failure to educate the public concerning the meaning of labels such as proficient” (Fitzpatrick et al., 2004, p. 49).

Significance of the Problem

With the enactment of the No Child Left Behind Act in 2002, many teachers have been quick to express their concerns that the mandated tests could result in “teaching to the test”. Although teachers are generally proponents of holding schools accountable for offering a quality education program, teachers have questioned the decisions by politicians to focus exclusively on improving basic academic skills. Rothstein and Jacobsen (2006) suggested that focusing entirely on reading and mathematics highlights the discrepancy between on low income and minority children and their mainstream counterparts and points to a disparity among urban and suburban schools in adherence to high standards of achievement. The goal of NCLB is to provide all students with a solid foundation of academic knowledge and skill but may be leading to an undue narrowing of curricular choices and the kind of learning opportunities for academically at-risk students (Rothstein & Jacobsen, 2006, p. 266).
A survey conducted by the Center of Education Policy (CEP) in 2005 found that “97% of high-poverty districts had new minimum-time requirements for reading, while only 55% of low-poverty districts had them” (as cited in Rothstein & Jackobsen, 2006, p. 266). In a previous study, the CEP found that one-half of the districts that had adopted minimum-time policies had significantly lessened the time spent on social studies, art, music, and physical education.

A multi-year review and analysis over a four-year period by the Center on Education Policy identified the following ten significant effects of the NCLB Act: (a) student achievement in reading and mathematics is rising; (b) schools are devoting more time to reading and mathematics, sometimes by reducing the amount of time spent on other subjects; (c) schools are spending more time aligning the curriculum and instruction and are focusing more attention on analyzing test scores; (d) schools that are low-performing are undergoing makeovers; (e) schools and teachers are doing a better job in meeting the law’s academic requirements: (f) the number of schools on the state “needs improvement” lists are not increasing. The next five effects were more controversial: (g) students are being required to take many more tests; (h) schools are focusing more time on narrowing the achievement gaps and the needs of specific students (i.e., English Language Learners, Student with Special Needs); (i) the federal government is assuming a larger role in education; and (j) state governments and school districts have taken a more active role such as expanding testing programs for students in grades 3 to 8 and one year of high school (Jennings & Rentner, 2006).

A Review of the Literature

Role of Mandated Tests and Standards in Curriculum Development

The writers believe that a “symbiotic” relationship exists between mandated tests and curriculum standards. Both mandated tests and standards are directly related to curriculum development. Content and performance standards are used by school districts to define expectations for meeting grade-level criteria. “Curriculum development reflects those standards,
delineating by grade the content and strategies for teaching and assessing what is taught. The
instructional process should include the same types of inquiry that students will encounter in
subsequent testing for school or national assessments” (Castleberry, 2007, p. 20). In other
words, mandated tests are supposed to assess students’ understanding of the uniform state
curriculum standards as taught to them by their “highly qualified teachers”.

No Child Left Behind (NCLB), mandates challenging and clear standards of achievement
and accountability for all children, and strategies for reaching these standards (U.S. Department
of Education, 2007). Accountability measures include benchmarks for adequate yearly progress
(AYP) that guide states in meeting NCLB in language arts/reading, mathematics, and science by
2014. The benchmarks include state and local assessments aligned to state content standards and
are measured according to state achievement standards. The results are disaggregated by student
ethnicity, race, home language, disability, and family income. It should be noted that assessment
under NCLB is not intended to be a high stakes test from a federal policy perspective nor from a
legislative perspective but rather a measure of students’ ongoing improvement on an annual
basis.

High stakes tests are intended for determining whether a student will be promoted from
one grade level to another or for determining whether a student has met the requirements to
graduate from high school (Mele-McCarthy, 2007). Assessment under NCLB is designed to
measure adequate yearly progress and test results will not determine promotion or retention.

The Role of Testing in Public School Education

In public schools, tests are measures used to collect data to assist with evaluating
achievement and knowledge acquisition. There are four approaches to achievement testing:
norm-referenced-testing (NRT), criterion-referenced testing (CRT), objective-referenced testing
(ORT), and domain referenced testing (DRT). These tests are similar in many ways but the
interpretation of the test results may be quite different.
Norm-referenced tests are primarily used to compare students' test scores. These tests are used by school districts to assess the progress of their students in meeting grade-level standards. Examples of norm-referenced tests are the California Achievement Tests, the Comprehensive Test of Basic Skills, and the Iowa Test of Basic Skills. The major value of these tests is that they allow for comparison with other norm groups and are used to determine how well a school is doing in comparison with other schools across the nation. The major weakness of these tests is that they may not evaluate the curriculum that is being taught (Fitzpatrick, Sanders, & Worthen, 2004).

Criterion-referenced tests are used to measure student performance against an established set of criteria. These tests are presently used in 49 states to measure standards that have been adopted by each state to determine the performance of schools and/or school districts. Criterion-referenced tests are generally used to measure students’ progress in meeting the curriculum standards for selected academic programs such as language-arts, mathematics, and science (Fitzpatrick, Sanders, & Worthen, 2004).

Objective-referenced tests are used for formative evaluation. Teachers are able to use these tests to determine how well their students are meeting their course objectives. The information that these tests provide enable the teacher to adjust her/his course content to improve student learning (Fitzpatrick, Sanders, & Worthen, 2004).

Domain-referenced tests are used to measure students’ knowledge in a particular subject area. The items in this type of test are not connected to a curriculum but to a content domain such as American history or economics. These tests are useful in determining how much information students who graduate from high school have acquired in relationship to a particular subject area (Fitzpatrick, Sanders, & Worthen, 2004).
The Standardized Testing and Reporting (STAR) Program in California

The Standardized Testing and Reporting (STAR) Program is part of the California assessment system. The STAR Program measures how well students in California are learning the knowledge and skills identified in the California content standards. The STAR Program is authorized under the California Education Code Section 60640 until 2011. Tests in the STAR Program are administered annually to students in grades two through eleven and include: the California Standards Tests (CSTs), the California Achievement Tests, Sixth Edition (CAT/6 Survey), the California Alternate Performance Assessment (CAPA), the Standards-based Tests in Spanish (STS), and the Aprenda, La prueba de logros en español, Tercera edición (Aprenda 3). The CSTs measure the achievement of state content standards in English-language arts, mathematics, science, and history-social sciences. The CAPA is an alternate assessment for students with severe cognitive disabilities. The STS is administered to Spanish-speaking English learners and measures the achievement of state content standards in reading-language arts and mathematics in Spanish for grades two, three, and four. The Aprenda is a nationally norm-referenced achievement test of general academic knowledge in Spanish for Spanish-speaking English learners for grades five through eleven in (California Department of Education, 2007).

Conclusion

The pending reauthorization of the Elementary and Secondary Education Act, which is presently known as the No Child Left Behind Act, is creating a great deal of lively discussion between the politicians and the educators over whether the new version is going to be an improvement over the last rendition of this legislation.

The Bush administration placed the reauthorization of the No Child Left Behind Act as a priority for continuing to improve education in the United States. In stark contrast, there are many professional educators who argue that the Bill was flawed and is in need of fixing. For example, the testing of students should be kept in perspective. Few would argue that testing is
important in education, because teachers and the public need to know how students and schools are progressing in mastering the curriculum standards. Hence, the public should be provided with a snapshot of how successful students are doing in meeting the benchmarks that have been established by the state curriculum standards.

Standards-based reform policies have resulted in using standardized tests to measure how well students in each grade of every school in the United States performed in reading and math. The rationale for testing was to determine the number of schools in the nation whose students were making “adequately yearly progress” under NCLB (CEP, 2010). The teachers need test data to have a comprehensive view of how students are progressing.

The Center for Educational Policy (2010) has recommended eliminating AYP because otherwise “in some states nearly all the schools could be labeled as failing by school year 2012-2013” (p. 2). The AYP system has “over identified public school for improvement and makes no distinction between schools in which one group of students missed one or two AYP targets and those in which students missed multiple targets” (p.2). The Center for Educational Policy also suggested that the current practice of singling out underperforming schools could overburden the state departments of educations who are responsible for providing assistance to these underperforming schools (CEP, 2010).

The current administration has proposed a sweeping overhaul of the law to eliminate the current accountability system. The new “blueprint” focuses on the 5000 lowest performing schools in the nation. This may result in returning the power and responsibility for students’ academic growth back to local education agencies.
References


Center on Education Policy (2010). *How many schools have not made adequate yearly progress under the No Child Left Behind Act?* Washington D. C.: Center on Education Policy


**Title:**
Yes we scan! Using consumer scanners for teaching and research

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**Abstract**
Since the diffusion of personal computers and the advent of consumer scanners, digitizing paper documents has become increasingly simple and cost-effective. Even so, it is suspected that many teachers and researchers do not use scanners to their full potential. In order to help others realize the benefits of using scanners for teaching and research purposes, the present article outlines the many uses of scanners and illustrates how scanner use can increase productivity and aid in organizing information.
Yes we scan! Using consumer scanners

for teaching and research

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In many ways, educators have benefited greatly from advances in computer technology. Numerous tasks like contacting colleagues at far away institutions via e-mail and registering for conferences online are now everyday occurrences. It may even be surmised that most educators cannot imagine teaching or conducting research without the use of personal computers.

However, to say that educators possess and wield a wealth of technology is not necessarily to say that such technology is used efficiently and effectively. As discussed by Keengwe and Lawson-Body (2008), though many campuses provide their faculty with a vast array of technological resources to aid in student instruction, it is incumbent on faculty members to learn about and experience this technology for themselves so that they may effectively integrate this technology with their instructional duties.

In an effort to make current technology even more useful, the current article describes a method that, if used regularly and consistently, will help both teachers and researchers to (a) produce tests and other handouts easily and without major modifications, (b) clean up their offices, which are likely filled with various paper
documents, (c) organize documents by making them centrally located and thus more easily accessible, and (d) store documents safely in a minimal amount of space. This method involves using a peripheral device that most people already own or have easy access to: a scanner.

Background to Scanning

According to Gray (2006), it has become imperative to “recognize that we have become a society of information managers” (p. 2263). Because of improved search engines, both online and embedded within personal computer operating systems, the tasks of searching for and retrieving information have never been easier. The clear drawback, however, is that these searches require information to be in electronic form. Such searches cannot locate information found in physical documents, such as in handouts received at conferences or in photocopies of journal articles. It would be of incredible use if such information could be transformed into a digital format. Scanning those physical documents into a personal computer would certainly allow one to take advantage of the computer’s abilities to search for and locate information.

If one considers the sheer number of papers the average educator accumulates over the course of one academic year (e.g., papers obtained from faculty meetings), it would appear a daunting – if not outright impossible – task to scan them all. Only those lucky few with teaching assistants may be able to accomplish this feat. However, it is not the case that all documents need to be scanned, nor should they be. One must be selective about the scanning process. Nevertheless, it may be generally stated that scanning documents provides three clear advantages:
(1) *Scanning aids in handout and test construction.*

Numerous are the times the author has seen colleagues photocopying, cutting, and pasting pictures or images onto word-processed tests. While this is one way to create tests, it makes it difficult to make alterations or improvements to those tests once they are made. What is more, there is then the matter of filing away that physical test if it can be used, either in whole or in part, at a later date, which only adds to office clutter. Since most tests are word-processed to begin with, it makes sense to scan pictures or images and insert them into the word-processing document where appropriate.

(2) *Scanning places important documents close at hand.*

It may be ventured that most if not all educators use their computers on a near-daily basis. If this is the case, it would be wise to scan documents that are very useful or that are often needed, with examples being class rosters, teaching timetables, and colleague email addresses and phone numbers.

(3) *Scanning helps in the procurement of library-use-only information.*

Scanning such information can generally only be done by those who own or have access to laptop computers and portable scanners. Many journal articles can only be obtained from bound volumes that are marked “Library Use Only.” Of course, articles in these volumes may be taken to the copy room and photocopied, but in addition to the disadvantage of adding to office clutter, these physical photocopies use up tremendous amounts of paper and can quickly become a significant financial burden, especially when one is involved in a major research or writing project. Using a laptop computer and portable scanner within the library allows one to avoid these disadvantages. In fact, in many cases, the money saved by scanning documents instead of photocopying them can quickly meet and surpass the cost of the computer and
scanner.

Needless to say, those who deem library scanning an option should be aware of two things. First, silent scanners are few and far between. As a matter of etiquette, scanning should only be done in study rooms, in isolated areas away from others, or in the photocopy room (if space allows). Taking advantage of scanners and the scanning process does not give anyone the right to unnecessarily disturb other library patrons.

Second, there is the matter of copyright laws. These laws exist to protect the intellectual property rights of others. Most libraries post signs like the following, which serve as guidelines when making copies:

Users may only copy materials within the limits of copyright laws.
- Copy only up to half of a book.
- Copy only up to half of a journal article from the latest issue. Articles in issues older than three months may be copied in full.
- Copy only for academic purposes.
- Do not copy for others.
- Do not distribute copies for commercial purposes.

The Pros and Cons of Scanning

The Cons

Before teachers and researchers begin scanning documents into their computers, they should be fully aware of the drawbacks inherent in scanning:

1. Scanning is a time-consuming endeavor.

Scanners are never as fast as the person doing the scanning would like them to be, especially when there are hundreds or even thousands of pages to be digitized.
Scanner speeds do vary (see below), but few consumer-level scanners will produce scans as quickly as a photocopier produces photocopies.

(2) Scanners do not fully mimic the output provided by photocopiers.

All things considered, photocopiers produce better results than scanners. Certainly, scan resolution can be increased and color scans can be made with a quick setting change, but scanner users must be aware that consumer scanners are not constructed – and therefore are not quite as precise – as industrial photocopiers. The most obvious result of this difference is that it is sometimes difficult to fully copy text that is printed near the spine of an open book (particularly large books like reference materials or bound periodicals). While a photocopier can handle the downward pressure that must be applied to have all the text on a page copied, consumer scanners, being more delicate, cannot be treated the same way. If an inordinate amount of pressure is applied, the scanner glass could break or become warped, thereby preventing the moving parts below from functioning properly. In either case, the end result is an unusable scanner.

(3) Scanning does not translate into instant organization.

Though scanning lends itself to increased organization, this organization does not come automatically. It is up to the user to develop a system of scanning and storage that facilitates the locating of those digitized documents, even without the help of a computer’s search functions.

(4) Anything that has been digitized should be backed up.

As mentioned, scanning takes time. As such, it also takes effort on the part of the user to go through with the digitization process. To make sure that those efforts do not go to waste, it is important to back up all scans. Ideally, such backups should be
made on a regular basis. Backups can be created in a number of different ways (e.g., by using an external hard drive, by creating a data DVD). How backups are made is ultimately up to the user. Of course, there is an additional financial element involved in making backups, but little can be done should the computer one is using crashes or is stolen and the original documents that were scanned have been thrown away or are no longer accessible to the user.

The Pros

Even with these drawbacks apparent, it can be argued that the advantages presented by scanning far outweigh the disadvantages.

(1) Document location no longer becomes a concern.

Whether one is at home, at the office, or traveling, one will always have access to the digitized documents (this is certainly the case for those with laptops, only slightly less so for those with portable external hard drives or remote access to a computer or files). Access despite location is definitely a plus because (a) documents need not be transported from place to place in order to get work done and (b) one can have access to information as needed (e.g., one does not have to carry a physical list of colleague phone numbers and contact information to a conference on the off-chance that such information will be needed).

(2) The process of locating information becomes quicker and more efficient.

Those who consistently and correctly use scanners will find that they no longer have to upset shelves or sift through drawers and filing cabinets to find that one piece of information they know they have. If scanned documents are properly labeled
and “filed” on a computer’s hard drive, this information can be retrieved quickly and easily.

(3) Nearly all of one’s information is stored in one convenient place.

This advantage, though self-explanatory, was clearly demonstrated to the author during the process of dissertation writing. All the information from the literature sources being used for the dissertation were literally at the author’s fingertips when it came time to actually write the paper, and it made it extremely easy to check things like page numbers, quotations, and book publishers from the scans during the proofreading stage. Because nearly every piece of information was stored on the author’s laptop, the references could be checked whenever and wherever it was most convenient, which at times included on trains, in the back of a car, and in an airport lobby when waiting for a flight.

(4) Scanning + backups = superfluous original documents.

As stated in the equation above, if a document is not absolutely imperative to keep, it may be thrown away after being scanned and backed up. The most salient advantage to discarding physical documents is that it clears up valuable home and office space. Another advantage, which is of likely interest to world travelers (e.g., those who change research or teaching locations often), is that it is considerably easier and far less expensive to pack up and ship a case full of data DVDs than photocopied articles. A further benefit not to be overlooked is that multiple copies of such data DVDs can be made and stored in various places. An unfortunate incident in one location (e.g., a fire, an earthquake) will not spell total disaster if copies have been stored elsewhere.
Consumers today are faced with many considerations when it comes to purchasing a scanner: the size and type of the documents to be scanned, scan output color and resolution, and image compression, just to name a few (cf. Raby, 1998). While different scanners are manufactured to meet different needs, most current consumer scanners (often called either desktop or flatbed scanners) use a USB 2.0 Hi-Speed interface, which typically allows low-end consumer scanners to produce roughly two or three scans per minute. Most people would probably be satisfied with this speed, but some may consider this too slow, especially if high-volume scanning is required. High-end scanners that are dedicated to document digitization are equipped with sheet-feeding capabilities for automatic double-sided scanning (in some cases allowing 150 scanned pages or more per minute), but gains in speed usually come by sacrificing economical pricing and portability. Some scanners are USB powered, meaning that they do not need an external power supply. Such scanners tend to be compact, lightweight, and inexpensive, thereby making them the perfect companion to laptop computers because (a) neither the scanner nor the laptop require an electric outlet (which may be off limits to library patrons in some situations. In others situations outlets may simply be nonexistent) and (b) there are fewer cables to transport from place to place.

Nowadays, one would be hard-pressed to find a scanner that lacks function buttons. These buttons allow for quick and easy scans, “photocopies,” and the emailing of scanned documents. This automation speeds up the often tedious and boring task of making scans, but one always has the option of being entertained (i.e., distracted) during the scanning process by doing other things such as watching television, talking on the telephone, chatting over the Internet, or even perusing other documents that one is
considering scanning.

Before one begins scanning a document, it is important to consider the type of scan (e.g., black and white, grayscale, color), resolution, and scan format that would best match the document at hand. Not considering these aspects of the scan could result in either illegible scans, scans that take an inordinate amount of time to complete, or scans that take up far more disk space than necessary. While different documents require different settings, personal preferences also play a part. In the author’s experience, in terms of resolution, most scans for text or figures require no more than 150 or 200 dpi (dots per inch). This resolution, when done with a grayscale setting and saved in JPEG format, provides the perfect balance of small file size and clear resolution, even in the event that it is deemed necessary to enlarge or print the scan at a later date. More complicated documents may require higher resolutions or even color (e.g., if documents contain color graphs), but in general it is recommended that high resolution or color scans be avoided whenever possible due to their longer scanning times and larger file sizes.

Most scanners manufactured today come with OCR (optical character recognition) software features. OCR allows the text on a page to be transformed into computer text. In other words, instead of making a scan that is similar to a picture or a photocopy of a document, an OCR scan reads the document and “types” what is written on the page into a word-processing program. OCR, while convenient, may not be the best scanning choice for archival and retrieval purposes, the main reasons being (a) one cannot immediately tell what page the scan came from, (b) OCR does not always scan and copy text perfectly, which can result in computer text that is full of odd or apparently “mistyped” text, and (c) when it comes to checking quotations or names
from a source, it is preferable to refer to a near-perfect copy of the original document rather than just computer text on a screen. In any event, scanner users are strongly encouraged to experiment with and explore a scanner’s configurations so that they may find the scan setting that best suits their scanning needs.

Scan Retrievals

When one begins to scan documents, how one names said documents becomes key when it later comes time to retrieve the documents from a computer hard drive or disk. In order to more easily locate those scans later, it is recommended that users name each scan with a short abbreviation of the scan. For instance, suppose that a researcher wishes to scan the following journal article:


It would not be feasible to scan each page and name each resultant scan in full (e.g., Rubrecht 2003-Literacy Across Cultures-p11, Rubrecht 2003-Literacy Across Cultures-p12). Naming scans this way produces too many results when a search for the article is later conducted. Instead, it is recommended that one create a folder with a comprehensive name (e.g., Rubrecht 2003-Japanese English writing-Literacy Across Cultures) that can be searched for and easily located. The individual scans should still be named, but their names should be generic yet indicative of the article that they came from (i.e., Ru2003-11, Ru2003-12, etc.). How each scan is named is, of course, ultimately a matter of preference.
Occasionally, it may become necessary to print documents that have been scanned, such as when one is making notes or calculations. In such cases, users should avoid printing a multi-page article one scanned page at a time. Rather, a much faster and easier way to get a printed version of an article, if the scan viewing software one uses does not allow batch printing, would be to insert those scans into a word-processing program (e.g., Microsoft Word), particularly by drag-and-drop method. Printing one 20-page document is certainly easier than printing 20 one-page documents. Be sure, however, to set the margins in the word-processing program as narrow as possible. Narrow margins increase the available page space where the scan will be situated, which in turn increases the print size in the scan, thereby making the print more legible.

Scanners and the Researcher

*Using the Screenshot Method*

Having scanned articles on hand makes the task of article writing much more simplified, for when it comes time for researchers to take notes for the literature review, it is essentially only a matter of copying and pasting select screenshots of sections of the article one is reading. These screenshots can be taken with either keyboard or mouse shortcuts within a computer’s operating system or by using dedicated screenshot-capturing software. After a screenshot is taken, it should be placed into another application (hereafter, target application) such as a word-processing or a digital asset management (DAM) cataloging program. As the basic goal of notetaking is to obtain a brief yet clear understanding of writers’ ideas, screenshots that are limited to only a few lines (i.e., sentences) are more effective for notetaking than are screenshots of entire windows or pages, though screenshots of larger sections such as article
abstracts or entire paragraphs can be taken if necessary.

**Screenshot Advantages**

The advantages of taking notes by using screenshots are many:

(1) *Exact wording is kept.*

When used judiciously, direct quotes from literary sources lend credence to one’s own work. Furthermore, direct quotes can often present information succinctly, sometimes far more so than paraphrasing. When including a direct quote from the literature, a screenshot of the original text (taken from a previously scanned document) helps to ensure that no typographical errors are introduced into one’s own work during the notetaking process. Additionally, the original text can be easily referred to during the actual article-writing phase. This allows the writer to ascertain that the quote, when being typed, is mistake free.

Such screenshots as these can also be used when paraphrasing is preferred over direct quotes. The passage in question can still be found quickly and the original wording checked. Of course, though a citation is still required when paraphrasing the work of others, plagiarism can be more easily avoided, for writers can effortlessly ascertain that their wording is sufficiently different from that of the original.

(2) *The input of complex information becomes simplified.*

One of the biggest obstacles in notetaking comes when one attempts to incorporate information found in illustrations such as charts, graphs, or tables into one’s notes. If such information is deemed important enough to be included in an article that one is writing, it is possible to make such information handy by taking a screenshot of it and placing it in the target application. These screenshots allow any non-standard text
(e.g., diagrams, lists, figures) to be more readily accessible for article incorporation.

(3) Typing required for notetaking is reduced.

Traditional notetaking, either hand-written or typed, requires a significant amount of time and effort for the notetaker. This screenshot copy-and-paste method means that less typing is required, which translates to time saved and reduced physical stress. Even so, as each screenshot captures the information one desires to utilize, more information can be made available in the target application for later consideration and usage.

It goes without saying that using screenshots in this manner is only possible if the relevant literature has already been scanned. While journal articles found in bound volumes that are marked “Library Use Only” will most likely be what have been scanned, there is still the matter of what to do with information found in books, such as those found on researchers’ office shelves. In such cases, it becomes necessary to scan the relevant sections, often in an ongoing manner, as one reads each book. If one keeps copyright laws in mind, as delineated above, this is usually not a problem. OCR scans become one viable option in these cases, for the scanned text areas are transformed into blocks of editable text, and the original text can more or less be referred to easily. This scanning of book areas does increase the amount of time required for notetaking, but making OCR scans arguably reduces both the time and effort needed to input information, especially when compared against the traditional method of typing out that same information. As an aside, proper OCR scans present text characters that are often easier to read than the text found in regular scans, as the text is computer text, not a “picture” of text. As will be discussed, such computer text can be recognized by
text-searching software, which itself provides further advantages, but of course, it is up to the user whether or not to create scans or utilize OCR.

*Words of Warning about Screenshots*

Screenshots need not be taken simply from documents that have been scanned. It is possible to download and take screenshots of articles (which are usually in PDF format) from journals that provide online subscription access. Though these downloaded articles tend to be superior to typical scans in that they present high-quality text that is often searchable, some PDFs downloaded from databases are password protected. Without the password, text copying – and in some cases even taking screenshots through a PDF viewer such as Adobe Acrobat Reader – becomes, by design, impossible. The workaround in such situations is to take a screenshot through the computer’s operating system itself or by use of a dedicated screen capture program.

*Screenshot Notetaking Suggestions*

The drawback to screenshot notes is the inability to conduct searches for specific text, as the screenshots are essentially only pictures or snapshots of document pages. Nevertheless, there are ways to take advantage of the target application’s text search functions when screenshots are involved:

1. *Manually type complete reference information.*

   This should be the first step before placing screenshot notes of a literature source into the target application. Including reference information in full (e.g., author, year, title) makes it easier to find the notes to a particular author’s work and reduces potential confusion when citing the literature, as it is often the case that writers must cite multiple works from an author.
(2) Manually type page numbers for screenshots.

When one decides to take a screenshot from a literature source, manually type the page number to note where exactly that screenshot came from. This location indicator will become invaluable later for several reasons. First, page numbers are necessary should direct quotes be used. Without a page number, it would later become necessary to read back through the entire original literature source to find where that quote came from. Second, because screenshots should be as short as possible, it may sometimes become necessary for one to refer back to the original literature source for clarification of screenshot information (i.e., relevant information adjacent to the screenshot’s information). A page number made handy means that there is little difficulty involved should a return to the correct page be required.

(3) Manually type a succinct screenshot summary.

Screenshot summaries are text searchable. This means that the task of organizing and grouping one’s notes when it comes time to enter the article-writing stage will be greatly simplified. Summaries should be kept to essential key words but may be as lengthy as is required to make later text searches effective.

(4) Spell-check all manually-typed information.

Part of the reason to manually include information about screenshot contents is that it allows writers to take advantage of the text-searching function of the target application. As such, one must be assured that the text is spelled correctly, especially author names. Anything that is spelled incorrectly will be missed during a text search, the result of which is information found within screenshots not being located and subsequently going unused.
Researchers’ Other Data

Beyond aiding researchers with their literature review, scanners provide an additional salient advantage that should not be overlooked: they can be used to digitize data collection materials such as questionnaires. Scanning questionnaires one has administered provides digital copies of the information found in those questionnaires. A calamity of any kind (e.g., a fire) would destroy any data one has collected, some of which could have come at great cost or from research participants one no longer has access to. Having scans of the data – and the recommended backups in different places – means that the research with that data could be continued at a later date. If the questionnaires and the data they contain are lost, it could very well spell the end of a research project.

This scanning and archiving of data presents its own further advantages. First, it makes it easy to return to the data to double-check something, rather than sift through stacks of papers. Second, it helps to have the scan of a questionnaire on one computer monitor while the data is extracted and put into a word-processing program or spreadsheet on another. This keeps one’s desk clear of clutter, it allows the researcher to store the digitized data in a safe place, and it eases data input, for both incoming and outgoing data is right before one’s eyes.

Third, it allows researchers to more easily delve back into the research data at a later date. For instance, researchers may be most interested in a particular topic when engaging in a research project. However, later, based on the initial research results, the researcher may find it necessary to go back to the data (e.g., the original questionnaires) and extract data that was not pertinent to the initial research but that have become important, such as if a researcher decides to conduct a longitudinal study and requires
the first set of data for comparison purposes.

Finally, scanned archives present proof. If, at some point, someone challenges a researcher’s data, the scans – and the data they contain – are there as proof. Many researchers destroy all records of their research to preserve the anonymity of their research subjects. While definitely a good idea, this is often done because it is too difficult or expensive to store the mountains of data (e.g., questionnaires, audio recordings) under lock and key. As many types of data in the social science and education fields can be digitized, it is very easy and practical to digitize and store this information in a password-protected computer file or on disk in a safe and secure physical location such as a lockbox or a safe deposit box.

Conclusion

Not everyone will agree that the advantages of scanning outweigh the disadvantages. If done in a methodical manner, and if used in conjunction with additional software (e.g., referencing applications), document searches are expedited and article citations can be conducted with a minimal amount of effort.

It is hoped that readers will come to experiment with scanners and find more creative ways to use them for instructional and research purposes. Although this article does not provide specific details, there are resources available that provide more in-depth explanations about scanners and the scans they can produce (cf. Cohen & Robins, 1999; Huss, 2003). Some may consider these and similar “how to” texts overkill, as they discuss everything from how to use scans to produce professional-looking publications to how to use photo editors to improve resultant scans, but there are enough explanations and tips that go beyond even what has been described.
in the present article to allow educators and researchers to maximize the potential of their scanners.

As a final note, it is highly recommended that scanner users utilize password protection for all scans created. The scans (e.g., from literature sources) are technically only for the person who made them. Copyright laws, as mentioned above, should not be ignored. Also, if a scanned document is truly important, then the original should of course be kept. It is better to be safe than sorry.

Biodata

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References


Comparison of Intrinsic and Extrinsic Motivation Between Now and 20 Years Ago in Japanese Elementary School

Frederico Jose Martins Carreira
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In Japan, a relaxed education policy has been introduced into the school education system since the mid-1980s (Nozaki, 2006). In 1997, the program for educational reform was released by Monbusho (Ministry of Education, Science, Sports and Culture, now Monbukagakusho or Ministry of Education, Culture, Sports, Science, and Technology [MEXT]), aiming to change the teaching methods resulting in students' passive learning to one encouraging their autonomous learning (Ministry of Education, Science, Sports and Culture, 1997). In 1998, Monbusho released the National Curriculum Standards Reform, with the aim of helping children (a) cultivate rich humanity, sociality and identity as a Japanese living in the international community, (b) develop the ability to learn and think independently, and (c) acquire basic abilities and skills and be able to develop themselves (Ministry of Education, Science, Sports and Culture, 1998). Further, MEXT (2001) drew up the Education Reform Plan for the 21st Century, which urges teachers to make classes more enjoyable, free of worry, and easy to understand. Then, the comprehensive five-day school week system started in April 2002, aiming at letting children spend more time free from pressure at home and in the community, and engage in socially beneficial activities in order to foster "Ikiru Chikara" (the zest for living), including the abilities to learn and think on their own (MEXT, n.d.). School education has been shifting from cramming and competition to creativity and a more relaxed approach for the last 20 years.

Then, how has pupils' motivation, "the process whereby goal-directed activity is instigated and sustained" (Pintrich & Schunk, 2002, p. 5), changed during the last 20 years? This paper focuses on intrinsic motivation, referring to "motivation to engage in an activity for its own sake" (Pintrich & Schunk, 2002, p. 245) and extrinsic motivation, referring to "motivation to engage in an activity as a means to an end" (Pintrich & Schunk, 2002, p. 245). Several researchers (e.g., Harter, 1981; Lepper, Sethi, Dialdin, & Drake, 1997) have investigated pupils' intrinsic and extrinsic motivation for learning. They found that elementary school pupils decreased in
intrinsic motivation with age, although with slight differences among them. In Japan, Sakurai and Takeh (1985) examined the developmental trend in intrinsic motivation among Japanese elementary school pupils.

To elucidate development and gender differences in motivation between 20 years ago and now in Japanese elementary school, this study investigated intrinsic and extrinsic motivation using a questionnaire developed by Sakurai and Takano (1985). Thus, the purpose of the present study is to compare (a) motivational components of elementary school pupils, (b) their developmental trends, and (c) their gender differences between 20 years ago and now. It is hoped that this study will lead to a number of implications for elementary school education in Japan and expand its scope.

Definition of Intrinsic and Extrinsic Motivation

There have been mainly two types of definitions of intrinsic and extrinsic motivation in psychology. First, Kruglanski (1975) introduced endogenous-exogenous attribution, which refers to means-goal categories. That is, endogenous action means an end in itself. For example, persons who have endogenous attribution enjoy learning English without special reasons (Carreira, 2006). Their goal is only to learn English. Exogenous action refers to “a means that mediates a further goal, one exogenous to it” (Kruglanski, 1975, p. 390). For example, individuals who have exogenous attribution study English for external reasons such as entrance examinations and careers (Carreira, 2006). Kruglanski stated that endogenous action is linked with intrinsic motivation.

Secondly, Heider (1958) introduced perceived locus of causality (PLOC), referring to actions or outcomes which can be perceived as personally caused or as a result of impersonal causes. Personal causality refers to “instances in which P causes x intentionally” (Heider, 1958, p. 100). For example, individuals who have personal causality do it on their own (Carreira, 2006). Impersonal causality refers to instances in which “P may cause x unintentionally merely because his physical or social being exerts some influence on the environment” (Heider, 1958, p. 100). For example, individuals who have impersonal causality do something with unconscious motivations (Carreira, 2006).

Moreover, deCharms (1968/1983) expanded Heider’s concept and proposed origin and pawn. “An Origin is a person who perceives his behavior as determined by his own choosing; a Pawn is a person who perceives his behavior as determined by external forces beyond his control” (deCharms, 1968/1983, p. 273). An origin is
intrinsically motivated, whereas a pawn is extrinsically motivated (deCharm, 1968/1983).

Developmental Trends of Intrinsic and Extrinsic Motivation

Several researchers (e.g., Harter, 1981; Lepper et al., 1997; Sakurai & Takano, 1985) found that pupils’ intrinsic motivation decreases with age. Harter (1981) conducted research on intrinsic and extrinsic motivation in Connecticut, New York, Colorado, and California. Over 3,000 pupils (third through ninth graders) participated in her study (Harter, 1981). Harter investigated five subscales: challenge, curiosity, mastery, judgment, and criteria. She (1981) defined them as follows:

Five separate dimensions are defined by an intrinsic and an extrinsic pole: preference for challenge versus preference for easy work, curiosity/interest versus teacher approval, independent mastery attempts versus dependence on the teacher, independent judgment versus reliance on the teacher’s judgment, and internal versus external criteria for success/failure. (p. 300)

Harter’s questionnaire forced children to decide which of the options was truest for them. There were two sentences in one item: one was based on intrinsic motivation and the other on extrinsic motivation. Children were asked to decide which kind of child was like them and then asked whether this description was only partially true or completely true for them. Each item was scaled ranging from 1 to 4. Scale 1 indicated the maximum extrinsic motivation and 4 indicated the maximum intrinsic motivation (Harter, 1981). The challenge, curiosity and mastery subscales changed from intrinsic to extrinsic motivation with age (Harter, 1981). In contrast, there was a shift from extrinsic to intrinsic motivation on the judgment and criteria subscales (Harter, 1981).

In Japan, Sakurai and Takano (1985) developed a questionnaire, Scale of Intrinsic versus Extrinsic Motivation (SIEM), based on Harter (1981). The participants in Sakurai and Takano were 486, second (7 or 8 years old) through seventh (12 or 13 years old) graders, who lived in Nagano, located in central Japan. There were 240 boys and 246 girls. Sakurai and Takano changed some items, including perceived locus of causality, endogenous-exogenous attributions, and enjoyment as well as curiosity, challenge, and mastery which were used by Harter. Six factors were extracted as follows: curiosity, causality, enjoyment, mastery, challenge and attribution. Sakurai and Takano found three types of developmental trends. First, the curiosity,
causality, and enjoyment subscales declined gradually from second through fifth grades, but increased in sixth grade and decreased in seventh grade again. Secondly, the mastery and challenge subscales decreased with age. Thirdly, the attribution subscale increased with age.

Regarding gender differences, Sakurai and Takano (1985) revealed that the curiosity and causality scores of girls were significantly higher than those of boys in all the grades except sixth grade. The enjoyment scores of girls were significantly higher than those of boys only in second grade. The challenge scores of boys were significantly higher than those of girls in sixth and seventh grades.

Present Study

Purpose

As has been shown above, Japanese school education has been shifting from cramming to a more relaxed approach for the last 20 years. It can be predicted that the intrinsic and extrinsic motivation of elementary school pupils now will be different from 20 years ago. Thus, this study employed the SIEM developed by Sakurai and Takano (1985) and attempted to explore differences in (a) components, (b) developmental trends, and (c) gender of intrinsic and extrinsic motivation of Japanese elementary school pupils between 20 years ago and now.

Research Questions

The present study has addressed the three following research questions:

1. Are there any differences in the components of intrinsic and extrinsic motivation of Japanese elementary school pupils between 20 years ago and now?
2. Are there any differences in developmental trends in intrinsic motivation of Japanese elementary school pupils between 20 years ago and now?
3. Are there any gender differences in intrinsic motivation of Japanese elementary school pupils between 20 years ago and now?

Method

Participants

Third (8 to 9 years old), fourth (9 to 10 years old), and sixth (11 to 12 years old) graders in one public elementary school and one private school were selected to
participate in the present study. The total number of participants in the present study was 385: 137 third, 129 fourth, and 119 sixth graders. In the case of missing values, cases were excluded listwise. Boys and girls were 59.2% and 40.8%, respectively. The informed consent statement, where each participant was assured of anonymity and confidentiality, was received from the pupils’ teachers in each school.

A Elementary School

A Elementary School, located in a suburb of Tokyo, is a public school. There were 454 pupils in A Elementary School. The total number of participants from A Elementary School in this study was 209.

B Elementary School

B Elementary School, located in a suburb of Tokyo, is a private school. There were 360 pupils in B Elementary School. Parents in B Elementary School are relatively eager for their children to study. Most of the students in B Elementary School take entrance examinations in order to attend other prestigious private junior high schools. The total number of participants from B Elementary School in this study was 176.

Instruments

The SIEM was used in this study. The SIEM, based on Harter (1981), was created by Sakurai and Takano (1985). The SIEM consisted of 30 items. There were two sentences in each item: one was based on intrinsic motivation and the other on extrinsic motivation. Children were asked to decide which kind of a child was like them. Each item was scaled as 0 and 1. Scale 0 indicated extrinsic motivation and 1 indicated intrinsic motivation. The content of the initial six subscales was as follows: curiosity, causality, enjoyment, mastery, challenge and attribution. Each subscale contained five items.

1. Curiosity. A high score indicates that students study for the sheer pleasure that they experience while learning something new. Sample: “I always want to know as much as possible” as intrinsic choice versus “I do not want to know many things” as extrinsic choice.

2. Causality. A high score indicates that individuals study voluntarily. Sample: “I study because I want to” as intrinsic choice versus “I study because my parents tell
me to” as extrinsic choice.

3. Mastery. A high score indicates a higher desire to work independently. Sample: “I try to solve difficult problems by myself” as intrinsic choice versus “I ask a teacher soon when a problem is difficult” as extrinsic choice.

4. Attribution. A high score reflects that individuals study because they feel studying is fun. Sample: “I study because studying is fun” as intrinsic choice versus “I study in order to get a good grade” as extrinsic choice.

5. Challenge. A high score indicates that individuals have more desire to engage in challenging schoolwork. Sample: “I like to solve more difficult problems” as intrinsic choice versus “I like to solve easier problems” as extrinsic choice.

6. Enjoyment. A high score indicates that respondents enjoy schoolwork. Sample: “Schoolwork is fun” as intrinsic choice versus “Schoolwork is not fun” as extrinsic choice.

**Data Analysis**

The returned questionnaires were coded. The collected data was analyzed using the Statistical Package for the Social Sciences (SPSS) computer program. In the present study, exploratory factor analysis was used for extracting the underlying factors behind the motivation of the elementary school pupils. Based on the results of factor analysis, subscales were created by adding the scores for the items within each factor. A multivariate analysis of variance (MANOVA) was conducted to detect the effects of grade and gender on the SIEM. When necessary, post-hoc tests were conducted to determine the precise contrasts in which the observed significance occurred.

**Results**

**Motivational factors**

To determine the interrelationship among the questionnaire items, all the data collected from 385 respondents were factor-analyzed using varimax rotation. Three variables (items 11, 16, and 19) were excluded because these items were loaded on two factors. Factor analysis yielded six factors, which accounted for 56.62% of the total variance.

Factor 1 is determined by appreciable loadings on four variables (items 5, 17, 23, and 29). All ask about preference for challenge versus preference for easy work. Thus, Factor 1 can be labeled Challenge following Sakurai and Takano (1985). The six
variables (items 2, 8, 14, 20, 26, and 28) loading on Factor 2 ask whether children decide what to do by themselves. Although item 28 was categorized into attribution in Sakurai and Takano (1985), item 28: *I study because I don’t want to be scolded by my parents* can be considered as causality. Therefore, Factor 2 can be labeled Causality, following Sakurai and Takano. The five variables (items 6, 12, 18, 24, and 30) loading on Factor 3 primarily ask whether children enjoy studying or not. Thus, Factor 3 can be labeled Enjoyment, following Sakurai and Takano. All of the variables (items 1, 7, 13, and 25) that load on Factor 4 ask whether learning is motivated by curiosity. Therefore, Factor 4 can be called Curiosity, following Sakurai and Takano. Factor 5 is defined by positive loadings on five variables (items 3, 9, 15, 21, and 27) and asks whether children prefer to work independently or depend on teachers. Factor 5 can be called Mastery, following Sakurai and Takano. Factor 6 is determined by appreciable loadings on three variables (items 4, 10, and 22) and clearly asks whether their reason for learning is for their own enjoyment or for external reasons such as good grades. Thus, Factor 6 can be called Attribution, following Sakurai and Takano. In the present study, six factors identical to those of Sakurai and Takano (1985) were extracted, although only item 28 was loaded on a different factor from that of Sakurai and Takano.

Based on the results of factor analysis, the scores for the items within each factor were added up to create the six subscales. The cronbach’s coefficient alphas for curiosity, causality, enjoyment, mastery, challenge and attribution were, .84, .80, .76, .66, .72, and .67, respectively. Table 1 indicates means and standard deviations (SD) of the third, fourth, and sixth graders and all the subjects for measures of the six motivation variables.

### Table 1

*Means and Standard Deviations for Intrinsic and Extrinsic Motivation*

<table>
<thead>
<tr>
<th>Group</th>
<th>Challenge</th>
<th>Causality</th>
<th>Enjoyment</th>
<th>Curiosity</th>
<th>Mastery</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Grade3</td>
<td>2.68</td>
<td>1.52</td>
<td>3.17</td>
<td>1.69</td>
<td>4.30</td>
<td>1.14</td>
</tr>
<tr>
<td>Grade4</td>
<td>2.67</td>
<td>1.58</td>
<td>3.63</td>
<td>1.69</td>
<td>4.19</td>
<td>1.34</td>
</tr>
<tr>
<td>Grade6</td>
<td>2.17</td>
<td>1.60</td>
<td>2.93</td>
<td>1.66</td>
<td>3.50</td>
<td>1.66</td>
</tr>
<tr>
<td>All</td>
<td>2.51</td>
<td>1.58</td>
<td>3.25</td>
<td>1.70</td>
<td>4.01</td>
<td>1.42</td>
</tr>
</tbody>
</table>
**Effects of Grade and Gender on the Variables of SIEM**

MANOVA was performed in order to examine the effects of grade and gender on the six motivation variables extracted from the SIEM: curiosity, causality, enjoyment, mastery, challenge and attribution. Table 2 provides means and SD as a function of grade and gender. As shown in Table 3, results of the multivariate tests revealed a significant effect of grade, Pillai’s Trace = .12, $F(12, 718) = 4.45$, $p = .00$, partial eta squared = .069, gender, Pillai’s Trace = .09, $F(6, 358) = 6.16$, $p = .00$, partial eta squared = .094, and grade by gender interaction, Pillai’s Trace = .07, $F(12, 718) = 2.31$, $p = .01$, partial eta squared = .037. As a result, the six scales could be analyzed individually using univariate F-tests.

**Table 2**

*Means and Standard Deviations for Intrinsic and Extrinsic Motivation as a Function of Grade and Gender*

<table>
<thead>
<tr>
<th>Group</th>
<th>Challenge</th>
<th>Causality</th>
<th>Enjoyment</th>
<th>Curiosity</th>
<th>Mastery</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Grade3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>2.76</td>
<td>1.48</td>
<td>2.93</td>
<td>1.72</td>
<td>4.22</td>
<td>1.17</td>
</tr>
<tr>
<td>Girls</td>
<td>2.56</td>
<td>1.57</td>
<td>3.50</td>
<td>1.61</td>
<td>4.41</td>
<td>1.09</td>
</tr>
<tr>
<td>Grade4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>2.43</td>
<td>1.59</td>
<td>3.98</td>
<td>1.79</td>
<td>4.21</td>
<td>1.17</td>
</tr>
<tr>
<td>Girls</td>
<td>2.96</td>
<td>1.53</td>
<td>4.44</td>
<td>1.13</td>
<td>4.53</td>
<td>1.05</td>
</tr>
<tr>
<td>Grade6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>2.38</td>
<td>1.53</td>
<td>3.61</td>
<td>1.50</td>
<td>2.55</td>
<td>2.47</td>
</tr>
<tr>
<td>Girls</td>
<td>1.85</td>
<td>1.66</td>
<td>3.33</td>
<td>1.71</td>
<td>3.35</td>
<td>1.88</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>2.51</td>
<td>1.54</td>
<td>3.28</td>
<td>1.70</td>
<td>3.92</td>
<td>1.41</td>
</tr>
<tr>
<td>Girls</td>
<td>2.52</td>
<td>1.63</td>
<td>3.78</td>
<td>1.56</td>
<td>4.15</td>
<td>1.43</td>
</tr>
</tbody>
</table>

There was a significant interaction effect between grade and gender in the two variables: challenge, $F(2, 363) = 3.59$, $p = .03$, partial eta squared = .019, and attribution, $F(2, 363) = 6.91$, $p = .00$, partial eta squared = .037 (see Table 3). To break down this small interaction, simple main effect analyses were performed. As indicated in Table 2, fourth-grade girls ($M = 2.96$) are significantly higher in challenge.
than fourth-grade boys ($M = 2.43$). Challenge scores of sixth-grade girls ($M = 1.85$) were significantly lower than those of third- and fourth-grade girls ($M = 2.56$ and $2.96$, respectively). Fourth-grade girls ($M = 2.04$) are significantly higher in attribution than fourth-grade boys ($M = 1.23$). Attribution scores of fourth-grade girls ($M = 2.04$) were significantly higher than those of third- and sixth-grade girls ($M = 1.41$ and $0.96$, respectively).

**Table 3**

*Multivariate and Univariate Analyses of Variances F Ratios for Grade × Gender Effects for SIEM*

<table>
<thead>
<tr>
<th>Variable</th>
<th>MANOVA</th>
<th>Challenge</th>
<th>Causality</th>
<th>Enjoyment</th>
<th>Curiosity</th>
<th>Mastery</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F (6, 358)$</td>
<td>$F (1. 363)$</td>
<td>$F (1. 363)$</td>
<td>$F (1. 363)$</td>
<td>$F (1. 363)$</td>
<td>$F (1. 363)$</td>
<td>$F (1. 363)$</td>
</tr>
<tr>
<td>Grade</td>
<td>4.45**</td>
<td>5.10**</td>
<td>6.09**</td>
<td>12.78**</td>
<td>13.89**</td>
<td>11.43**</td>
<td>7.76**</td>
</tr>
<tr>
<td>Gender</td>
<td>6.16**</td>
<td>0.18</td>
<td>27.26**</td>
<td>1.52</td>
<td>9.62**</td>
<td>0.35</td>
<td>2.48</td>
</tr>
<tr>
<td>Grade × Gender</td>
<td>2.31**</td>
<td>3.59*</td>
<td>2.76</td>
<td>2.94</td>
<td>2.12</td>
<td>1.07</td>
<td>6.91**</td>
</tr>
</tbody>
</table>

*Note. F ratios are Pillai’s Trace’s approximation of Fs. MANOVA = multivariate analysis of variance; ANOVA = univariate analysis of variance.*

$p < .05$. **$p < .01$.

There was a significant main effect of grade in the six variables: challenge, $F (2, 363) = 5.10$, $p = .01$, partial eta squared = .027, causality, $F (2, 363) = 6.05$, $p = .00$, partial eta squared = .032, enjoyment, $F (2, 363) = 12.78$, $p = .00$, partial eta squared = .066, curiosity, $F (2, 363) = 13.89$, $p = .00$, partial eta squared = .071, mastery, $F (2, 364) = 11.43$, $p = .00$, partial eta squared = .059, and attribution, $F (2, 363) = 7.76$, $p = .00$, partial eta squared = .041 (see Table 3). In the case of significant main effects of grade, Tukey’s post hoc test was performed to identify statistical differences. Challenge scores showed statistically significant differences between third and sixth grades and between fourth and sixth grades. Causality scores showed statistically significant differences between fourth and sixth grades. Enjoyment scores showed statistically significant differences between third and sixth grades and between fourth and sixth grades. Curiosity scores showed statistically significant differences between third and sixth grades and between fourth and six grades. Mastery scores showed statistically significant differences between third and sixth grades and between fourth
and sixth grades. Attribution scores showed statistically significant differences between third and sixth grades and between fourth and sixth grades.

As seen in Table 3, gender had significant effects on the two variables: causality, $F(1, 492) = 27.26$, $p = .00$, partial eta squared = .070 and curiosity, $F(1, 492) = 9.62$, $p = .00$, partial eta squared = .026. Girls had higher scores than boys in the two variables (see Table 3).

Discussion

*Research Question 1*

*Are there any differences in the components of intrinsic and extrinsic motivation of Japanese elementary school pupils between 20 years ago and now?*

The results concerning the dimensionality of intrinsic motivational factors are informative and generally support the findings of a previous study by Sakurai and Takano (1985). Both Sakurai and Takano and the present study found six dimensions of intrinsic motivational factors that were labeled: curiosity, causality, enjoyment, mastery, challenge, and attribution, although only one item was categorized on a different factor from that of Sakurai and Takano. Thus, the components of intrinsic and extrinsic motivation of contemporary Japanese elementary school pupils are almost similar to those of 20 years ago.

*Research Question 2*

*Are there any differences in developmental trends in intrinsic motivation of Japanese elementary school pupils between 20 years ago and now?*

Sakurai and Takano (1985) found that the mastery and challenge subscales decreased with age. The present study also found that the two variables generally decreased with age. However, post hoc tests on the grade x gender interaction show that the challenge scores of sixth-grade girls were significantly lower than those of third-and fourth-grade girls, but there were no significant differences among boys.

In Sakurai and Takano (1985), causality declined gradually from second through fifth grades, but temporarily increased in sixth grade, decreasing in seventh grade again. However, the students in this study increase causality in fourth grade, which might be because contemporary elementary school pupils are mentally precocious, compared to their counterparts 20 years ago. However, there may be other persuasive
reasons, which should be explored in the future.

Further, enjoyment and curiosity in Sakurai and Takano decreased gradually from second through fifth grades, but temporarily increased in the sixth grade. In this study, such an increase was not observed. It might be said that the students 20 years ago had higher expectations for entering junior high school than contemporary elementary school pupils.

According to Sakurai and Takano (1985), the attribution subscale increased with age. This study, however, shows that attribution scores significantly decrease from fourth to sixth grades. Elementary school pupils 20 years ago were more intrinsically and autonomously motivated to learn than contemporary pupils.

In sum, there are rather differences in the developmental trends of motivation between 20 years ago and now. The students 20 years ago temporarily increased curiosity, causality, and enjoyment in sixth grade, but such an increase cannot be found in this study. Although Sakurai and Takano (1985) found the attribution subscale increased with age, this study shows that attribution significantly decreases from fourth to sixth grades. That is, this study has shown that contemporary elementary school pupils have a greater developmental decline in intrinsic motivation than those of 20 years ago. Then, what causes these differences?

As has been said above, the Japanese school education system has been shifting from a highly competitive to a more relaxed approach for the last 20 years, which might have influenced contemporary pupils’ intrinsic motivation. Contrary to our expectations, the more relaxed approach might not be doing well in enhancing the intrinsic motivation of elementary school pupils, especially, in the case of higher graders.

Moreover, it is often said that contemporary elementary school students tend to play computer games indoors and not to play outdoors. Since the mid-1900s, many researchers (e.g., Anderson & Dill, 2000; Dill & Dill, 1998; Sakamoto, 2005; Sakamoto, Ozaki, Mori, Takahira, & Ibe, 1998) have discussed the bad effects of video and computer game. For example, Sakamoto explored the relationship between video game use and children’s psychological development. It might be said that such changes in play styles affect pupils’ intrinsic motivation.

Then, what can be done about the developmental decline in intrinsic motivation? A first approach for combating the developmental decline in motivation involves promoting perceptions of autonomy (Lepper & Henderlong, 2000). Intrinsic
motivation derives from students feeling a sense of control over their learning environment and activities (Lepper & Hodell, 1989). It is important to create an autonomous climate in the classroom. One of the ways to enhance perception of autonomy is to provide opportunities for pupils to control and choose different activities within a range of activities that fit into the curriculum.

A second potential response to the developmental decrease in motivation is to encourage pupils to have clear and specific goals in the classroom. According to Csikszentmihalyi and Rathunde (1993), flow experience, referring to a subjective state of being completely involved in something, forgetting time, fatigue and everything else but the activity itself, usually happens when there are clear goals one can reach. According to Pintrich and Schunk (2002), clear and specific goals promote motivation better than vague general goals such as “Do your best”. Pintrich and Schunk also said that proximal or close-at-hand goals enhance motivation better than distant goals, because individuals can judge progress toward the former.

A third potential response to the developmental decrease in motivation is to provide activities that are challenging but reasonable in terms of students’ capabilities (Lepper & Henderlong, 2000). According to Deci and Ryan (1985), pupils should be given activities that are difficult and challenging, but not outside their range of competence. Lepper and Hodell (1989) said that optimally challenging activities are ones in which goals are of intermediate difficulty and attainment is uncertain. Csikszentmihalyi and Rathunde (1993) also state flow experience happens when an appropriate balance between skills and challenges is achieved.

Research Question 3

Are there any gender differences in intrinsic motivation of Japanese elementary school pupils between 20 years ago and now?

Sakurai and Takano (1985) found the curiosity and causality scores of girls were significantly higher than those of boys in all the grades except sixth grade. The present study also shows that girls have higher scores than boys in the two variables. In Sakurai and Takano, the challenge scores of boys were significantly higher than those of girls in sixth and seventh grades. In this study, the challenge scores of girls are significantly higher than those of boys only in fourth grade. Gender differences are almost similar to 20 years ago, although there are some differences in challenge.
Limitations and Conclusions

A few more limitations of the study and suggestions for future study need to be addressed. First, the data was collected only by means of a questionnaire. Qualitative research, including interviews with students and teachers and classroom observations, would provide significant further layers of analysis.

Secondly, data collection was cross-sectional. A cross-sectional study is less effective in identifying individual variations in growth or to establish causal relationships (Cohen, Manion, & Morrison, 2000). Longitudinal studies are particularly appropriate in research on human growth and development (Cohen et al., 2000). To investigate the change in motivation with age more precisely, longitudinal data collection should be conducted.

Thirdly, whereas the participants in this study lived in the suburbs of Tokyo, those in Sakurai and Takano (1985) lived in the Japanese countryside. These contextual differences may affect the results. To compare more precisely motivation of elementary school pupils between 20 years ago and now, research should be done in Nagano as conducted by Sakurai and Takano. Moreover, inferences drawn from the results of this study are limited by the nature of the particular sample used, which consisted solely of students who live in the suburbs of Tokyo. These results may be specific to one group and not generalizable to Japanese elementary school pupils as a whole. As with all studies, then it is essential to replicate this study to determine the applicability of the results to other contexts.

Notwithstanding its limitations, this study does make a contribution towards revealing and understanding the motivation of Japanese elementary pupils. This study reveals that the components of intrinsic and extrinsic motivation of Japanese elementary school pupils now are almost similar to those of 20 years ago, but that there is a developmental decline in intrinsic motivation among today’s Japanese elementary school pupils, compared to pupils 20 years ago. This study narrows its focus down to motivational studies and this is obviously just one aspect of the picture representing elementary school pupils. Thus, other areas like cognitive development and socio-cultural factors will have to be investigated in the future.

References


Retro Green: Sustainable Initiatives for Facility Renovations in Higher Education

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Abstract

Institutions of higher education have traditionally attempted to construct functional and innovative facilities to meet the needs of their stakeholders. Over the past few decades, the concepts of green design and sustainability have evolved as mechanisms to deal with limited resources and reduce environmental impacts. Architects, engineers, and consultants have begun practicing social responsibility by incorporating green design concepts and technologies into new construction and renovations of existing facilities. This presentation will provide a narrative for the sustainable measures initiated in the recent 12 million dollar expansion/renovation of the Raymond B. Preston Health and Activities Center at Western Kentucky University. Other highlights include an explanation of WKU’s Energy Policy, the architect selection details, descriptions of renovation and building improvement standards, a list of potential sustainable initiatives for renovation projects, and suggested measures for maintaining green facilities.
Conducting a Comprehensive Study Abroad Course:  
The 2008 Beijing Summer Olympic Games

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Abstract

The authors lead a study abroad trip to Beijing, China during the 2008 Summer Olympic Games representing Western Kentucky University and Winston-Salem State University. In desiring to provide participants with an unparalleled experience, we embarked upon a year-long planning process for an academic/cultural experience in a foreign country. In all, forty-one faculty, staff, students, and alumni took a 15 day trip from Bowling Green, Kentucky to Beijing, China and back. The country of China and all of its historical landmarks had a great impression on all persons involved. The Olympic Games were a life-changing experience, from the Opening Ceremony to the events attended. In all, it was a thoroughly worthwhile adventure we hope to replicate every four years. This presentation will highlight the overall learning experience, travel and logistical considerations, difficulties encountered, curricular issues, and the Olympic experience.
The Relationship of Leadership and Employee Collegiality

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            Fred Gibson, PhD
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Abstract

The purpose of this study was to examine the relationship between park and recreation directors’ leadership styles and collegiality among subordinates. The Multifactor Leadership Questionnaire 5X (Avolio & Bass, 2004) was used to determine the leadership styles of the directors and the Culture Triage Survey (Phillips & Wagner, 2002) was used to assess the health of the park and recreation department’s organizational culture. Departments were asked to participate in the study based upon information garnered from the Kentucky Recreation and Park Services Study (2007-2009). Surveys were mailed to 479 potential respondents and 134 were returned (28%).

A bimodal method of data collection was used to administer the survey to employees of participating park and recreation departments. The organizational culture behavior of collegiality was found to be significantly related to the transformational leadership behaviors of individual consideration, inspirational motivation, and intellectual stimulation. Collegiality was also found to be significantly related to the transactional leadership behaviors of contingent reward and active management-by-exception. Collegiality was also found to be significantly related to the passive-avoidant leadership behaviors of lassiez-faire and passive management-by-exception.
Abstract

Inquire to Engage in Chemistry

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Focus on Teachers: The Committee on Prospering in the Global Economy of the 21st Century ("Committee") supports summer camp education programs for classroom teachers that focus on increasing content knowledge. Many school children are systematically discouraged from learning science and mathematics because of their teachers’ lack of preparation, or in some cases, because of their teachers’ disdain for science and mathematics. This project addresses the lack of content knowledge and work to resolve related issues with teachers in grades 5-9 who teach units of chemistry. Stipends and curriculum materials are provided to teachers who participate in summer camps and follow up activities focusing on chemistry content and pedagogy which involves active learning.

Scope and Content of Project. Students learn chemistry over several years through a vertically aligned curriculum. Chemistry in SC is first introduced in Grade 5 through the unit called Properties of Matter. It is re-introduced in Grade 7 (middle school science) and Grade 9 (physical science). A startling 93% of physical science teachers in grades 5-8 have inadequate content preparation. (See Committee report above). In grades 9-12, 63% of physical science teachers and 61% of chemistry teachers have no major or certification in the area they teach demonstrating inadequate content preparation. In addition, content will include teaching active learning pedagogy and learning through inquiry.

Inquire to Engage in Chemistry (ITEC) serviced sixteen 5-9 grade teachers in four low performing school districts who teach units of chemistry through three Super Saturday
workshops and a week-long summer camp in which strategies for teaching chemistry to middle level students as well and hands-on laboratory activities were mastered.

Evaluation of the effects of this project on both teachers and students are presented.
Evidence of the Demonstrated Need for the Program

In 2000, 93% of US students in grades 5-9 were taught physical science by a teacher lacking a major or certification in the physical sciences (chemistry, geology, general science, or physics). An implementation action resulting from this report is to “Strengthen the skills of 250,000 teachers through training and education programs at summer institutes… training programs.”

The SC Department of Education report cards for four nearby school districts demonstrated the need for a program to address (1) science teachers’ lack of content knowledge, understanding and, consequently, enthusiasm for chemistry and physics for grades 5 – 9; and (2) further study of best practices and preferred pedagogy to teach children afflicted by poverty. Specifically, the report cards for the aforementioned school districts illustrate the high level of student poverty (as demonstrated through the free and reduced lunch statistics) and the high level of below basic scores in science on the 2006 and 2007 PACT tests.

The needs of the school districts were determined by conversations with the district leaders and through the district report cards as published on the SC Department of Education website. The three districts had both high levels of (1) PACT scores in the categories of below basic and basic in science and (2) poverty.

Roles Played by Partners in Establishing Needs & How Needs Established Project Design

Dr. Cindy Johnson-Taylor, Chair of the Department of Education at Newberry College, initiated contact with the four school districts to determine their level of interest in participating in the
summer and Saturday workshop program. Dr. Cindy Johnson-Taylor and the three school district contacts spoke at length over the phone and communicated through email to establish the needs of the districts. It soon became clear that there was a dual need to increase content knowledge of teachers in science in grades 5-9 and to provide further study of pedagogy to better engage students, especially those with backgrounds of poverty. Newberry College has a strong chemistry program, in great part due to Dr. Christina McCartha, Chair of the Chemistry Department. Dr. McCartha has significant experience working with students in grades 5-9, serves as a Girl Scout Leader, and has co-written the Chemistry Education curriculum which recently received approval by the Professional Review Committee of the State Department of Education. Her input as a chemist also helped establish needs and possible curriculum available to address the needs demonstrated by the district representatives and the report cards. Dr. Johnson-Taylor’s experience as an educator in the public schools, coupled with her experience teaching pedagogy, enabled her to work together with the district representatives and Dr. McCartha to evaluate data collected by the districts, district report cards, and needed content knowledge in chemistry. This collaborative evaluation helped to establish the Inquire to Engage in Chemistry (ITEC) program design.

**Purpose of the Project**
The purpose of the Inquire to Engage in Chemistry (ITEC) program is to increase general chemistry knowledge and proficiency of science teachers in grades 5 – 9 through inquiry based instruction, thereby increasing competency and enthusiasm for science.

**Research Base**
Research on teaching and learning over the past several decades has provided a better understanding of how students learn and the teaching methods that are most effective in supporting student learning in the sciences. “There is mounting evidence that supplementing or replacing lectures with active learning strategies and engaging students in discovery and scientific process improves learning and knowledge retention”. (Science, 2004, 304, 521-2)

Teachers at all levels need to become aware of these results and learn how to incorporate new strategies in their classrooms so that all students will learn science and more be attracted to careers in science fields. An effective way to help teachers adopt new methods is for them to participate in workshops that model active learning strategies to help participants learn about strategies as they are engaged in them. (Preparing High School & Freshmen-Level Chemistry Teachers for Teaching & Learning in an Activity-Based Framework). Bell, Jerry, ACS, 2007.

The Committee on Prospering in the Global Economy of the 21st Century (“Committee”) supports summer camp education programs for classroom teachers that focus on increasing content knowledge. Many school children are systematically discouraged from learning science and mathematics because of their teachers’ lack of preparation, or in some cases, because of their teachers’ disdain for science and mathematics. This project will address the lack of content knowledge and work to resolve related issues with teachers in grades 5-9 who teach units of chemistry. Rising above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future, Committee on Prospering in the Global Economy of the 21st Century: Agenda
for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, 2005. Footnote and bibliography

Research indicates that Inquiry-Based Learning helps at-risk student succeed in school. At-risk students often struggle to learn in a traditional classroom. Classrooms where learning activities are varied give these students the opportunity to excel. Students become active participants in their learning rather than disinterested. Engaged learners enjoy school and become lifelong learners. Numerous research studies have shown the value of inquiry-based learning, particularly in improving the achievement level of the lowest-performing students and minorities (National Drop Out Prevention Center, 2008). In other words, engaged students have a better chance of staying in school and being successful than those who are disenfranchised in the classroom by traditional teaching methods.

According to the Center for Inquiry-Based Learning (2008), in a science classroom, this type of teaching and learning occurs when a teacher creates situations in which students take on the role of scientists. In these situations, students take the initiative to observe and question data; pose explanations of what they see; conduct tests to support or contradict their theories; analyze data; draw conclusions from experimental data; design and build models; or any combination of these. These learning situations are open-ended in that they do not aim to achieve a single "right" answer. Nevertheless, students work under clear standards to achieve their learning goals.

The professional development aspect of this project is important as well. Almost all school districts have some type of professional development for their teachers. The problem is that very few of these activities are effective in changing teaching practices. Most professional development is fragmented and short-term, and rarely focused on curriculum for students (Southern Regional Education Board, 2008). In a 1998 study, only 30% of teachers participated in professional development activities that required in-depth study of a specific field (Hirsch, Koppich, & Knapp, 1998). Content and duration are very important for effective professional development (Reimer, 2004). As SREB research indicates, for professional development to be most effective it must be focused and sustained over a period of time (2006).

**Objectives of ITEC**

1. Increase teacher content knowledge in science standards for grades 5-9.
   - Coordinate or produce as necessary vertically-aligned curriculum units for teachers to take with them and utilize in their classrooms; make available on district websites.
   - Coordinate or produce series of labs and/or lab manuals that demonstrate labs and their integration from one level to the next.
   - Teachers participate in one-week summer camp at Newberry College where they receive instruction each day on a different strategy for engaging students in science.
   - Produce a handbook for teachers to take with them with examples of strategies that may apply in different classroom situations.
Visits to schools by grant facilitators to assist teachers in using inquiry based teaching.

**Activities to be implemented:**
The chemistry activities are designed to support the national and state science standards for grades 5-9. A cohort of 16 teachers from the four school districts will be served by the grant during years 1 and 2. A different cohort of 20 teachers from the school districts school districts will be served by the grant during years 3 and 4 utilizing the same program.

Prior to beginning with professional development, an in-classroom coach from Newberry College into each of the 16 classrooms to observe. The focus of the first observation will be to assess the level of chemical and lab safety in the classroom and to look for inquiry-based instructional strategies being employed in the classroom.

The first cohort began with three Saturday events held at Newberry College to concentrate on activities dealing with chemical and lab safety both at the college instructional level and for incorporation into the classroom. The state standard for safety for each grade level indicates teachers should “Use appropriate safety procedures when conducting investigations” (state standards). The goal of the first year Saturday Teacher Events is to provide teachers with enough content in the area of safety to feel confident to effectively carry out the chemistry activities. The Saturday Teacher Event implements Safety Instruction. The Safety Content Knowledge included precautionary labels, material safety data sheets (MSDS), using protective equipment, handling laboratory equipment safely, safe handling of chemicals, storage of chemicals, disposal of chemicals, and emergency equipment. (Sarquis, M. *Building Student Safety Habits for the Workplace* Terrific Science Press, Middletown Ohio, 2000.) The teachers participated in several labs to illustrate the content during the Science Safety Workshop. During the safety activities for grade 5-9 students, students will see the necessity of safe practices in the lab and the potential dangers associated with unsafe practices. (Sarquis, M., Ed. *Safe Not Sorry! Chemical Safety Activity Handbook* Terrific Science Press, Middletown Ohio, 2007; ACS grade 7-12; ACS grades K-6) The safety material will be introduced into each grade level in a vertically aligned curriculum so each student is given the information needed to safely complete the chemistry activity for the designated year. The participants will be introduced to several safety websites and technology resources that can be integrated into the classroom.

Inquiry-based learning instruction will include materials developed and disseminated by the National Drop Out Prevention Center (NDPC) housed at Clemson University. The NDPC has commissioned the writing of curriculum which instructs teachers on best practice in engaging students the learning process.

<table>
<thead>
<tr>
<th>Table I: Saturday Safety Events for Cohort of 20 Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saturday Teacher Event #1 at Newberry College</strong></td>
</tr>
</tbody>
</table>
At the first Super Saturday 15 people attend both sessions. Both a pre-test and a post-test were administered. A paired t-test analysis on the total scores found that the participants did learn at a 0.01 level of significance.
The pre/post test scores for the second Super Saturday were item by item to determine on which items the participants did not improve. The paired t-test could not determine that the participants’ knowledge increased on questions 1, 5 or 7. However at a 0.1 level of significance, the participants’ knowledge did increase on question 1. The levels of significance for the questions on which the participants did improve were at least 0.05. Using the total scores for both the pre and post test, a paired t-test did show that the participants did gain knowledge.

On the third Super Saturday, no pre/post test was administered since the workshop consisted entirely of laboratory activities demonstrating the concepts covered in the first two Super Saturdays. After completion of the first year of Saturday events, the cohort participated in a weeklong summer camp at Newberry College to increase their chemistry content knowledge. This was done through a vertically aligned curriculum in chemistry for grades 5-9. Each grade level teacher was provided with a non consumable science kit with instructions containing material to work with the grade in which they teach. The Summer camp Activities are summarized in Table II.

“Scientific inquiry is a powerful way of understanding science content. Students learn how to ask questions and use evidence to answer them. In the process of learning the strategies of scientific inquiry, students learn to conduct an investigation and collect evidence from a variety of sources, develop an explanation from the data, and communicate and defend their conclusions.” (NSTA Position Statement on Scientific Inquiry) Inquiry instruction included following the indicators discussed in the state K-12 Scientific Standards and Indicators. Several papers have been written on inquiry in the classroom. Several papers have been written on inquiry in the classroom. (science teacher, 54-58, oct 2005; Science and children, p37-41, feb 2006; science teacher, 42-45, dec 2004; NSTA, Technology-Based Inquiry for Middle School: An NSTA Press Journals Collection; NSTA Press: Arlington, VA, 2004.; NSTA, Readings in Science Methods, K-8: An NSTA Press Journals Collection; NSTA Press: Arlington, VA, 2008.; Jorgenson, O.; Cleveland, J.; Vanosdall, R. Doing Good Science in Middle School: A Practical Guide to Inquiry-Based Instruction; NSTA Press: Arlington, VA, 2004.; McDonald, S.; Criswell, B.; Dreon, Jr., O. “Inquiry in the Chemistry Classroom: Perplexity, Model Testing, and Synthesis”; Science as Inquiry in the Secondary Setting, Chapter 4, 41 – 51.) According to Kelly Deters, “The fastest way to begin using inquiry is to take a fairly straightforward lab and simply delete the procedure, data recording, and analysis sections.” (Science teacher, dec 2004 p 42-45) Many teachers do not use inquiry due to their fear of losing control in the classroom, safety issues, or lack of classroom time. (Science teacher, dec 2004 p 42-45) We incorporated inquiry into activities the teachers can take to their school districts.

Each teacher received vertically aligned activities organized from existing materials on the web and through manuals on inquiry based chemistry activities. A kit for the grade in which the teacher teaches was given to each participant. The kit will contained nonconsumable items to complete the chemistry unit. The content sufficient to teach the grade 5 was presented for grade 5 and as the week progressed the content was built upon, to increase the teacher confidence in the material. As the teacher confidence built in performing scientific inquiry, the difficulty level of the material increased through each grade level. The teachers performed the activities just as the students would and drew conclusions from the data just as the students would. During year
1, each participant received the appropriate grade level kit with activities to address the state standards in chemistry. During Year 2, each participant will receive an additional kit with alternative and extension activities to address the state standards in inquiry/chemistry.

The vertically aligned curriculum activities were taken from several sources including, but not limited to, the following: the Western Piedmont Education Consortium has a resource science curriculum guide for grade 6 and is working on science guides for additional grades (Saluda and McCormick districts participate in this program). Appropriate grade level activities will be taken from *Inquiry in Action*, an American Chemical Society publication (ACS, 2005) that investigates matter through inquiry. National Science Foundation funded projects include Center for Inquiry Based Learning, *Strange Matter* teacher guide and *Demoworks* guide. Terrific Science Press has produced series of books including *Teaching with Toys* series, *Science in Our World* series, *PACT Chemical Technology* series, and *Strive to Thrive* series. All of the resources are aligned with the National Science Standards and/or with South Carolina State Standards.

Along with living together in the dorms and eating together for meals, each evening the participants participated in an activity to build relationships and encourage collaboration within the cohort. During the summer camp year #1, each district planned a Saturday event for their school district or select school within the district to have a science fair or a fun science activity day using selected activities from the week. The Saturday event is a way the teachers within the district have a scheduled time to collaborate and promote science education in their district. The Saturday events will be implemented at each district between summer camp #1 and summer camp #2.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-6:00</td>
<td>Check-in, move in dorm rooms</td>
<td>Contact with teachers</td>
</tr>
<tr>
<td>6-8:00</td>
<td>Welcome, instructor introductions, dinner, get to know you activities</td>
<td>Welcome, dinner, discussion of Saturday events in each district</td>
</tr>
<tr>
<td>8-9:00</td>
<td>Week at a glance, overview, pre-camp knowledge evaluation</td>
<td>Week at a glance, overview, pre-camp knowledge evaluation</td>
</tr>
</tbody>
</table>

**Day #1: Monday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9:00</td>
<td>Breakfast</td>
<td>Network</td>
</tr>
<tr>
<td>9-10:00</td>
<td>Vertically Aligned Curriculum</td>
<td>Vertically Aligned</td>
</tr>
<tr>
<td>Time</td>
<td>Activities</td>
<td>Curriculum to Standards</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>10-11:00</td>
<td>Grade 5 activities: Part I</td>
<td>Grade 5 activities: Part II</td>
</tr>
<tr>
<td>11-12:00</td>
<td>Grade 5 activities: Part I</td>
<td>Grade 5 activities: Part II</td>
</tr>
<tr>
<td>12-1:00</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1-2:00</td>
<td>Grade 5 activities: Part I</td>
<td>Grade 5 activities: Part II</td>
</tr>
<tr>
<td>2-3:00</td>
<td>Grade 5 activities: Part I</td>
<td>Grade 5 activities: Part II</td>
</tr>
<tr>
<td>3-4:00</td>
<td>Grade 5 activities: Part I</td>
<td>Grade 5 activities: Part II</td>
</tr>
<tr>
<td>4-5:00</td>
<td>Design Lesson Plan for Saturday Event with your district: Session 1</td>
<td>Grade 5 activities: Part II</td>
</tr>
<tr>
<td>5-6:00</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>6-8:00</td>
<td>Cookout</td>
<td>Cookout</td>
</tr>
</tbody>
</table>

**Day #2: Tuesday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9:00</td>
<td>Breakfast</td>
<td>Network</td>
</tr>
<tr>
<td>9-10:00</td>
<td>Inquiry Instruction IV</td>
<td>Inquiry Instruction VII</td>
</tr>
<tr>
<td>10-11:00</td>
<td>Grade 6 activities: Part I</td>
<td>Grade 6 activities: Part II</td>
</tr>
<tr>
<td>11-12:00</td>
<td>Grade 6 activities: Part I</td>
<td>Grade 6 activities: Part II</td>
</tr>
<tr>
<td>12-1:00</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1-2:00</td>
<td>Grade 6 activities: Part I</td>
<td>Grade 6 activities: Part II</td>
</tr>
<tr>
<td>2-3:00</td>
<td>Grade 6 activities: Part I</td>
<td>Grade 6 activities: Part II</td>
</tr>
<tr>
<td>3-4:00</td>
<td>Grade 7 activities: Part I</td>
<td>Grade 7 activities: Part II</td>
</tr>
<tr>
<td>4-5:00</td>
<td>Design Lesson Plan for Saturday Event with your district: Session 2</td>
<td>Grade 7 activities: Part II</td>
</tr>
<tr>
<td>5-6:00</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>6-7:00</td>
<td>Dinner</td>
<td>Dinner</td>
</tr>
<tr>
<td>7-9:00</td>
<td>CSI night</td>
<td>NASA Night</td>
</tr>
</tbody>
</table>

**Day #3: Wednesday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9:00</td>
<td>Breakfast</td>
<td>Network</td>
</tr>
<tr>
<td>9-10:00</td>
<td>Grade 7 activities: Part I</td>
<td>Grade 7 activities: Part II</td>
</tr>
<tr>
<td>10-11:00</td>
<td>Grade 7 activities: Part I</td>
<td>Grade 7 activities: Part II</td>
</tr>
<tr>
<td>11-12:00</td>
<td>Inquiry Instruction V</td>
<td>Inquiry Instruction VIII</td>
</tr>
<tr>
<td>12-1:00</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1-2:00</td>
<td>Grade 7 activities: Part I</td>
<td>Grade 7 activities: Part II</td>
</tr>
<tr>
<td>2-3:00</td>
<td>Grade 7 activities: Part I</td>
<td>Grade 7 activities: Part II</td>
</tr>
<tr>
<td>3-4:00</td>
<td>Grade 8 activities: Part I</td>
<td>Grade 8 activities: Part II</td>
</tr>
<tr>
<td>4-5:00</td>
<td>Design Lesson Plan for Saturday Event with your Grade 8 activities: Part II</td>
<td>Grade 8 activities: Part II</td>
</tr>
</tbody>
</table>

- **Content**: Additional content or details related to the above activities.
- **Coordination**: Activities related to coordination between teachers or content specific details.
- **Network**: Activities related to networking or communication.
- **SQL**: Additional SQL or database-related activities.
- **Fun!!!**: Activities marked as fun or enjoyable.
- **NA**: Not applicable or data not available.
### Day #4: Thursday

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6:00</td>
<td>Break</td>
<td>NA</td>
</tr>
<tr>
<td>6-7:30</td>
<td>Dinner off campus</td>
<td>Network</td>
</tr>
<tr>
<td>7:30 – ??</td>
<td>On your Own</td>
<td>NA</td>
</tr>
</tbody>
</table>

#### Time Activities

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9:00</td>
<td>Breakfast</td>
<td>Network</td>
</tr>
<tr>
<td>9-10:00</td>
<td>Inquiry Instruction VI</td>
<td>Inquiry Instruction</td>
</tr>
<tr>
<td>10-11:00</td>
<td>Grade 8 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>11–12:00</td>
<td>Grade 8 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>12-1:00</td>
<td>Lunch</td>
<td>Network</td>
</tr>
<tr>
<td>1-2:00</td>
<td>Grade 8 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>2-3:00</td>
<td>Grade 9 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>3-4:00</td>
<td>Grade 9 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>4-5:00</td>
<td>Design Lesson Plan for Saturday Event with your district: Session 4</td>
<td>Coordination between teachers/Content</td>
</tr>
<tr>
<td>5-6:00</td>
<td>Break</td>
<td>NA</td>
</tr>
<tr>
<td>6-7:00</td>
<td>Dinner off campus</td>
<td>Network</td>
</tr>
<tr>
<td>7-9:00</td>
<td>Inko Dye T-shirt</td>
<td>On Your Own</td>
</tr>
<tr>
<td>9- ??</td>
<td>Stargazing on roof SCM</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Day #5: Friday

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Needs of District</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9:00</td>
<td>Breakfast</td>
<td>Network</td>
</tr>
<tr>
<td>9-10:00</td>
<td>Grade 9 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>10-11:00</td>
<td>Grade 9 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>11–12:00</td>
<td>Grade 9 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>12-1:00</td>
<td>Lunch</td>
<td>Network</td>
</tr>
<tr>
<td>1-2:00</td>
<td>Grade 9 activities: Part I</td>
<td>Content</td>
</tr>
<tr>
<td>2-3:00</td>
<td>Design Lesson Plan for Saturday Event with your district: Session 5</td>
<td>Content</td>
</tr>
<tr>
<td>3-4:00</td>
<td>Camp evaluation, post-camp knowledge evaluation</td>
<td>Evaluation</td>
</tr>
<tr>
<td>4-5:00</td>
<td>Check-out, departure</td>
<td>NA</td>
</tr>
</tbody>
</table>

A thirty-nine question pre/post test was administered at the summer camp. The evaluator conducted a paired t-test on each question and on the entire test. The t-test on the total test score demonstrated that the participants did learn at a 0.01 level of significance. Then he analyzed the data on each question. Questions 2 – 7, 9 – 14, 15c, 18 – 20, 22 – 27, 29, 30, 31 c, d and e showed that at least thirteen of the sixteen participants knew the material in these questions.
before starting this camp. Thus, of the 39 questions on this test, all but 3 of the participants knew the material on 26 of the questions before the camp.

As a result of this analysis, in year 2 of this project, a pre-test will be administered in November at the Annual Meeting of the South Carolina Science Council. An item-by-item analysis of the pre-test will be used to ensure that the content topics in Summer Camp II will be topics about which a great deal of the participants feel weak.

This analysis does not show that nothing was learned because a focus group showed that the participants learned much about teaching these concepts and the pedagogy of the labs. Teachers described the laboratory activities as “wow labs” meaning that the results of the experiments were entertaining and awing to the teachers and students. After visiting the camp and viewing an afternoon’s worth of these activities, the evaluator agrees. The labs were organized in such a way that each group could work at their own pace without pressure. However, when the activity was completed, laboratory assistants removed the used materials and wheeled in a cart with the materials needed for the next laboratory. A focus group discussion with the camp participants showed that the participants learned or re-learned much of the content through the labs, became confident in using the same laboratories with their students, and felt much more confident about their abilities to teach these same laboratories to their students.

In discussions with Drs. Johnson-Taylor and McCartha, the participants decided that the offering of Super Saturdays in their districts was counter-productive for many reasons – e.g. the teacher was the only chemistry teacher in the district at her grade level. Instead, the participants will present their activities at the Annual Meeting of the South Carolina Science Council (local National Science Teachers’ Association affiliate).

Dr. McCartha administered the Student Assessment of Learning Gains (SALG) instrument to the participants. SALG is a well known assessment tool for the students to assess what they have learned. Analysis of the SALG showed:

1. In skill areas of communication with administration and working effectively with teachers, the participants were more confident in discussion of the safety material than prior to the Super Saturday sessions.
2. On the post-test Understanding of chemistry, 88% of the participants indicated good or great gain in understanding of the main concepts and relationships between the main concepts explored in the summer camp while 100% indicated a moderate, good or great gain in understanding.
3. The concepts in which one of the participants indicated a great deal of understanding on the pre-test were physical properties, properties of energy, simple machines, atomic number, and mass number. The topics in which two or three participants indicated a great deal of understanding on the pre-test were law of conservation of energy, basic properties and behavior of waves, and difference in molecules and atoms. Participants indicated gains in understanding in all areas after the summer camp.

**Follow-up Activities:** In order to provide high quality professional development, the program offers in-classroom coaching for the participating teachers. Each teacher will have at least two
in-classroom coaching sessions during the year with additional sessions set up to meet the needs of individual teachers. These coaching sessions will provide observation, conferencing, providing logistical and technical assistance and modeling of content and strategies. The fall after the summer camp, in class coaches will go into all classrooms to observe and work with teachers on implementing both the content and the inquiry based learning strategies. The same will occur in the spring. The visiting coach will prepare a set of field notes based on each visit to document any trends, highlights or concerns. These notes will also provide written feedback to the teacher. The in-class coaching is critical to providing the sustained professional development outlined by SREB and others.

It is important that ITEC insure that all school districts receive equal service and representation from Newberry College, even those that are a further distance from the college. To insure this quality of service, each school district is assigned one college faculty member to serve as its liaison. These are full-time faculty, not paid staff or student workers. The faculty member is charged with making sure his/her district receives all of the benefits of the grant.

**Assessment of How Activities have Contributed to Teacher Practice**

The evaluator or his designate visited the classrooms of 16 teachers before the first Saturday session to observe how the teachers teach and to have a baseline for further evaluation. The evaluator will visit the classrooms of at least five participants and use the Education Review Team teacher observation form to determine whether the teachers are using the pedagogy taught to them in the workshops and to observe project staff assisting the teachers to improve their teaching.

**Assessment of the Impact of the Project on Student (PK-12) Achievement**

The evaluator will examine the MAP scores or similar scores of the participating teachers’ classes year by year beginning with the year before entering this project in an attempt to determine whether the workshop activities are impacting student achievement positively.
References Cited:


“There is mounting evidence that supplementing or replacing lectures with active learning strategies and engaging students in discovery and scientific process improves learning and knowledge retention”. (Science, 2004, 304, 521-2)


South Carolina State Science Standards. *South Carolina Department of Education.*


PACT Chemical Technology Resources series, 2000-2002.


Title:  SIMMONS COLLEGE SCHOOL OF HEALTH SCIENCES DEPARTMENT OF NURSING: THE DOTSON BRIDGE AND MENTORING PROGRAM  300 Fenway, Boston MA 02368

Topic:  Successful Mentoring Programs

Name:  LaDonna L. Christian MS, APRN-BC: Director of the Dotson Bridge and Mentoring Program

Email: ladonna.christian@simmons.edu

Background:  Although there is a growing need for minority nurses in the health care system, minorities in nursing continue to be underrepresented in colleges and schools of nursing. Many minority nursing students are poorly prepared for college, have family responsibilities and jobs, are culturally different, and English is their second language. These barriers can translate into major challenges, academically and clinically.

Mentoring in nursing has been traced back to great nurse leaders such as Mary Adelaide Nutting, Florence Nightingale, Mary Seacole, and Mary Mahoney, but very little has been written about mentoring minority students. Mentoring can provide that specific and deliberate guidance needed to bridge the gap between the educational, professional, cultural, and personal needs of the minority nursing student. Mentoring empowers the scholar to progress within a compassionate, collaborative, culturally competent, and respectful environment.

The Dotson Bridge and Mentoring Program started August 2009, because of a vision by Dr. Judy Beal and the generous donation from George and Phyllis Dotson, to provide support and change the outcome of graduation and NCLEX passing rates of African, Latino, Asian, and Native American (ALANA) nursing students. The ALANA scholars in the program are committed to learning and developing academically, personally, and professionally. The mentors are nurses, who are community leaders, clinicians, and alumni, that share the vision of helping minority nursing students experience success and improve graduation and NCLEX outcomes at Simmons College.

Presently the Dotson Program consists of a director, a faculty member, 13 mentors, and 40 scholars. The director, faculty, and mentors meet on a monthly basis to discuss the needs of the scholars and to support each other. Each mentor has 2-3 scholars to whom they offer weekly support by assisting them in the development of their goals and skills necessary to be successful in the nursing program. The scholars are enrolled in the generic, DIX Scholars, direct entry, and FNP nursing programs. Throughout the year, the Dotson Program offers several workshops in various learning skill areas. We have also developed a brochure that outlines the services offered by the program.

Outcomes:  In our first year, the Dotson Program has graduated 4 scholars: Presently 3 of the 4 have successfully passed the NCLEX and have a 100% nursing course pass rate.

Purpose:  The program is designed to provide academic, professional, cultural, and personal support to minority nursing students, and improve the graduation and NCLEX outcomes.

Methods:  Qualitative and Quantitative data collected for outcome based evaluation through questionnaires/surveys and interviews.

Future:  Our program is still growing and we are adding 3 new mentors and 8 scholars over the next year.
1. Title: Puzzle of Autism
2. Names: Julie Moore and Geoffrey Au
3. Affiliations: National Education Association, IDEA Resource Cadre
4. Address: Julie Moore 2238 Lorelei Lane NW Seabeck, WA 98380
   Geoffrey Au 908 Kana Place Honolulu, HI 96816
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6. Abstract:
This hands on session focuses on how teams can increase a child with ASD’s access to the
general education curriculum, by improving conversations between special and general
educators who serve students with high functioning autism and the techniques and strategies
that work best. This presentation explores the issues important to educators surrounding
students with autism, including-- features of autism and techniques and research-based
strategies that work in the general education setting. Participants (up to 50) will receive a
complimentary copy of The Puzzle of Autism, written by the National Education Association
with the Autism Society of America.

Participants will be provided materials that will:

- Explain the characteristic exhibited by students with autism spectrum disorder.
- Suggest evidence-based effective strategies for students with autism spectrum disorder
  in the areas of Communication, Sensory Ingernation and Regulation, Socialization and
  Social Skills, Behavioral Issues and Restricted Issues.
- Identify resources.
Julie Moore, NEA IDEA Resource Cadre, Juliem@cksd.wednet.edu, 360-662-2300, ext. 2365
Research Objectives

High stakes testing. Accountability. Highly-qualified teachers. Teachers and other professional educators are being held to higher standards than in the past thanks to federal and local legislation like No Child Left Behind (NCLB, 2002). Given the greater accountability expectations, are teachers skilled in classroom assessment? While high stakes testing has become the primary focus when reporting assessment results for students, teachers, and school districts, it is in the classroom where most assessment activities take place. Nearly two decades ago, Stiggins (1991) reported that nearly 50 percent the activities happening in classrooms involve some form of assessment. These activities include both formal and informal assessments and take the form of tests, quizzes, observations, and homework. Teachers assess student achievement and behaviors all the while attending to the mandates set forth by state and federal guidelines and standards. Just as frequently, teachers report that they are not fully prepared to handle the rigors of assessment and have reported that training in measurement was inadequate due to limited exposure to coursework or experiences in testing, measurement, and classroom assessment (Stiggins, 1999, Wise et al, 1990).

In 1991, a series of grant-supported research studies were conducted to meet the following goals: (1) measure teacher competency levels in the educational assessment of students; (2) identify a topic for the development of a training prototype; and (3) prepare a prototype training module on the selected topic (Impara, 1993). These studies examined classroom assessment literacy as defined by the seven Standards for Teacher Competence in Educational Assessment of Students developed by the American Federation of Teachers, the National Council on Measurement in Education, and the National Education Association (1990). These Standards address seven broad skill areas in educational assessment and include:

1. choosing assessment methods appropriate for instructional decisions;
2. developing assessment methods appropriate for instructional decisions;
3. administering, scoring, and interpreting the results of both externally-produced and teacher-produced assessment methods;
4. using assessment results when making decisions about individual students, planning teaching, developing curriculum, and school improvement;
5. developing valid pupil grading procedures which use pupil assessments;
6. communicating assessment results to students, parents, other lay audiences, and other educators; and
7. recognizing unethical, illegal, and other inappropriate methods and uses of assessment information.

Goal 1 of the original studies was achieved through a two-part national survey of teacher competencies in the area of educational assessment of students completed by 555 teachers representing a 48% response rate and 286 administrators representing a 51% response rate. Goals 2 and 3 were achieved through the development of several training modules originally designed to be delivered through in-service programs. Results of these studies indicated that administrators and teachers indicated weaknesses in several areas as identified by the Standards. The most significant weakness was related to items measuring the teachers’ knowledge about communicating test results (Standard 6). Has anything changed since 1991? Are teachers more competent in the assessment of students given the changes in PK-12 education since No Child Left Behind (2002)? Do teachers and administrators feel prepared to handle the rigors of classroom assessment in the age of accountability?

Current Study--Research Objectives
In the original studies, the overall research goals were to measure teachers’ and other school professionals’ knowledge of classroom assessment (Impara & Plake, 1995; Impara, Plake & Fager, 1993a; Impara, Plake & Fager, 1993b, Plake, 1993; Plake, Impara & Fager, 1993). The overall research objective of this study is to replicate the previous studies to determine whether changes have occurred in teachers’ and administrators’ knowledge of classroom assessment and whether their levels of perceived competence have improved given the federal legislation mandated in No Child Left Behind and other high stakes accountability requirements.

Additional research objectives are aligned with the original goals two and three and will include the development of training materials using available technologies to ensure teachers, administrators, and others have access to information to improve student learning and development of a delivery mechanism to make these materials available to all stakeholders.

Current Study--Proposed Methodology
In 1991 a national sample, employed in two stages, of school administrators and teachers was identified using census and school system databases. Stage one utilized U.S. Census track data to identify six counties, stratified by population size, from each state. In counties with large populations, large cities were selected to represent various school system configurations. The Directory of Public Elementary
and Secondary Education Agencies, 1988-1989 was used in the second stage to locate and verify addresses for the cities and counties identified in the census data (National Center, 1990). When counties and cities had more than one school system, random selections were made from among the districts/school systems that were large enough to employ at least twelve teachers and six administrators. Additionally, accommodations were made to the sampling for Montana (systems were elementary or secondary and cities counted as one system) and Hawaii (system was technically one district). The first four of the six counties or cities selected from each state were designated as the initial sample and the remaining two systems were identified as backups to be used if needed.

At the time of the original studies, the researchers contacted each state’s assessment director/assessment coordinator to endorse the studies. Forty-five of the fifty state coordinators provided information needed for school system participation that included information on whether the system was still in operation and the name of a contact person in the selected districts. The remaining five states were not included in the final sample. By way of initial contact, an informational letter was sent to the contact persons in each of the 180 school systems (four per state from 45 states) that resulted in 90 school systems agreeing to participate. Responses were received from 82 school systems and provided 555 responses from teachers and 300 responses from administrators representing 42 states. The final sample represented school systems from all population categories and locations (i.e., small, mid-sized, and large systems from rural, urban, and suburban areas).

The proposed study described within will utilize similar sampling techniques while benefiting from technologies. During State 1, U.S. Census track data will be used to identify six counties, stratified by population size. Sampling from counties with large populations will use large cities to represent different school system configurations. During Stage 2, contact information for public elementary and secondary education agencies will be utilized from school district websites. The counties and cities identified as part of the sample will be located and contact information will be verified electronically. When counties and or cities have more than one school system, a random selection will be made from among the systems large enough to provide at least 12 teachers and six administrators. Contact will also be made with state and local assessment directors or testing coordinators to inform them of the study and to obtain their support. It is the goal of this study to obtain a sample that represents small, mid-sized, and large school systems from rural, suburban, and urban settings.

The methodology for use in this proposed study must adhere to the original study, however, since 1991 technology has advanced to allow for paperless administration. It is imperative that a sampling procedure be designed that adheres to the original study while using current technologies. To this end, the original instrument will be converted to an electronic version using Survey Monkey or a similar program. Additional questions will be added to ensure all demographic information is collected.
Discussion of Expected Outcomes

What has changed since 1991? Email, the World Wide Web, teacher preparation and professional development via distance delivery, NCLB, etc. Are teachers and other professional educators prepared to respond to the increasing demands of classroom assessment and accountability? It is anticipated that the proposed study described within will be able to answer these questions.

In the original studies, on average teachers answered approximately 23 of the 35 items correctly and demonstrated the highest performances in Standard 3: Administering, Scoring, and Interpreting Test Results. Their lowest performance was seen on Standard 6: Communicating Test Results to Students, Parents, other Lay Audiences, and other Educators. Given the additional requirements expected of teachers, it is anticipated that improvement in all areas will be demonstrated as well as in their overall performance as measured by the 35-item questionnaire.

It is important to note that the results of this study will be designed to stand on their own merit and it is anticipated that they will serve as comparison data to the original studies.

Resources Referenced and Consulted:


Submission #710

1. **Title** - “Fine Arts and Physical Education Need Higher Order Thinking Too!”

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**Abstract:**

We need to do more than just ensure that the fine arts and physical education maintain funding. We need to create environments where students are thinking critically. Physical education and the fine arts are excellent sources of schemata for facilitating thinking. However, to have transfer of learning to another context in order to achieve higher order thinking, there needs to be explicit teaching.

Higher order thinking in the arts and physical education is vital in order to create independent, successful learners who can identify, understand, decide, and act upon external and internal sources of feedback (Lodewyk, K. 2009). In contrast, if students are not prompted to think critically on their own, they may become more dependent on the teacher for direction, information, and emotional support.

Research suggest that if teachers persistently practice higher order thinking strategies, there is a good chance for a consequent development of critical thinking capabilities in our students (Miri, B, David, B, Uri, Z, 2007).

The objective of this presentation is to: (1) show how teachers can facilitate critical thinking by removing themselves from being the controller to the facilitator, (2) how to move from traditional direct instruction to a less traditional indirect instruction, (3) how to use questioning to present unique challenges to the student, (4) how to have students analyze patterns, draw conclusions, provide rationalizations, and support conclusions, (5) show attendees how to rethink how the learning environment is structured.
21st Century Student use of Space in 20th Century Classrooms.

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“This classroom is just like those my father sat in! They tell us to teach 21st century skills but the space we teach in is rooted in the past.”

Helm, et al., 2010, p. 66

Background:
New goals for education require new opportunities to learn and yet 2011 classrooms look much the same as they did in 1911. Changes in education have focused on adults with little consideration of classroom space and its influence on youngsters learning. Times are changing. “…the old classroom layout of four lines of desks facing the teacher is falling by the wayside” (Horowitz-Bennett, 2006, p. 48). Teacher-centered models featured desks in rows and focused on process. “Traditional teaching/learning models are related to a more vertical classroom layout” (Betoret & Artiga, 2004, p. 355). New models of classroom organization focus on openness and flexibility. “Teachers using a student-centered approach prefer to organize classrooms in a horizontal manner. In this format the workload is shifted to the learner: students are asked to think on an analytical or application level (Betoret & Artiga, 2004).

The focus is no longer on teaching but on student learning. When students learn in different ways, they experience time and space in different ways. When students can manage efficiently and effectively their own learning the teacher can become a guide.

Recent interest in classrooms has focused on reorganizing existing classrooms to address the needs of today’s curriculum and students (Kelly, 2007). Simons and Masschelein (2008) recommend that teachers, “open up spaces in the present in order to think otherwise about pedagogy – beyond the current ideas on instruction in learning environments” (p. 688). Changing the structure of the classroom makes a switch in pedagogy possible.

Teachers in a rural school district have experienced the dramatic changes that can occur when classrooms are designed to focus on student learning.

Purpose:
To discover the effect of planned classroom space on: (1) student achievement, (2) teacher behavior, and (3) students use of space.

Note: The results presented here represent nine years of study.
Theory:

Harlen (1997) identified positive things that happen when classrooms are thoughtfully planned: organization leads to effective practice; teachers can plan their time use; it is easier to establish classroom routines and systems; and a manageable number of teaching groups can be maintained. Her ideas are in line with Getzels and Guba who view space and time as conceptually independent but phenomenally interactive (Alcorn, 2006).

Space is an important factor for both the student and the teacher. “It is difficult, if not impossible, to separate instructional activity from the physical environmental setting within which it occurs” (Lackney & Jacobs, 2002, p. 1). The physical environmental may impede the effectiveness of instruction (Browne-Ferrigno, et al., 2006; Chan et al., 2009). Classrooms remain unchanged despite changes in standards, new curricula, and required new patterns of teaching. “As a result, the program and the setting in which that program takes place are often in conflict with each other hindering both teaching and learning” (Lackney & Jacobs, 2002, p. 4). The allocation of space is a major ingredient for improving teaching and learning (ASCD, 2007).

According to Ouchi (2004), “Structure must change before culture can change” (p. 18). Altering the collection of moveable classroom furniture is necessary to allow student-centered activities to happen. “All furniture should be actively used for some part of each day” (Clayton, 2001, p. 46). Furniture not used on a daily basis should be removed. Less furniture means more space. In a spacious setting, students assume an increased amount of responsibility for their own learning.

Research Design:

A mixture of semi-experimental and case study approaches were used to gather information. A semi-experimental design involved qualitative and quantitative analyses of classroom space and quantitative analyses of student test outcomes.

A case study format was appropriate because the researcher had little control over events in the classroom. This approach required observation in a field setting with a minimum of contrivance. The researcher focused on a contemporary situation for teachers within a real-life context. This was a purposeful study of functioning classrooms (Yin, 2003). A descriptive, cross-sectional, non-experimental research design was used (Johnson, 2001, Type 2).

Participants:

Five classrooms (grade 4) in two rural, elementary schools 70 miles north of New York City were studied to determine the effect of open space on student achievement in science. The remaining studies focused on six classrooms (four in grade 3, two in grade 4) in one of the schools. Classroom observations were scheduled at times mutually acceptable to the classroom teacher and the researcher.

Practice:

Two teachers, Joan (grade 3) and Jim (grade 4) (pseudonyms), volunteered their classrooms as demonstration sites to show how rooms could be planned around space to benefit students. Both teachers moved to a different classroom but are taking their students to the next
grade level. The researcher worked with the teachers to organize their classrooms during the summer. The researcher visited the classrooms for four days staggered throughout the school year. This approach required observation in a field setting with a minimum of contrivance. The measures were unobtrusive so as not to involve or disrupt interaction between researcher and subjects. This follows Stake (1995) who suggested that there was a need to evaluate the functioning of an uncluttered classroom.

Joan and Jim both inherited classrooms that had been occupied by teachers that retired following long careers. Twenty-plus years of collected materials were left behind. The researcher guided Joan and Jim using some tested ideas. To create functional rooms, we identified key factors in room arrangement by focusing on needs rather than organizational convenience: material management, ability to move around the room, and flexibility of layout to meet future needs (Design Council, 2009; Neilson, 2004). The goal was to empower Joan and Jim to learn about, and alter their classrooms to match their particular curriculum and teaching style.

Understanding that all physical design solutions must be owned by their users, all final decisions were left to Joan and Jim: different users have different needs (Higgins, et al., 2005). Joan and Jim were guided using four lines of thought.

**Guideline #1:** Reduce the amount of classroom material.

Classrooms are material intensive spaces but they do not have to be a rummage room. We encouraged Joan and Jim to weed out non-used materials: anything that was not used in the past year. If needed, most curriculum items can be located in readily available websites.

**Guideline #2:** Identify areas needed for instruction and activities.

The first consideration was planning where space was needed. Joan and Jim were asked several questions: “Where do you normally position yourself for direct instruction? Where do you plan to have a large gathering area? Where can students work alone or in groups of 2-4?” Research addresses the importance of these areas. Working in groups gives youngsters the opportunity to express ideas that are valued by the group (Harlen, 2000). There is a need to create separate specialist areas within the bigger space: study bays, work centers, places for group work, displays and learning centers (Nielson, 2004). Classrooms need some degree of flexibility because different room arrangements serve a variety of needs: collaborative teaching, experiential activities, personal learning, cooperative learning, project-based learning, working in different size groups, and multiple activities taking place at one time (Higgins, et al., 2005; Locker, 2007). Micro-environments, created with visual differences, offer choices to inquisitive youngsters. Subtle changes in the room can accommodate other teaching methods: storytelling, projects, teacher-student communication, collaboration, discussion, student performances, special events, hands-on experiments/experiences, and shared learning. Many spaces need to serve a dual purpose (BCSE, 2007). The taught curriculum and the teacher’s personal teaching style heavily influence the size and position of these spaces. Space needs to be protected before it is buried under furniture.

**Guideline #3:** Plan pathways to connect areas for instruction and activities.

Colbert (1997) noted that classrooms must be organized for optimal operation. Wide pathways where two people can walk past each other without touching should connect the instruction/activity areas of the room. This usually means there should be a major access pathway along a chalkboard normally at the front of or on one side of the room. Secondary
pathways should run perpendicularly to activity centers (Duncanson, 2003c). With proper pathways to activities children manage on their own.

**Guideline #4:** Arrange needed furniture.

Only furniture that is used at least every other day to support instruction should be incorporated into the classroom. Too much furniture crowds students together and creates safety hazards (Clayton, 2001). Planning where to place the furniture is easy: it goes in space between the pathways and avoids the gathering spaces. Beyond a place for each student to sit at a table or desk, teachers should endeavor to include less than 15 other pieces of furniture: that includes the wastepaper basket, and technology equipment. Doing so preserves space for student use. When teachers include over 30 pieces of furniture, boxes, and bins, the room becomes overcrowded (Duncanson, 2003b).

To address the premise that classrooms must change, the principal at the Indian Lake Elementary School (pseudonym) introduced teachers to the issue and invited teachers to volunteer to change their presentations to address the challenge. The principal introduced the “Daily Five” program to teachers and suggested they consider using blocks of time for language arts instruction and practice. The “Daily Five” program promotes a daily structure of five one-half hour blocks of time dedicated to five language arts activities (Boushey & Moser, 2006; Online Classroom, 2010). These include: (1) read to self, (2) read to someone, (3) listen to reading, (4) work with words, and (5) work on writing. Teachers are encouraged to move from busy work to centers to workshop to daily five: move from busy work to a high level of challenge. These steps encourage student independence, self direction, and personal responsibility (Boushey & Moser, 2006). In practice, teachers in many schools find dedicating five half hour blocks of time impossible to do: it takes too much time from their regular schedule. Teachers used the idea of students rotating stations in a shorter time frame.

**Data Collections:**

Test scores from the New York State Science Performance Evaluation Test were obtained through the building principals. During classroom observations, the researcher drew student migration maps (the major data collection instrument) to show where students actually worked in the classroom and the pathways they used. Activities students were engaged in at the time of observation were recorded as were the teacher’s activities.

**Findings:**

The effect of creating a classroom planned around space.

Reorganizing my classroom to create space has affected how I use time. I spend more time on lessons when I spend less time on reorganizing my work space. My students are the winners.

Sarah Holloway
Winner of Extreme Classroom Makeover
Jefferson County, Alabama
Personal communication, Sept. 19, 2008
Guideline #1: Reduce the amount of classroom material.
Joan and Jim discarded over 90% of the materials left to them by the previous occupants of the rooms. This included dried up ditto masters, outdated texts, broken equipment, and magazines from the 1980’s. As suggested by Anthes (2000), posters obscuring the windows were removed to reveal the garden outside of Joan’s room and an expansive grassy area outside Jim’s classroom. Space gained by discarding materials was used for displaying materials students used. Learning centers appeared where none had existed before.

Guideline #2: Identify areas needed for instruction and activities.
Joan and Jim talk about how they teach and their desire to create different size spaces for large groups, small groups, and individuals in meeting areas. A mental map is made of where those locations could exist.

Guideline #3: Plan pathways to connect areas for instruction and activities.
Having identified gathering areas for the students, it becomes obvious where pathways must exist.

Guideline #4: Arrange needed furniture.
Joan and Jim were asked if they use their teacher’s desk. Similar to answers from many teachers, they reported they only use the desk before and after regular school hours. During the day the desk area becomes a place to pile paper (Flat Surface Syndrome). They spend time after school using a table to spread out and plan for the next day. It is suggested they place their desk in storage. Both teachers agree to remove the teacher’s desk from the room along with six other pieces of furniture that were used to hold materials they have now discarded. Jim was glad to get rid of his teacher’s desk. “Now I can’t let things go. I am forced to finish things that day. The increase in my organization has been a good thing. The room is neater, I have less housekeeping. I have less work. It’s wonderful.” As suggested by Lushington (2008), when the new classroom arrangement was in place, the teachers were asked to sit on the floor to view the area as kids see it.

The effect of space on teacher behavior.

Teachers used newly acquired time to move away from publisher-produced, often low level activities, to create open-ended, high-level thinking activities that challenged students. Joan reported: “Kids have a greater number of options and the freedom to try things on their own. The students experience less frustration. When students use centers they can be at a table, on the floor, or in the hall. That means that centers don’t need to take up a lot of space: they can be on a shelf. Space gives you options. Six students can use a part of the room for extra help on one subject while pairs of students or small groups of students are working elsewhere. The three big open areas in the room help to make that happen. I can use the different spaces in different ways.
Time was used in new ways. The teachers didn’t worry about definite slots of time for teaching. Class was not run on the clock. Kids were dealt with on an individual basis to meet their needs. Benefits of increased space, time and student-centered teaching went directly to the pupils.

The effect of space on student achievement in science.

The science skills of classifying, manipulating materials, measuring, making non-standard measurements, recording data, and questioning are positively correlated to student density. Collectively, when these six skills are compared to the square feet of space per student, there is a Pearson correlation coefficient of +.881 that was significant at the .048 level (2-tailed) \( r = +.881, p = .048 \). This is a high positive correlation (Hinkle, Wiersma & Jurs, 1998). This means that in classrooms that have greater amounts of open space per student, on average, students scores are higher on six science skills. An increase of one square foot of empty space per student should result in an increase of .9 points in the student score on the grade-4 science Performance Evaluation Test.

The effect of space on the New York State English Language Arts (ELA) Assessment if grade-4.

The NYS ELA assessment is administered in January of each school year. The assessment consists of multiple choice questions and short, written responses. The test is aligned to three learning standards:

- Language for information and understanding,
- Language for literary response and expression, and
- Language for critical analysis and evaluation.

The exams given in grade-3 and grade-4 use different questions but address the same standards. The number of questions on the test varies each year.

An analysis of the exam was conducted to examine student success on each standard. Jim’s students scored below the school average on all three standards in 2008. In 2009, Jim’s students scored below the school average on standard #2 but above the school average on standards #1 and #3. The improvement on standard #1 was not significant. However, a t-test comparing the results from 2008 and 2009 on standard #3 displayed positive results: \( t = -2.303; \) \( df = 38; \) Sig (2-tailed) = .027. This shows a substantial improvement in test results for standard #3:

Students will listen, speak, read, and write for critical analysis and evaluation. As Listeners and readers, students will analyze experiences, ideas, information, and issues presented by others using a variety of established criteria. As speakers and writers, they will use oral and written language that follows the accepted conventions of the English language to present, from a variety of perspectives, their opinions and judgments on experiences, ideas, information and issues.
“Sitting regimented at desks according to predetermined, fixed schedules is no way to treat a primate capable of running up to 100 miles in one day.” Hall, 1976, p. 179

On an alternating day basis, teachers used a 60 to 80 minute block of time with three, four, or five stations. Teachers divided the class into three to five groups of students and allotted a block of time ranging from 12 to 20 minutes for students to work on an assignment. Teachers called this segment of the day the daily five, rotations, or station work. Stations were used for art, science, social studies, and mathematics in addition to literacy activities.

When students had choices of where to work on an assigned activity, they selected a work space based on three decisions.

First students decided if they needed a solid surface on which to work: a desk, table, clip board, or a hard space on the floor. Students had their own preference of where to work when the activity required writing (e.g. working with words, journal writing, story writing, mathematics practice, workbook exercises, playing board games, and working on projects). Manipulatives for mathematics and science that did not roll were effectively used when placed on a desk/table. Rolling objects (e.g. materials for a balls and ramps activity) worked well on the floor.

Students’ second decision addressed their need for physical comfort in a sitting position: soft chairs, sofas, pillows placed on the floor, a rug, and on the floor near a wall were common destinations. Reading to self and reading to a partner worked well in these locations.

A third decision focused on a need for autonomy – a position where they would be as far away as possible from people who were talking. Corners of the room were a prime work location. Pairs of students reading to each other, using flash cards, or math manipulatives, moved to corners of the room not being used by a teacher. Groups of students engaged in conversation moved as far apart from each other as space permitted. When partners reading to each other went to the outside of the room, silent workers positioned themselves equal distances from each other and conversing groups. Individual readers sometimes sat next to each other if they were reading the same book. When students working on projects needed tables, silent workers moved to the margins of the room.

Students developed territorial boundaries (Knowles, 1973). The position of students in the room occupied in different activities formed semi-regular tessellated patterns (Math Forum, 2010). Boundaries could be drawn on classroom maps around individuals or groups; the patterns consisted of regular polygons of different sizes.

Student choice of learning space was hindered by room design. Architecture of the room controlled where some activities took place, thus eliminating student choice. Built in electrical outlets, computer connections, and plumbing dictated where some activities were held. Computer stations and listening centers are normally located along a wall; their position being dictated by connections to hard wiring. Art and science activities that required water are situated close to a sink.
Implications:

“One place to start observing classrooms is to consider space, space use, and the environment or context of the teaching-learning process.”
Achilles, 1999, p. 36-37

The classroom is an appropriate level to observe and evaluate education. Giving teachers permission for removing unused materials, planning instructional space and pathways, and for removing excess furniture revealed space that expanded the number of teaching options. This “found” space contributed to a high level of organization: needed materials became readily available to teachers and students.

Planning space before the placement of furniture expanded the number of teaching strategies used on a regular basis. Teachers must take the initiative to arrange students’ desks in new patterns because students will not do it. Useable space will translate into additional time for instruction and teacher-student interaction. Reorganizing the classroom can be achieved at no cost.

The results of this research suggest a new level of planning for teachers. Teachers can plan the nature of the “daily five” stations so they require a variety of work and comfort locations. The location of work centers needs to be based on voice levels. Five groups of four students will make more noise than 20 students working independently.

There is a need to plan the physical layout of classroom furniture carefully due to its influence on space and student preference when choosing a place to learn. Classrooms with maximum open space, clear pathways, soft areas, space by the walls and windows, provide students with ample opportunities to self-select learning spaces that meet their needs (Duncanson, 2003a). Decisions about classroom organization must be made by individual teachers and their students in the context of pedagogy, task demands, constraints of architecture, furniture, and logistics (Craig, 2009).

The teacher and the learners should spread out and use the entire room. Effective room arrangements provide clear pathways so students can move freely to needed materials so as not to disturb others when working on a project: students will honor personal space with respect to communication distance. Teachers can watch where students position themselves and then follow their lead.

Teachers can change what happens in school. Constructive steps that restructure classrooms and remove obstacles to learning can be implemented (Kelly, 2007). Classrooms do not need to look like the one your father sat in.

The center for school improvement resides in the classroom.

References:


The Economic Impact of American Collegiate Football: A Case Study

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Abstract

The purpose of this study was to examine the direct economic impact of an American collegiate football program at a mid-major conference University. Data was collected using a random interview sampling method. Volunteers collected the data during various games over the course of the season. It was decided to utilize the Money Generation Model 2 (MGM2) short form in estimating the direct and total economic effects of visits to the collegiate football games. The MGM2 model was developed by Ken Hornback, Daniel Stynes, and Dennis Propst at Michigan State University in the United States. A full detailed explanation and free downloads of the program can be retrieved from the following web address; http://web4.canr.msu.edu/MGM2/. The developers of the program (Stynes et. Al. 2000) view the economic impact equation as “Economic impacts = Number of Visitors * Average spending per visitor * Economic multiplier.” (p.4). Multipliers utilized within the software program were developed using several recognized sources. Those sources include the Regional Input-Output Modeling System II (RIMS II) and the IMPLAN input-output model (Loomis & Walsh, 1997). Tables and figures are presented that outline the direct economic impact on the surrounding community.
The Effect of Leadership Styles on Health of Organizational Culture

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Abstract

The purpose of this study was to examine the relationship between park and recreation directors’ leadership styles and the organizational culture that exists in the organizations they lead. The Multifactor Leadership Questionnaire 5X (Avolio & Bass, 2004) was used to determine the leadership styles of the directors and the Culture Triage Survey (Phillips & Wagner, 2002) was used to assess the health of the organizational culture. Departments were asked to participate in the study based upon information garnered from the Kentucky Recreation and Park Services Study (2007-2009). Surveys were mailed to 479 potential respondents and 134 were returned (28%).

A bimodal method of data collection was used to administer the survey to employees of participating park and recreation departments. The culture variables examined in this study (professional collaboration, affiliative collegiality, and efficacy) were found to be significantly related to the transformational leadership behaviors of individualized consideration, intellectual stimulation, and attributed idealized influence. These culture variables were also found to be significantly related to the transactional leadership behaviors of contingent reward and active management by exception as well as the passive-avoidant leadership behaviors of lassiez-faire and passive management by exception.
Teacher Instruction and Behavior and Young Children’s Prosocial Actions

Poster Presentation Proposal

Identifying experiences in early education that can help children learn to share, cooperate, and help others may have implications for understanding pathways to adaptive development. Children’s active engagement in prosocial behavior—voluntary actions intended to benefit another (Eisenberg & Fabes, 1998)—associates with aspects of healthy growth and development, specifically empathy (Roberts & Strayer, 1996), antisocial impulse regulation, academic achievement (Caprara et al., 2000), self confidence (Larrieu & Mussen, 1986), supportive relationships (Sebanc, 2003), and prosocial engagement in early adulthood (Eisenberg et al., 1999).

Research suggests effective strategies are needed for guiding children toward prosocial behaviors. Teachers report many students arrive at school without necessary social skills to get along with one another or work together (Rimm-Kaufmann et al., 2000). Of further concern, children from lower-income homes lag behind in socioemotional skills when compared to more affluent peers (Child Trends, 2003).

This study examined whether specific teacher instructional practices and emotional support in early education are associated with children’s prosocial behavior. Indices of teacher instruction and behavior including verbal encouragement of prosocial behavior and empathy, positive behavioral management, encouragement of expressive language, vocabulary instruction, and emotional warmth were explored in relation to prosocial behavior. Our à priori expectation was that children might need more deliberate encouragement of their prosocial behavior in a context; therefore, teachers’ verbal
encouragement of prosocial behavior and empathy was expected to most strongly relate to prosocial action in the classroom. We also examined whether emotional warmth of teachers influences the association of teacher verbal encouragement of prosocial and empathic responses and children’s prosocial behavior.

This study relies mainly on observational data collected on 2,098 children from 124 first-grade classrooms located in 39 schools serving predominantly lower-income families. Principal components analyses indicated the scales of Teacher Encouragement of Prosocial Behavior and Empathy, Positive Behavioral Management, Encouragement of Expressive Language, Vocabulary Instruction, Emotional Warmth, and Children’s Prosocial Behavior respectively had a Cronbach’s alpha of .71, .74, .79, .66, .80, and .73 and a mean percentage observed agreement of 87%, 82.1%, 83.1%, 71.43%, 79.9%, and 78.6%. Linear multiple regression analyses were conducted. Covariates of teacher level of education, years of teaching experience, and classroom size were included in analyses. Preliminary hierarchical linear modeling analysis revealed no between school-variance (ICC = .00); therefore, multi-level modeling was not conducted.

Results indicated teachers’ verbal encouragement of prosocial behavior and empathy most strongly associated with classroom prosocial behavior. A significant association also was found between encouragement of expressive language and prosocial behavior. Positive behavioral management, vocabulary instruction, emotional warmth, and the joint effect of teacher emotional warmth and encouragement of prosocial behavior and empathy did not associate with prosocial behavior. See Tables 1 and 2.

Findings suggest prosocial behavior may be supported by teachers’ deliberate encouragement of prosocial behavior and empathy and their creation of a positive, interactive social environment. This study extends prior research by examining a network of teacher instructional factors that may associate with children’s prosocial behavior; it also suggests the associations that warrant future experimental study for causality.
Table 1

*Examing the Aspects of Teacher Behavior and Instructional Emphasis that Associate with Classroom Prosocial Behavior (n = 124 classrooms)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>b</th>
<th>SE b</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.62</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Foster prosociability and empathy</td>
<td>.25</td>
<td>.06</td>
<td>.42**</td>
</tr>
<tr>
<td>Emotional warmth</td>
<td>-.02</td>
<td>.04</td>
<td>-.07</td>
</tr>
<tr>
<td>Behavioral management</td>
<td>-.05</td>
<td>.05</td>
<td>-.10</td>
</tr>
<tr>
<td>Encourage expressive language</td>
<td>.07</td>
<td>.04</td>
<td>.22*</td>
</tr>
<tr>
<td>Build vocabulary</td>
<td>.10</td>
<td>.06</td>
<td>.14</td>
</tr>
<tr>
<td>Teacher education</td>
<td>-.01</td>
<td>.17</td>
<td>-.01</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>-.01</td>
<td>.01</td>
<td>-.08</td>
</tr>
<tr>
<td>Class size</td>
<td>.03</td>
<td>.04</td>
<td>.08</td>
</tr>
</tbody>
</table>

*Note. R² = .34. *p < .05, **p < .01.*
Table 2  
*Examining the Interaction Effect of Emotional Warmth and Encouragement of Prosocial Behavior and Empathy on Classroom Prosocial Behavior (n = 124 classrooms)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>b</th>
<th>SE b</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.08</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Foster prosociability and empathy</td>
<td>.35</td>
<td>.05</td>
<td>.59**</td>
</tr>
<tr>
<td>Emotional warmth</td>
<td>-.01</td>
<td>.03</td>
<td>-.02</td>
</tr>
<tr>
<td>Emotional warmth X Foster prosociability and empathy</td>
<td>-.04</td>
<td>.02</td>
<td>-.08</td>
</tr>
<tr>
<td>Teacher education</td>
<td>-.07</td>
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<tr>
<td>Class size</td>
<td>.02</td>
<td>.04</td>
<td>.04</td>
</tr>
</tbody>
</table>

Note. \( R^2 = .31. \) \*\( p < .05, \) \**\( p < .01. \) For the interaction term, variables were mean centered prior to computing the crossproduct. The beta with the superscript indicates that the interaction effect was almost significant \((p = .06).\)
Abstract for Hawaii International Conference on Education Proceedings

Submission ID: 728 (poster)

Title: Creating a Community Advisory Board to Enhance Your Educational Program

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Abstract:

Quality programs in all areas of higher education need to continually look for ways to improve and update curriculum; creating a collaborative dialogue between those in higher education and those in public sector is one such way (Dorazio, 1996). Collaboration using an advisory board comprised of those in the field of a particular profession, students, administrators, and community members is an opportunity to develop cohesive program preparation goals. For instance, in the field of teacher education, a recent NCATE initiative proposed that to ensure teacher education is relevant to classrooms of the 21st century it is necessary that teacher education programs close the gap between theory and practice, coursework and classroom, preparation and induction (NCATE, 2009).

The focus of this poster session is to provide stakeholders with specific information on how to create, implement, manage, sustain, and be an effective member of an advisory board. There are numerous benefits of such collaboration with an advisory -- the least of which is an alliance of collaborative leaders with the common goal for long-term community support and changes in college curricula and public policy advocating for our profession as educators.

Professional development activities by inservice and preservice teachers are essential for enhancement and enrichment. Schools often provide one-size-fits-all professional development without consideration to the specific needs of instructional situations. This is particularly evident in reference to music teachers. The challenges faced by music teachers are unique, frequently leading to feeling of isolated in their school. Isolation is a common factor in music teaching that is seldom addressed in professional development activities.

This article focuses on experiences of music teachers in their second year of teaching. To provide support for music teachers in their first four years, Kansas State University Department of Music provides on-campus and on-site professional development workshops and offers video conference feedback of classroom instruction. Feedback from teachers involved exposed feelings of isolation in their first year of teaching. Although having been provided with peer mentors, but no one received feedback relevant to particular challenges augmenting a feeling of isolation: “I have a fantastic administration and supportive mentors, but their feedback wasn’t sufficient to help me become a better music teacher.” The nature of the music instruction demands a unique approach to professional development.
Professional Development through Video Conference

Music teachers often need help with discipline-specific concerns and problems. The needs of young music teachers can be addressed through the use of video conference technology. It is not complicated to set up a video conference for observation. Needed at both sites are:

- High-speed internet connection, preferably through Ethernet.
- Permissions granted in the school’s firewall for video conference.
- A computer with digital camera, often built into a laptop.
- A video conference program such as iChat, Skype, Yahoo, or other freeware.

Once connected, the professional development mentor observes instruction with the intention of providing supportive feedback to help the novice teacher through challenging situations or to provide guidance for instructional enhancement. The mentor interacts with the teacher via the computer and video conference technology providing feedback relative to the observations.

Consultation, coaching, mentoring, reflective supervision, and technical assistance are among the variety of ways the video technology can be used to provide external feedback and discussion. Professional development can have a profound impact for music teachers when it is applied in concurrence with the act of teaching.
Professional Development through Video Conference Ensemble Clinics

One of the goals of professional development is enhanced impact on student learning. A vehicle often used by music teachers to learn to become better teachers while improving student learning is ensemble clinics. In a traditional clinic setting, the teacher observes a clinician working with the ensemble.

In a clinic performed through video conference, the teacher does not remove him/herself from the ensemble to observe but is directly involved. The clinician interactively provides instructional feedback to the students while the classroom teacher experiences the strategies offered by directing the ensemble. “This was one of the most efficient clinics that I had ever done because the director is able to communicate with the students more effectively than I could due to his relationship with them.

We used Apple MacBooks with a built-in camera and iChat for the video conference. The students viewed the clinician on a large screen at the front of the room while the clinician interacted through a computer in the technology lab at the university. The technology did not appear to hinder the clinic situation for students, clinician, or teacher. Students were clearly involved throughout the clinic experience and teachers were pleased with the amount and quality of student learning. The teachers also found the student reactions reassuring and confirming of their own instruction: “During the clinic when the students heard comments that were the same as they had heard from me in former rehearsals, they
looked at me nodding that they recognized what they were being told. This was good for me as a young conductor affirming that I was hearing and addressing the same things.”

New teachers not only need to identify areas of improvement, but also need confirmation of successful teaching. Direct interaction with instruction is one area where traditional forms of professional development appear to be lacking.

A traditional ensemble clinic has a focus on performance improvement, but video conference creates a professional development environment equally as instructional for the teacher: “As I watched my students during the clinic, I recognized that I was learning new things too. I would listen to what the clinician was suggesting, then feel the difference as I conducted the new way.” Because the director is actively involved in the clinic, the experience is an effective method of professional development for the teacher.

Perhaps the greatest technical challenge to overcome when using video conference with an ensemble is enhancing the sound quality for transmission over the internet. The small microphones on the laptops are sufficient for speaking but hinder the high and low frequencies of a musical ensemble. After experiencing this challenge during our first video conference clinic, the teacher used microphones that were available at the school, strategically placed them in the room, and mixed the sound with a small audio mixer. The signal was inserted through the mic jack on the laptop. The other problem that may occur is in the amplification of the clinician in the rehearsal room. It is essential to place the speakers in such a way as not to create feedback.
By taking advantage of video conference and other similar technologies, music teachers can address professional isolation with peer mentoring, feedback from teaching observations, and online face-to-face discussion of specialized challenge. This technology can also open doors to enhanced educational experiences including virtual discussion composers, sharing performances among schools, and online master classes for individuals or groups of students.


Examine the *educative curriculum materials* component in the first year of a three-year school-wide professional development model to enriching teacher mathematical and pedagogical content knowledge.

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Melfried Olson  
University of Hawai‘i at Mānoa

INTRODUCTION

This paper describes one component from the first year of a three-year school-wide professional development project1 to challenge teachers to deepen their understanding of content, teaching, and learning of elementary mathematics in grades K to 5.

Kapālama Elementary School (KES) is the third largest elementary school in the Honolulu District. The school community is multi-ethnic and a substantial number of its students come from outside the school’s normal attendance area. Demographic data related to KES is in Table 1. Of the 630 students enrolled in the 2007-2008 school year, 53% received free or reduced-cost lunch and 16.3% exhibited limited English proficiency. The percentage of families with children headed by a single mother, 26.4%, exceeded the state average of 18.3%; the average family size, 4.2, exceeded the state average of 3.42; the percent of households with public assistance income, 17.1%, was over twice the state average of 7.6%; the percent of families with children living in poverty, 22.8%, was double the state average of 11.2%; the median household income, $44,822, was less than the state average of $49,820; the percent of college graduates in the community, 12.3% was half of the state average of 26.2%, while the percent with less than a high school education, 31.3%, was double the state average of 15.4%. These data give a picture of conditions that identifies KES as a high-needs school.

Table 1  
*Kapālama Elementary School Demographic Data*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>School Average</th>
<th>State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free or reduced-cost lunch</td>
<td>53%</td>
<td>---</td>
</tr>
<tr>
<td>Limited English proficiency</td>
<td>16.3%</td>
<td>---</td>
</tr>
<tr>
<td>Families headed by single mother</td>
<td>26.4%</td>
<td>18.3%</td>
</tr>
<tr>
<td>Average family size</td>
<td>4.2</td>
<td>3.42</td>
</tr>
<tr>
<td>Households on public assistance</td>
<td>17.1%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Families with children living in poverty</td>
<td>22.8%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$44,822</td>
<td>$49,820</td>
</tr>
<tr>
<td>College graduates in the community</td>
<td>12.3%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Less than high school graduate</td>
<td>31.3%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

1 The research reported in this paper was generated through the grant KARES: Kapālama Algebra Readiness Project in the Elementary School funded by the Hawai‘i Department of Education Mathematics and Science Partnership Program with money from the United States Department of Education. The views expressed in this paper are the views of the authors and do not necessarily represent the views of the funding agency.
To address needs identified by Kapālama teachers, project KARES: Kapālama Algebra Readiness Project in the Elementary School, a professional development project designed to promote deeper student understanding by improving teachers’ content understanding and instructional strategies, was developed. The project is funded through a Mathematics and Science Partnership grant awarded by the Hawai‘i Department of Education from the U.S. Department of Education for the period 2009 through 2012. The goals and objectives of KARES are to:

1. have teachers develop a deep understanding of elementary mathematical content;
2. increase teachers’ use of strategies that include problem solving, reasoning, and communication;
3. create, use, and evaluate educative curriculum materials that strengthen teacher and student mathematics content knowledge;
4. develop a professional teaching community in an environment where teaching is reflective and public;
5. as an end goal, use lesson study where teachers plan and teach lessons designed to focus on student thinking and learning; and
6. attend to the adaptation and coordination of curriculum materials and sequencing related to the new series adopted at Kapālama.

KARES supports the culture of Rigor, Relevance, and Relationships already started at Kapālama Elementary, including incorporating the National Council of Teachers of Mathematics (NCTM) process standards (NCTM, 2000) and constructive response questions into instruction. KARES focus on algebraic reasoning and thinking, where justification is based on evidence and reasoning meshes a cohesive network of ideas through the grade levels. The focus on communication, both written and verbal, reinforces learning through collaboration and reflection as well as makes connections with and supports components of the Kapālama’s Language Arts Standards.

Year 1 included four school-wide professional collaboration days for KARES professional development sessions as well as three articulation weeks during which each grade level was allotted time to reflect on and plan their mathematics instruction. An eight-day intensive summer seminar in which teachers generated educative curriculum materials (ECM) and a five-day summer professional development institute that daily featured observing a class of children and examining their work rounded out the year’s KARES experience at Kapālama Elementary. This paper focuses on the process used in the professional development related to teachers’ work on the ECM.

WHY EDUCATIVE CURRICULUM MATERIALS

Curriculum materials for Grades K through 12 intended to promote teacher learning in addition to student learning are referred to as educative curriculum materials (Davis & Krajcik, 2005). The characteristics of teachers’ mathematical knowledge has been shown to make a difference in the effectiveness of their teaching and the way they hold this knowledge affects their ability to use it in teaching (Hill et al., 2007). As researchers and teachers learn more about content knowledge for teaching and how dispositions toward unpacking mathematics develop among teachers, changes may need to occur in curriculum design, teacher preparation, and in-
service professional development to appropriately prepare teachers with the kinds of mathematical knowledge necessary for teaching. Thus, it is necessary to characterize and articulate the nature of content knowledge for teaching and understand how teachers develop this knowledge.

Teacher learning involves developing and integrating one’s knowledge base about content, teaching, and learning; becoming able to apply that knowledge in real time to make instructional decisions; participating in the discourse of teaching; and becoming acculturated into and engaging in a range of teacher practices. Teacher learning is situated in teaching practice including classroom instruction, planning, lesson modification, assessment, and collaboration with colleagues.

The ECM created must be accurate, complete, and coherent in terms of content; and effective in terms of pedagogy with good representations of content, a clear purpose for learning it, and multiple opportunities for students to explain their ideas. It is felt that these materials can help teachers:

- learn how to anticipate and interpret what learners may think about or do in response to instructional activities;
- support learning of subject matter, add new ideas to repertoires, develop knowledge base;
- consider ways to relate units during the year;
- make pedagogical judgments visible;
- explicate the ideas underlying the tasks rather than merely guiding actions (i.e. making rationales for decisions visible moves beyond adding new ideas to help teachers integrate their knowledge base and make connections between theory and practice); and
- promote pedagogical design capacity (i.e. the ability to use personal resources and supports embedded in curriculum materials to adapt curriculum to achieve productive instructional ends).

THE DEVELOPMENT PROCESS

Eighteen Kapalama Elementary teachers met with KARES staff members to work on educative curriculum materials for eight days in the summer of 2010. The participants included two teachers for Grade 1, five teachers for Grade 2, two teachers for Grade 3, four teachers for Grade 4, and four teachers for Grade 5. The school’s mathematics curriculum coordinator also participated.

To guide the development of materials, the following Nine Design Heuristics for Educative Mathematics Curriculum Materials, adapted from Davis & Krajcik, (2005) were distributed and discussed. These heuristics relate to methods that encourage learners (teachers, in this case) to discover solutions for themselves. These heuristics are focused, intentional, and adaptive and provide a valuable foundation for our work. The heuristics are divided into three categories: Teacher Content Knowledge, Pedagogical Content Knowledge, and Mathematics Content Knowledge.
Design Heuristics for Teacher Content Knowledge

Design Heuristic 1: Supporting teachers in engaging students with important mathematical topics at an appropriate level through meaningful tasks:

Curriculum materials should provide teachers with productive tasks that make the mathematics accessible to students as well as rationales for why these activities are mathematically and pedagogically appropriate.

Curriculum materials should help teachers adapt and use these experiences with their students, for example by making recommendations about which tasks are most important and which can be structured for students to conduct themselves and which might be more successful as demonstrations. Curriculum materials should suggest and help teachers think about productive sequences for activities.

Design Heuristic 2: Supporting teachers in using multiple representations of the mathematics:

Curriculum materials should provide appropriate instructional representations of mathematics (e.g., tables, graphs, models, diagrams) and support teachers in adapting and using those representations, for example by noting areas that could potentially lead to inaccuracies with regard to the mathematics content. Curriculum materials should be explicit about why a particular instructional representation is mathematically and pedagogically appropriate and what misunderstandings ideas it might promote if used improperly. The curriculum materials should help teachers determine the most salient features of an instructional representation.

Design Heuristic 3: Supporting teachers in anticipating, understanding, and dealing with students’ ideas about mathematics:

Curriculum materials should help teachers recognize the importance of students’ ideas and help teachers identify likely student ideas within a topic. Curriculum materials should help teachers gain insight into how they might be able to deal with the ideas in their teaching, for example by giving suggestions for potential mathematical connections.

Design Heuristics for Pedagogical Content Knowledge in Mathematics

Design Heuristic 4: Supporting teachers in engaging students by questioning:

Curriculum materials should provide driving questions for teachers to use to frame a unit and should help teachers identify questions that they can use with their students, including focus questions for guiding a class discussion. Curriculum materials should help teachers understand why these are mathematically and pedagogically productive questions.

Curriculum materials should help teachers engage their students in asking and answering their own questions, by providing suggestions of productive questions and ideas about how to guide students toward those or other productive questions.

Design Heuristic 5: Supporting teachers in engaging students with collecting and analyzing data:

Curriculum materials should provide teachers with approaches to help students collect, compile, and understand data and observations, help teachers understand why the use of evidence is so important in mathematical reasoning, and help them adapt and use these approaches across multiple representations.

Design Heuristic 6: Supporting teachers in engaging students in designing investigations into mathematical topics:

Curriculum materials should help teachers recognize the importance of sometimes having students design their own investigations. Curriculum materials should provide guidance for how teachers can support students in doing so, by providing ideas for appropriate designs
and suggestions for improving students’ inappropriate designs (Stiggins, 1997).

Design Heuristic 7: Supporting teachers in engaging students in making explanations based on mathematics concepts:
Curriculum materials should provide clear recommendations for how teachers can support students in making sense of data and generating explanations based on evidence that the students have observed and justified by mathematics that they have learned. The supports should include rationales for why engaging students in explanation is important in mathematics and why these particular approaches for doing so are mathematically and pedagogically appropriate.

Design Heuristic 8: Supporting teachers in promoting mathematical communication:
Curriculum materials should provide suggestions for how teachers can promote productive communication among students and teachers in conversations. The curriculum materials should provide rationales for why particular approaches for promoting communication (e.g., class discussions, student presentations) are mathematically and pedagogically appropriate.

Design Heuristic for Mathematics Content Knowledge

Design Heuristic 9: Supporting teachers in the development of Mathematics Content Knowledge:
Curriculum materials should support teachers in developing factual and conceptual knowledge of mathematics content, including concepts likely to be misunderstood by students. Support should be presented at a level beyond the level of understanding required by the students, to better prepare teachers to explain mathematics concepts and understand students’ ways of understanding the material. Curriculum materials should help teachers see how the ideas relate to real-world phenomena and to the activities in the unit and why strong subject matter knowledge is important for teaching.

We developed the following guidelines for questions that teachers might consider while preparing an ECM for their grade level.
1. How does (the topic selected) engage students in important mathematical ideas?
2. How does (the topic selected) provide students with the opportunity to compare, contrast, and analyze different representations?
3. What are the anticipated ideas/responses of students? Why might students give these ideas/responses? What suggestions are made for dealing with these ideas/responses?
4. What questions are provided to use with students for delving into the mathematics ideas? What questions are provided for guiding group discussion? What suggestions are provided for engaging students to ask and answer their own questions? What questions are pedagogically and mathematically productive?
5. What are the opportunities for students to pose their own questions? What guidance is provided for students to engage in designing their own investigations?
6. What opportunities are there for students to provide explanations and to use mathematical reasoning to justify their thinking?
7. What questions and suggestions are provided for generating student communication (class discussions, student presentations, etc.)?
8. What connections are there to mathematics that has preceded and will extend beyond that required for the students at this grade level?
An eight-day plan of action was generated with guidelines and suggestions for the participants. The plan included:

1. Select topic to be investigated. Teachers were asked to consider a topic that children in their grade level had difficulty learning, whether based on student achievement data, or that they found difficult to teach. By posing the directions in this manner, we opened up the discussion to the difference between focusing on teacher actions and student outcomes. The topics chosen for each grade level were:
   - Grade 1: The many ways to understand addition and subtraction
   - Grade 2: Place value with bases other than ten
   - Grade 3: Attributes and the development of mathematical language
   - Grade 4: Area and perimeter
   - Grade 5: Division of decimals

2. Keep in mind the recommendation from the school’s mathematics committee that Problem Solving would be a focus for School Year 2010–2011. School focal areas also included having students work in collaborative groups. Teachers were asked to revisit their previously developed constructed response questions to make sure they promoted problem solving.

3. Keep the guidelines for ECM in mind while investigating a topic and preparing their ECM. They were asked to pay special attention to teacher learning, make explicit the pedagogy used in the ECM, and remember the bigger picture of where the topic fit in their grade level as well as in the school.

4. Remember the design heuristic questions and use those as a ‘conscience’ when researching their topic and writing their product.

Each person received the book, *Math Matters* (Chapin & Johnson, 2006), providing them a resource on mathematics content for teachers of grade K through 8. The school’s recently adopted mathematics basal program gave teachers a starting point from which to work on their ECM.

There were several critical pieces that emerged during the eight days. Two KARES staff members were available for the five grade level groups, so they faced a challenge to keep abreast of the thinking of each group, to quickly ascertain how to direct a group to think more deeply about either the content or pedagogical strategies being considered, and to select or recommend appropriate resources when a group was stymied in their thinking. Some issues that emerged were:

1. The need to enhance teacher content knowledge. As an example, the grade 5 teachers first contemplated fractions and division as topics. After much discussion on what children could not do, the teachers were given a task to help their group “turn a corner in their own thinking”. Everyone was asked to write a division problem for 286 ÷ 8 and to use each of their stories as the context to work through a solution. They also were instructed to write down every question they asked of themselves and every answer with which they responded until they found a solution. Their ensuing discussions led to different ideas about division, such as whether each story was a “subtractive division” or a “distributive division,” and which of these did the “usual division algorithm” use. When the teachers realized
the massive amount of questions involved and how those questions emphasized place value, they began to understand that problems about this topic were difficult problems for teachers to understand and solve, let alone fifth-grade students.

2. The need to be a reflective learner. The discussions about place value by the grade 2 teachers focused on where to ask which questions to ensure a focus on conceptual development. Their discussions were intense and reflective and they decided to make sure to embed the questions in their materials, along with anticipated student responses and their responses back to the students. Reflecting on the experience of working together on the ECM, on the last day of the session one second grade teacher said, “The understandings were not the same for all of us so we had to do a lot of dialoguing … The process is so important. You know we can always say, ‘Ooo, this is our product and we’re going to give you our product,’ but it was days of processing and dialoguing … that was the valuable part for us.”

3. The first grade teachers examined the pedagogical strategies embedded in Cognitive Guided Instruction (Hiebert et al., 1997). Project staff exhausted their collection of references, including Van de Walle (2004), material on Cognitively Guided Instruction (Carpenter, Fennema, Franke, Levi & Empson, 1999), Second Handbook of Research on Mathematics Teaching and Learning (National Council of Teachers of Mathematics, 2007), and searching the internet, so the two teachers could familiarize themselves with this topic. The teachers were amazed when they read there were at least 11 different models of addition and subtraction and recognized why children have difficulties with some of these forms. They decided to prepare materials to start their instruction with multiple combinations of addition and subtraction strategies. The school’s first grade mathematics program was organized such that one section had problems with numbers 1 through 6 and a subsequent section dealt with numbers 9 through 12. The teachers felt this organization was too contrived and drawn out so decided to use numbers 1 through 12 in their problems from the beginning.

4. Teachers struggled to think beyond the problems and tasks in the textbook. It often took an example like the one mentioned in (a) above before they would delve into the mathematics of the topic. It was also hard for them to take the stance that an answer, whether right or wrong, tells something about the thinking of a student and in order to find out what that thinking is, the child must be asked to explain his/her reasoning.

5. It was a challenge for teachers to change their mindset to get beyond the rules of doing mathematics and focus on the goal of the school to incorporate problem solving. The natural inclination was to view problem solving as something to be added and taught separately rather than as a way to start an investigation and encourage thinking based on what their students already know.

ASSESSING THE PROCESS

As part of the evaluation of the eight days of working on ECM, on the final day of the professional development teachers were asked to reflect on the process. Almost to a person, the comments were very positive, reflected how valuable the experience was for
the professional growth for the teachers, and allowed us to see what they considered important. Four representative comments are given below:

By reviewing long division in the traditional algorithmic method, a realization of just how confusing the process must appear to my students (also to my other team members) helped us review and clarify our lessons. The reexamination of our units is valuable in helping my teaching become more effective because I need to utilize the questions (ECM) in my teaching practices. I also feel working together as a team (valuable collaboration) in particular problems “enhanced” and furthered a deeper understanding of the subject matter.

This PD experience has been the most influential, knowledgeable, inspirational experience in all 20+ years of workshops. Many of us have many years of teaching experience and personal post high-school experience and arrogantly think that we can teach anything. Long explanation short, ... this ECM session was an epiphany. For the first time, I truly struggled and tried to empathize with what my students have to “put up with.” It’s not providing them with all that we have to teach them but how and at what depth. Thank you! I hope from this day on I can be a real teacher!

This professional dev. experience has enhanced my understanding of mathematics beyond any book I could have read. I feel the time and discussion I had with my grade level teachers was the most eye opening wonderful experience. We worked really hard to address our essential math concept and every discussion we had kept going back to “why” do the students need to know this? I’ve learned it is really important to have discussion with students in order to understand their understanding. I felt like I was questioning myself and realizing my understanding of math. I had to “find out” what I didn't know. I had to read and re-read lessons and ask questions to others for my understanding.

This experience has helped me to closely examine the concept that I teach. It gave me time to really think about what I’m asking my students to think about. When closely scrutinized, analyzed, and finally, understood, my deeper content knowledge has helped me to be more effective in planning the learning process for my students. I now take into deeper consideration how I scaffold and present information.

Their comments suggest these teachers felt they had not only learned about the scope and sequence of the mathematics in the grade level they taught, but they gained in-depth understanding about the specific mathematics topics they selected which in turn affected their thinking about how they might help their students learn that content. Teachers learned more about the complexities of the teaching-learning process nurtured by the “teaching with problem solving” approach embedded within this professional development.
development experience. During the eight days, teachers were immersed in the process and came to understand the approach used by the facilitators of “volleying” questions back to the group for contemplation. While frustrated at first, teachers began to embrace the approach as an appropriate teaching and learning style. They saw this as consistent with the ideas in the articles by Berg (2010) and Young (2010) that emphasize children need to work on, struggle with and solve problems; that self-efficacy is being able to tackle difficult situations and succeed and not from writing answers to exercises where no thinking is involved.

In summary, the process of developing ECMs helped KARES address the objectives of helping teachers deepen their mathematical content knowledge, understand how to incorporate processes such as problem solving, reasoning, and communication into their instructional materials, and become more reflective and public about their knowledge about mathematics and the teaching of mathematics.

REFERENCES


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1. Introduction

The purpose of this study was to examine professional education programs geared toward facilitating the employment and business startup of marriage immigrants in Seoul, especially the education programs provided by the Youngdeungpo Multicultural Family Support Center. The overlapped assistance from different government agencies that are responsible for supporting marriage immigrants results in a waste of budget and detracting from the efficiency of their policies. The government agencies just tries to produce external visible results by holding temporary events, and it's consequently not easy to nurture professional personnels who will assist marriage immigrants. So it's basically meant in this study to urge client-centered policy setting and the development of education programs tailored to the regional and cultural characteristics of clients.

2. Method

As for multicultural education in foreign countries, relevant literature and earlier studies were reviewed to find out general theories of multicultural education. The suggestions of Korean multicultural policies were discussed. What the Youngdeungpo Multicultural Family Support Center taught and how the center did it were examined in detail, and what educational results it produced and what improvements should be done were presented. Data were gathered by making a participant observation from January, 2009, to August, 2010, and what types of tasks the education programs assigned was checked. After the education programs were completed, those who participated in the programs were asked to describe in the form of mind map how much they found themselves to be better able to find a job.

3. Results

The marriage immigrants who immigrated into our country through marriage wanted to learn about the Korean language, Korean food and Korean culture the most, which the greatest number of educational programs provided to them dealt with. Concerning what they considered most important, they wanted to get a job or start their own business for economic reasons, and they consequently hoped for vocational education and wanted to be helped to find a job when they were asked a question what type of education and national policy they preferred. Currently, however, most of them were irregular workers or just did part-time work. Regarding the reason why they couldn't get a job nor start

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their own business though they wanted to do that, the largest group weren't able to find a job and couldn't speak Korean well. The third and fourth stages of the customized service and support system by life cycle, which is backed up by the Ministry of Justice, include the list of the policies of different government departments, such as providing education geared toward teaching marriage immigrants to be ready for getting a job or fostering them to prepare for jobs especially suitable for immigrants.

But what matters above all is that the immigrants who lacked confidence should receive education like self-leadership education to change their way of thinking to restore their self-esteem. The Youngdeungpo Multicultural Family Support Center has advertised for multicultural education instructors and bilingual instructors to offer professional education programs to help the employment and business startup of immigrants, but the education programs don't work as intended due to a shortage of professional educators, and another reason is the uncertainty of employment, which is caused by the fact that the education programs are conducted just on a temporary basis by advertising for the instructors. This researcher was responsible for the education programs involving image making, appearance management, communication, basic etiquette and manners, and had a chance to find what results the programs produced and what improvements should be done in the future in the course of conducting the programs and teaching the participants to draw mind maps. what educational results it produced and what improvements should be done were presented.

4. Conclusion

The findings of the study suggest that prolonged, sustainable assistance should be offered for marriage immigrants to get a job or start their own business, and that the development of a wide variety of education programs is required. In terms of educational assistance for employment, what matters above all is a change of the way of looking at employment and providing self-leadership programs that could encourage marriage immigrants to improve their self-esteem and confidence. Sustained Korean language education should be provided, and professional educators should urgently be nurtured. Finally, professional programs that aim at fostering experts who can instruct marriage immigrants to get a job suitable for them should be developed, and they should actually be assisted to find a job after participating the programs.

References


Title of Submission:
Assessing the Influence of a Theoretical Model on Taiwanese College Students and English Performance

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Assessing the Influence of a Theoretical Model
on Taiwanese College Students and English Performance

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Abstract

This study aimed to (1) integrate relevant language learning models and theories, (2) construct a theoretical model of college students’ English learning performance, and (3) assess the model fit between empirically observed data and the theoretical model proposed by the researchers of this study. 1,129 Taiwanese college students participated in this study. The instruments utilized in this study were designed by the researchers of this study, including Self-regulated Inventory and English Achievement Test. The collected data were inputted into computer for statistical analysis by LISREL 8.72. The results of this study showed that there was a statistically significant direct effect on affection/motivation and academic achievement. Moreover, the statistical result showed a mediating effect of action control in language learning process. Based on the results and findings of this study, the researchers also provided several suggestions for further research and implications for future EFL instruction.

Keywords: Self-regulation, academic achievement, and college students
I. Introduction and Purpose of the Study

With the increase of international exchanges upon globalization and the coming of knowledge-based economy, the enhancement of students’ English proficiency, vision and competitiveness has become the important policy of education in many countries. Unfortunately, according to the Ministry of Education result of English examination survey on the freshmen students of vocational and technological colleges in the academic years of 2000, the English proficiency of vocational and technological college students in Taiwan is inferior and only 15% students meet the primary level of GEPT. Thus, how to enhance these students’ English proficiency has become one of the important tasks in vocational and technological education.

In order to enhance technological and vocational college students’ English proficiency, schools are devoted to constructing a bilingual environment, organizing English camps and contests, and planning remedial instruction. Despite these efforts, many researchers put their emphasis on the filed of English (e.g. Wu and Chang, 2003; Chang and Wu, 2010). This study treated technological and vocational college students as the targets and English as the specific learning field, and validated the theoretical model on technological and vocational college students’ English learning performance by SEM. The research purposes were below:

1. to integrate relevant learning models and theories,
2. to construct a theoretical model on technological and vocational college students’ English learning performance, and
3. to evaluate the quality of the theoretical model on technological and vocational college students’ English learning performance.
II. Literature Review

Recent studies on learning have successfully integrated expectancy-value theory (affection/motivation), action control theory and learning strategy theory, and indicated their importance on learning, as detailed below.

1. Researches Related to Affection/Motivation

Expectancy-value theory indicated that beliefs which influence learners’ motivation include affection, value and expectation. Bandura (1986) suggested that the individuals’ affective self-reaction to their performance could result in self-incentive. Thus, the individuals would construct higher level of goals, and adopt more effective strategies. Value refers to the internal reasons of a person to involve in some jobs (Pintrich, 1989). Current empirical studies (Eccles, 1994; Wigfield, 1994; Wigfield & Eccles, 2000) demonstrated that work value would influence learners’ selection in future courses, use of learning strategies, action control and academic achievement. Expectation refers to the learners’ anticipation to the success of the learning, and includes success expectation and perceived self-efficacy. Success expectation is the estimation of the learning result (Pintrich, 1989). The research of Wigfield (1994) indicated a significant correlation between success expectation and academic achievement. Cherng and Lin (2002) in Taiwan also demonstrated the significantly positive relation between success expectation and academic achievement. Self-efficacy refers to the individuals’ belief in their abilities in specific situations (Bandura, 1986). In the past 20 years, self-efficacy could highly predict the students’ motivation and learning (Bandura, 1997; Pajares, 1997; Schunk, 1989; Zimmerman, 1995, 2000). Thus, this study treated positive affection, success expectation, work value, and self-efficacy as the variables of affection/motivation.
2. Researches Related to Action Control

Recent researches focused on the mediating role of action control between learning intention and learning strategies, and defined action control as the learners’ protection intention and the control to fulfill the goals. According to Kuhl (1985), the mediation of action control in learning process could be observed upon the learners’ action control strategies which are allocated by Kuhl (1985) into cautious selection, coding control, emotion control, motivation control, environment control and information processing. Corno (1989) expanded the concept of action control in learning situation and indicated five action control strategies, including cognition control, emotion control, motivation control, situation control, and others control. However, the empirical study of Wu and Chang (2003) demonstrated that these action control strategies could be combined into cognition control, affection control, situation control, and others control. Cherng and Lin (2002) mentioned that action control is the critical intervening variable between learning motivation and learning strategies. Therefore, based on the statements of Kuhl, Corno, Wu and Chang, this study divided action control into cognition control, affection control, situation control, and others control.

3. Researches Related to Learning Strategies

Learning strategies were the main research issues in information processing theory in Cognitive Psychology in the past 20 to 30 years. Flavell (1971) was the first scholar who proposed learning strategies, and indicted that learning strategies are the cognition of cognition. Brown (1987) suggested that learning strategies include the individuals’ knowledge and control of the cognitive system and the plan, monitoring and evaluation abilities of the cognitive operation. Wu and Chang (2003) pointed out that the correlation among self-monitoring, self-evaluation, self-adjustment of learning strategies and strategy use is significantly high. It would lead to
multi-collinearity. These constructs should be combined. Pintrich (1999) suggested that learning strategies refer to the learners’ planning, monitoring and adjustment abilities in self-adjusted learning process. According to Wu (2003), learners with inferior English reading comprehension would use learning strategies differently. Moreover, the students in Taiwan used significantly different learning strategies when reading Chinese and English. Based on the above, this study treated repetition, organization, refinement, planning, monitoring, and adjustment as the valuables of learning strategies.

**4. A Theoretical Model of Technological and Vocational College Students’ English Learning Performance in This Study**

As to the test of model fit, this study reorganized the related learning theories and those proposed by Wu and Chang (2003), and considered college students’ development characteristics and English learning to further propose the theoretical model of English learning performance, including affection/motivation, action control, learning strategies and academic achievement with regard to technological and vocational college students’ English.

**III. Method**

1. **Subjects**

This study selected 1,129 students, who took the courses of English in freshmen and sophomore years, from 12 technological and vocational colleges in northern, central and southern Taiwan as the targets by stratified cluster random sampling.

2. **Instruments**

The instruments used in this study included Self-regulated Inventory and English Achievement Test. The Self-regulated Inventory is composed of English affection/motivation scale (22 items), English action control strategy scale (22 items),
and English learning strategies scale (26 items). The items in all scales used English as the specific field and rated based on Likert 6-point scale.

The English achievement test was designed based on the General English Proficiency Test (GEPT), College Student English Proficiency Test (CSEPT), and the principles of language evaluation. The evaluation on the oral test is more subjective and it is difficult to quantify the data. Thus, the test only involves the academic achievements of listening, reading and writing.

3. Data Analysis

After the tests, data were inputted into computer for statistical analysis by LISREL 8.72; $\alpha = 0.05$ was treated as the statistical significance level.

IV. Results & Discussion

The parameter estimation in LISREL is based on Maximum Likelihood methods which involves strict requirement for multi-variance normal distribution (Bollen, 1989; Jöreskog & Sörbom, 1993). Thus, before conducting the test of goodness of fit, the assumption of multi-variance normal distribution was validated by PRELIS 2.52. The finding demonstrated that data collected by this study did not meet the assumption, $\chi^2(2) = 1465.254, N = 1129, p < 0.05$. Thus, generally weighted least-square (WLS) method was applied for parameter estimation and test of goodness of fit.

1. Fit Test of English Learning Process Model

Upon literature review (Hair, Anderson, Tatham, & Black, 2006), the evaluation of SEM in this study refers to preliminary model fit, overall model fit and fit of internal instruction, as described below.
(1) Preliminary model fit of English learning process model

As to preliminary model fit, the estimation results did not show negative error variables (0.13~0.93). All error variables reached the significance level (0.05) and there was no significant standard deviation. It met the standard that theoretical model could not involve negative error variables and significant standard deviation. Error variables must meet the significance level (Hair et al., 2006). However, one factor loading was lower than 0.5 ($\lambda_{21} = 0.45$) and it did not meet the standard that factor loading could not be lower than 0.50. Low factor loading would reduce the reliability of the factors. However, for the completeness of the theoretical framework and since all factor loadings reached the significance level, the statistical test is still conducted.

(2) Overall model fit of English learning process model

With regard to absolute fit, chi-square value of the fit between the theoretical model in this study and data observed reached the significance level (0.05). It demonstrated that English learning process model in this study and data observed do not fit. However, in the test of goodness of fit, chi-square value tended to reject the theoretical model due to the increase of the samples. Thus, besides chi-square test, this study also evaluated the fit between the model and data by other measures which were not influenced by the number of the samples. Apart from $\chi^2$ test, the measures of overall model fit demonstrated good fit between the theoretical model and data observed in this study.

(3) Fit of internal structure of English learning process model

With regard to fit of internal structure of model, Hair et al. (2006) proposed the evaluation on fit of measurement model and fit of structural model, as described below:
As for fit of measurement model, factor loadings estimated reached the significance level ($t = 19.37 \sim t = 63.24, p < 0.05$) and it met the standard that factor loading should meet the significance level. In terms of structural model, structural parameters estimated reached the significance level $0.05 (t = 2.19 \sim 29.61, p < 0.05)$. It demonstrated that the structural model was positive.

2. Effects of Latent Variables in English Learning Process Model

According to Jöreskog and Sörbom (1993) and Hair et al. (2006) the effects among latent variables included direct effect, indirect effect and total effect, as described below.

(1) Direct effects of latent variables in English learning process model

a. Direct effect of latent independent variables on latent dependent variables

This study assumed the direct effect of affection/motivation on action control ($\gamma_{11} = 0.81, t = 29.61, p < 0.05$), learning strategies ($\gamma_{21} = 0.25, t = 6.44, p < 0.05$) and academic achievement ($\gamma_{31} = 0.24, t = 3.81, p < 0.05$). The data observed demonstrated that the direct effect was significant. It showed that learners with more affection/motivation tended to frequently use action control and learning strategies, and they would have better academic achievement.

b. Direct effect of latent dependent variables on latent dependent variables

This study assumes the direct effect of action control on learning strategies and direct effect of learning strategies on academic achievement. The observed data indicated that the direct effects were significant: the direct effect of action control on learning strategies ($\beta_{21} = 0.75, t = 19.06, p < 0.05$), the direct effect of action control on academic achievement ($\beta_{31} = 0.31, t = 2.30, p < 0.05$), and the direct effect of learning strategies on academic achievement ($\beta_{32} = 0.34, t = 2.19, p < 0.05$). In other words, in English learning, the students who defended learning intention by action control tended to use learning strategies, which
would enhance their academic achievement. The frequent use of learning strategies would also enhance academic achievement.

c. Residual variance of latent dependent variables

The residual variance ($\zeta_1$) of action control is 0.34, that ($\zeta_2$) of learning strategies is 0.07 and that ($\zeta_3$) of learning strategies is 0.28.

Based on the above, among all direct effect values, that of affection/motivation on action control is the highest (0.81) and the second is that of action control on learning strategies (0.75). The least is that of academic achievement on learning strategies (0.24).

(2) Indirect effects of latent variables in English learning process model

a. Indirect effect of latent dependent variables on latent dependent variables

Indirect effect of affection/motivation on learning strategies and academic achievement was significant (0.05). Through the mediating effect of action control, indirect effect of affection /motivation on learning strategies was 0.62 ($\gamma_{11} \times \beta_{21} = 0.81 \times 0.75 = 0.61$) which was higher than the direct effect (0.25) ($\gamma_{21} = 0.25$) of affection/motivation on learning strategies. It showed that the students with more affection/motivation tended to defend learning intention by action control, which will increase the use of learning strategies.

The observed data indicated that direct and indirect effects of affection/motivation on academic achievement were significant ($t = 3.81$, $t = 10.62$, $p < 0.05$). Affection/motivation indirectly influenced academic achievement through three paths. First, the path from affection/motivation, action control to academic achievement, the normalized effect of this path was 0.25 ($\gamma_{11} \times \beta_{31} = 0.81 \times 0.31 = 0.25$). The second one was from affection/motivation, learning strategies to academic achievement. The normalized effect of this path was 0.01 ($\gamma_{21} \times \beta_{32} = 0.25 \times 0.34 = 0.008$). The
third one was from affection/motivation, action control, learning strategies to academic achievement. The normalized effect of this path was 0.21 ($\gamma_{11} \times \beta_{21} \times \beta_{32} = 0.81 \times 0.75 \times 0.34 = 0.21$). Total normalized indirect effect of these three paths was 0.54. Among the three paths, indirect effect of affection/motivation on action control was the most significant and that of action control on academic achievement was the most insignificant.

b. Indirect effect of latent dependent variables on latent dependent variables

With regard to indirect effect of latent dependent variables on latent dependent variables, indirect effect of action control on academic achievement was significant ($t = 2.17, p < 0.05$).

Through action control, indirect effect (0.61) of affection/motivation on learning strategies was the highest. The second was the indirect effect (0.54) of affection /motivation on academic achievement through action control and learning strategies. The least was indirect effect (0.25) of action control on academic achievement through learning strategies.

(3) Total effect among latent variables in English learning process model

a. Total effect of latent independent variables on latent dependent variables

Normalized total effects of affection/motivation on action control, learning strategies and academic achievement were 0.81, 0.86 and 0.78, respectively. In this study, total effect of affection/motivation on action control was equal to the direct effect. With regard to the influence of affection/motivation on learning strategies, total effect referred to direct effect (0.25) and indirect effect (0.61). In addition, total effect of affection/motivation on academic achievement was .78, including the direct effect (0.24) and indirect effect (0.54). Noticeably, normalized indirect effect of affection/motivation on learning strategies was 0.61 and it was 70% of total effect, more than the
normalized direct effect (0.25). It demonstrated the critical mediating role of action control between affection/motivation and learning strategies.

b. Total effect of latent dependent variables on latent dependent variables

Normalized total effects of action control on learning strategies and academic achievement were 0.75 and 0.56. This study assumed that action control only revealed direct effect on learning strategies. Thus, total effect of action control on learning strategies was equal to the direct effect. With regard to the influence of action control on academic achievement, the observed data indicated that the normalized total effect of action control on academic achievement was 0.56, including direct effect (0.31) ($\beta_{31}$) and indirect effect (0.05) ($\beta_{21} \times \beta_{32} = 0.75 \times 0.34 = 0.25$). Moreover, normalized total effect of learning strategies on academic achievement was .34. Since learning strategies did not reveal indirect effect on academic achievement, the total effect was equal to direct effect.

With regard to total effects of latent variables, that of affection/motivation on learning strategies was the highest (0.86), the second was that (0.81) of affection/motivation on action control and the least was that of (0.34) learning strategies on academic achievement.

V. Suggestions

In this study, except for chi-square test, the rest measures indicated that the good fit between the theoretical model and data observed in this study. Thus, the theoretical model of English learning performance could explain the actual data. The following two suggestions were derived based on the results of this study.
1. In English instruction, the integration of affection/motivation, action control, learning strategies, and academic achievement should be valued.

Past studies on instruction and learning tended to evaluate the students’ learning effect by intellectual and external performance. However, cognitive psychology conducted in-depth analysis on the internal process of human beings’ learning. With new technologies and urgent demand for educational reform, people turned the interest to the internal process of learning. The model validation of this study confirmed the importance of cognition and affection to English learning performance which could be further applied.

2. Including action control training in English instruction and reinforcing the students’ action intention of learning will help students’ English learning.

According to the related studies, “action control” was a critical intervening variable in learning process. Past studies have demonstrated that when learners are more educated, they tend to lose the motivation in learning, be less persistent and be lazy (Cherng & Lin, 2002; Wigfield & Eccles, 2000). Technological and vocational college students do not have significant English proficiency back in the studies in vocational schools. Since English courses become more difficult and the students are not willing to overcome the obstacles, the students would lose their interests in English learning and even totally give it up. It is the situation that teachers, educators, or other stakeholders do not expect. Therefore, it is necessary to include action control training in English courses to allow the students to try to recognize the distraction, probe into and fulfill action control, actively deal with learning by varied strategies, continue learning and be more confident in English learning.
参考文献


1. **Title of Submission:**

   Inclusive Leadership: An exploration of an innovative graduate course being taught by one instructor in a Master of Education program at a university in Canada.

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6. **Abstract:**

   Inclusive leadership is a relational approach in which leaders can create organizational cultures that encourage input from staff, stakeholders, and community members. Inclusive leaders achieve sustainable group successes by recognizing social injustices, building relationships, and by leveraging the diverse opinions, experiences, and backgrounds of its members. An innovative graduate course on Inclusive Leadership in a Master of Education program in Canada is the focus of this presentation. The rationale behind the course’s development, its design, and anticipated affects on the professional practice of class participants, who are, or intend to be educational leaders in the school system and other sectors, is being explored in this study.
1. Title of the submission.

Performance-Based Reward for Teachers: teachers’ perceptions of their motivation

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6. Abstract and/or full paper.
Performance-Based Reward for Teachers: teachers’ perceptions of their motivation

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Introduction

Since the 1980’s, a performance-based reward system has been capable of being an important tool for attracting and retaining quality teachers. Proponents claim that it is possible for a merit pay system to be awarded to more effective teachers (Dee & Keys, 2004). The arguments are persuasive enough to have stimulated various types of programs in Korea and other countries that differentiate teacher pay on the basis of performance. Meanwhile, opponents argue that the impact of pay supplements on supply and productivity will be small, that it reduces morale, and that it is difficult to identify high-performing teachers (Murnane & Cohen, 1986). The issue of performance pay has led to contentious educational debate, particularly concerning whether linking performance and pay is an effective means of improving performance.

A performance pay system is based on motivation theories. Because the employees’ efforts and persistence relate to the quantity and quality of work performed, a teacher’s motivation is a key factor in the learning process that takes place in schools. It is believed that a performance-based reward affects a teacher’s motivation in a way that would reduce turnover and increase student achievement. However, an interesting fact is that in teachers’ responses to performance-based pay, a number of teachers strongly oppose a performance pay system.

Motivation is closely associated with individual perceptions. Nonetheless, previous debates have spurred discussion about a link between performance related pay and teacher effectiveness. But, we have little information regarding the teachers’ characteristics and backgrounds that would be required for performance related pay to work. In this context, this study focuses on teachers’ characteristics and backgrounds instead of entering the debate over the effectiveness of performance pay for teachers.

Literature Review

Performance-based reward assumes two things. First, there is the assumption that teachers affect the
academic achievements of students and second, that differences in students’ achievements are a result of a
teacher’s personal characteristics. Several studies indicate that teachers who have professional knowledge and
skills in academic subjects and in turn link them to effective teaching methods in the classroom are proven to be
more effective in instructing students and improving overall academic achievement (McDiarmid et al., 1989;
Guyton & Farokhi, 1987). These studies support the argument that, in order to motivate teachers to gain new
knowledge and skills for improving students’ achievements, the teacher pay system has to be re-structured based
on the unitary ladder system (Sanders et al, 1997).

Research on performance pay systems is mixed. While efforts by school districts to offer teachers
performance-related pay have been largely unsuccessful in practice (Murnane & Cohen, 1986; Ballou &
Podgursky, 2001; Goldhaber & Anthony, 2005), other research supports the notion that a performance pay
system may have some potential in education (Clotfelter & Ladd, 1996; Lavy, 2002; Dee & Keys, 2004; Figlio
& Kenny, 2007).

With regard to teachers’ motivation, there are arguments in support of and in opposition to a performance-
based reward system. It is argued that teachers who are not motivated by financial rewards can be encouraged
with non-financial rewards (Odden, 2000; Tomlinson, 2000). These rewards can include satisfaction from high
student achievement, recognition, influence, learning new skills, and personal growth. Therefore, a
performance-based pay system is a means of providing motivation by introducing clear goals to the whole
school.

Some teachers have been opponents of performance-based pay policy, while other teachers have been
proponents of a performance-based pay system. Ballou and Podgursky (1993) indicated that teachers surveyed
were in favor of additional pay for additional duties as part of a career ladder where performance dictated the
speed of advancement. Moreover, the level of pay in a school district appears to have no influence on teachers’
attitudes towards merit pay, yet it was more likely to be supported by teachers with low salaries and by ethnic
minorities such as Black and Hispanic educators (Ballou and Podgursky, 1993).

Motivation theories would be useful in understanding how teachers responded to a performance-based pay
system. Most motivation theories depict the differences in teachers’ needs, beliefs, and goals. As far as possible,
most teachers try to personalize their roles in a school so that their motivation is closely related to their
individual characteristics. Among the theories, motivation-hygiene theory, which has been called two factor
theory, has been widely accepted by administrators (Hoy & Miskel, 2005). Motivation-Hygiene theory by
Herzberg and his colleagues (1959) explained that the motivation mechanism can differ according to a person’s
attitude and disposition. Hence, motivation-hygiene theory shows that factors contributing to worker’s job satisfaction and dissatisfaction exist independently. However, satisfaction is not determined solely based on these factors, and Herzberg distinguishes people into motivation seekers and hygiene seekers based on their attitudes and disposition at work. Motivation seekers mainly consider accomplishment, recognition, responsibility and development at work, while hygiene seekers regard work in terms of payment, working conditions, supervision and position. It means that motivation seekers focus on upper desire in the desire system, while hygiene seekers emphasize lower desire.

**Methodology**

Thirty primary, low-secondary, and high-secondary schools were selected from Daegu and the Gyeongbuk area of Korea. A total of about three hundred and twenty teachers were randomly sampled and data were collected through a questionnaire.

Teachers were asked to complete a questionnaire that was composed of three parts: teacher’s background information, characteristics, and their perceptions of a performance pay system. In the first section, teachers were asked to provide information about their gender (i.e., male, female), number of years teaching, school-level (i.e., primary, low-secondary, and high-secondary), and school location (i.e., urban, suburban, rural). In the second section, they were asked to indicate their attitude (i.e., hygiene-oriented, motivation-oriented). In the final section, they were asked to indicate their responses to a performance pay system (i.e., motivation, morale, commitment).

A cover letter, the survey instrument (questionnaire), and a stamped return envelope were mailed to each teacher during the month of April, 2010. The sample population of this study was 320 teachers but only 284 of the teachers completed and returned the survey. This represents a response rate of 88.7%.

The purpose of this study was to clarify if there is a difference in how performance-based reward affects motivation, morale and commitment of teachers according to a teacher’s background. In order to examine data packet score trends across the groups, we conducted an analysis of variance (ANOVA) to investigate whether distributions of teachers’ backgrounds and characteristics differ from one another.

Motivation, morale and commitment, which are the criteria for analyzing group difference, are defined as follows. Motivation is the process of showing one’s concentration, direction and durability for accomplishing goals. Concentration is how hard a person focuses on his goal. If the direction pursued by a person is different from the one laid out by the organization, there is a lack of performance results. Durability is considered
important as an indicator of how long one person can maintain his efforts (Mitchell, 1997). Morale is defined by a passionate attitude and interest in work and it is based on social satisfaction by participating in educational activities and on personal pride and worthiness. Commitment is a degree of psychological connection to a specific object which teachers value as highly relevant to educational activities. Teacher commitment consists of value recognition as cognitive perspective, identification as definitive perspective, and participation as behavioral perspective on how teachers consider their class, students or school organization (Hong, 2007).

Results

An analysis of the effects of reward policy on teacher motivation, categorized by teachers’ backgrounds, is as shown in Table 1. The analysis reveals that there was a significant difference in terms of gender, school level, location, number of years teaching, and attitude.

First, the results show that performance-based reward is more appropriate for male teachers rather than female teachers as far as providing motivation, as it was found that female teachers (2.68) receive less motivation than male teachers (3.23). However, recognition of motivation by male teachers is at an average of 3.23, meaning that it is not realistic in the field. These results are statistically significant at p<.001. Second, the effects of performance-based reward on a teacher’s motivation are larger at lower school levels. Elementary school teachers (3.27) are motivated better than middle school teachers (2.78) and high school teachers (2.19). As a result of the Scheffe test, the differences between elementary – middle school, elementary – high school, and middle – high schools are statistically significant at p<.001. Third, performance-based reward is more appropriate for teachers in urban and suburban areas than for those in rural areas. Teachers working in urban (2.98) and suburban (3.10) areas receive better motivation than teachers in rural areas (2.25). As a result of the Scheffe test, these differences occur between rural areas and urban, suburban areas, and they are statistically significant at p<.001. Fourth, performance-based reward is more appropriate for motivating teachers with more than 10 years of teaching experiences. Teachers with more than 10 years of experience (3.33) are better motivated than teachers with less than 10 years of experience. Lastly, a person’s attitude also has an effect on how they are affected by performance-based reward. Performance-based reward is better for motivating teachers who are hygiene-oriented (4.11) rather than teachers who are motivation-oriented (1.88). Considering the average, hygiene seekers recognize performance-based reward as a positive factor in motivation. On the other hand, motivation seekers consider performance-based reward to be a negative factor in motivation. These results are statistically significant at p<.001.
After analyzing the effects on motivation in terms of teachers’ backgrounds, differences appear in gender, school level, working area, experience, and attitude. However, the fact that variables other than attitude show an average of less than 3 means that teachers with these variables are not actually affected positively. However, effects of performance-based reward on hygiene seekers are actually positive.

Table 1: To Extent to Which PBR increases Motivation

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>F value</th>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>3.23</td>
<td>1.014</td>
<td>11.821***</td>
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<tr>
<td>Female</td>
<td>184</td>
<td>2.68</td>
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<td><strong>School Level</strong></td>
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<td></td>
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<tr>
<td>Primary</td>
<td>142</td>
<td>3.27</td>
<td>1.310</td>
<td></td>
</tr>
<tr>
<td>low-secondary</td>
<td>72</td>
<td>2.78</td>
<td>1.078</td>
<td>18.549***</td>
</tr>
<tr>
<td>high-secondary</td>
<td>70</td>
<td>2.19</td>
<td>1.195</td>
<td></td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>129</td>
<td>2.98</td>
<td>1.228</td>
<td></td>
</tr>
<tr>
<td>Suburban</td>
<td>99</td>
<td>3.10</td>
<td>1.366</td>
<td>8.817***</td>
</tr>
<tr>
<td>Rural</td>
<td>56</td>
<td>2.25</td>
<td>1.164</td>
<td></td>
</tr>
<tr>
<td><strong>Number of Years teaching</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>44</td>
<td>2.07</td>
<td>0.846</td>
<td></td>
</tr>
<tr>
<td>1~10</td>
<td>71</td>
<td>2.30</td>
<td>1.047</td>
<td>31.497***</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>169</td>
<td>3.33</td>
<td>1.299</td>
<td></td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation-oriented</td>
<td>157</td>
<td>1.88</td>
<td>0.683</td>
<td></td>
</tr>
<tr>
<td>Hygiene-oriented</td>
<td>127</td>
<td>4.11</td>
<td>0.669</td>
<td>763.157***</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

Table 2 indicates the results of an analysis of the effects of reward policy on teacher morale, categorized by teachers’ backgrounds. The ANOVA results reveal that there were statistically significant outcomes.

First, it can be determined that performance-based reward increases the morale of male teachers (3.22) more than female teachers (2.69). This difference is statistically significant at p<.001. Second, reward policy is more appropriate to raise the morale of teachers at elementary and middle schools (3.13 and 3.01, respectively), rather than high schools (2.20). Under the Scheffe test, this difference results from a group difference between elementary and high schools and middle and high schools. The difference between elementary and middle schools is not statistically significant. Third, reward policy works more positively to raise the morale of teachers
in suburban areas. The morale of teachers working in suburban areas (3.19) is raised higher than that of teachers in rural areas (2.50). The Scheffe test shows that this difference results from a difference in average between suburban and rural areas, and it is statistically significant at p<.001. Fourth, the effect of reward policy on teachers’ morale appears to be different according to teaching experiences. The more experienced teachers are, the higher their morale is raised. The Scheffe test shows that this difference is statistically significant at p<.001 for groups of teachers between more than 10 years experience and no experience, more than 10 years of experience and 1-10 years of experience, and no experience and 1-10 years of experience. Lastly, reward policy has different effects on teachers’ morale according to attitude. Reward policy gives out higher morale to teachers who are hygiene-oriented (4.06) rather than teachers who are motivation-oriented (1.92). Considering the averages of each group, hygiene seekers recognize the effects of reward policy on morale as positive, while motivation seekers think of its effects as negative. Similar to its effects on teachers’ motivation, the effects of reward policy on morale are actually determined heavily by the individual’s attitude.

Table 2. To extent to which PBR increase Morale

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>F value</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>3.22</td>
<td>1.106</td>
<td>11.712***</td>
</tr>
<tr>
<td>Female</td>
<td>184</td>
<td>2.68</td>
<td>1.334</td>
<td></td>
</tr>
<tr>
<td><strong>School Level</strong></td>
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<td></td>
</tr>
<tr>
<td>Primary</td>
<td>142</td>
<td>3.13</td>
<td>1.300</td>
<td></td>
</tr>
<tr>
<td>low-secondary</td>
<td>72</td>
<td>3.01</td>
<td>0.682</td>
<td>14.226***</td>
</tr>
<tr>
<td>high-secondary</td>
<td>70</td>
<td>2.20</td>
<td>1.480</td>
<td></td>
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<tr>
<td><strong>Location</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>129</td>
<td>2.79</td>
<td>1.267</td>
<td></td>
</tr>
<tr>
<td>Suburban</td>
<td>99</td>
<td>3.19</td>
<td>1.322</td>
<td>5.892***</td>
</tr>
<tr>
<td>Rural</td>
<td>56</td>
<td>2.50</td>
<td>1.128</td>
<td></td>
</tr>
<tr>
<td><strong>Number of Years teaching</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>44</td>
<td>1.64</td>
<td>0.487</td>
<td></td>
</tr>
<tr>
<td>1~10</td>
<td>71</td>
<td>2.39</td>
<td>1.062</td>
<td>54.37***</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>169</td>
<td>3.40</td>
<td>1.211</td>
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<tr>
<td><strong>Attitudes</strong></td>
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</tr>
<tr>
<td>Motivation-oriented</td>
<td>157</td>
<td>1.92</td>
<td>0.716</td>
<td>626.089***</td>
</tr>
</tbody>
</table>
The effects of reward policy on the level of a teacher's commitment are analyzed in Table 3, categorized by teachers’ backgrounds. Significant differences were observed in teachers’ perceptions of performance-based reward.

First, as a result of gender comparison, male teachers (3.50) recognized the effects of performance-based reward on their commitment to be more positive than female teachers (2.93), and this result is statistically significant at p<.001. Second, the comparison between school levels shows that reward policy plays a more positive role in raising the commitment of elementary school teachers (3.35) than in the case of high school teachers (2.80). To analyze the difference between group averages, a Scheffe test is conducted. Differences in average values between elementary-middle schools, elementary-high schools, and middle-high schools are statistically significant at p<.001. Third, teachers working in suburban areas recognize the effects of reward policy on commitment most positively in comparison to working areas. Reward policy affects the commitment level of teachers working in urban and suburban areas (3.12 and 3.36, respectively) more than those working in rural areas (2.75). As a result of the Scheffe test, this difference results from difference between rural-urban areas and rural-suburban areas. Differences between suburban and urban areas are not statistically significant. Fourth, a teacher with more teaching experience recognizes the effects of reward policy on commitment to be positive. A group with more than 10 years of experience has an average of 3.72, which is the highest among the categories. The average of a group with 1-10 years of experience is 2.65, and one with no experience is 1.64. This means they believe reward policy affects teachers’ commitment negatively. Looking at the average values of each group, only a group with more than 10 years of experience considers reward policy to have a positive effect, while the rest of the groups think it has a negative effect. Lastly, teachers who are hygiene-oriented (4.30) recognize the positive effects of reward policy on commitment, whereas those who are motivation-oriented perceive the negative effects of reward policy. This difference is statistically significant at p<.001.

Table 3. To extent to which PBR increase Commitment

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
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<th>F value</th>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>3.50</td>
<td>1.259</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>184</td>
<td>2.93</td>
<td>1.155</td>
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<tr>
<td><strong>School Level</strong></td>
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<tr>
<td>Hygiene-oriented</td>
<td>127</td>
<td>4.06</td>
<td>0.716</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001
### Conclusions & Implications

This study analyzes the effects of reward policy, categorized by teachers’ backgrounds and attitudes. It turns out that the reward policy has some effect on the motivation, morale and commitment of teachers, but these effects can be increased given certain teachers’ backgrounds and attitudes.

The major findings of this study are as follows: First, this policy has different effects between genders in that male teachers show more positive effects than female teachers. Second, the effects of reward policy appear to differ between school levels. Teachers in elementary schools have a more positive result than those in middle and high schools. Third, the effects of reward policy are different by location. Teachers working in urban and suburban areas have more positive results than those in rural areas. Fourth, more teaching experience is also a factor in the varying effects of the reward policy. Teachers with more than 10 years of experience responded more positively than those with less than 10 years. Fifth, the effects of reward policy appear variable in terms of personal attitudes. Teachers who are hygiene-oriented are affected more than those who are motivation-oriented.

Policymakers have held to the assumption that giving more extrinsic rewards to teachers will improve results. However, the findings of this study indicate that it is necessary to consider the teachers’ backgrounds and attitudes. Therefore, educational leaders should verify individual characteristics, beliefs and needs in order to increase teachers’ motivation.

To this end, the following items need to be taken into consideration. First, a more in-depth analysis is...
necessary to verify the cause for the difference in the effects of performance-based reward in terms of gender, school level, and location. Further studies are needed to clarify which characteristics of school organization create a difference in realizing the positive effects of reward policy among different school levels, what cultural value and norms make regional differences, and which factors in gender lead to different effects of reward policy. If new information is accumulated, compatible policies can be pursued.

Second, future analysis should further consider differences in school levels and location. Elementary, middle and high schools in Korea have their own distinct organizational structures and management systems. In addition, the goals of school education are different according to school levels. Different cultural values and norms are found in urban, suburban and rural areas, and in turn they are reflected in school education. Therefore, based on further studies with an emphasis on clarifying differences in school levels and location, a more adequate analysis can be conducted.

Third, the autonomy of each school has to be guaranteed in order to establish standards for receiving performance-based reward and for practicing the actual evaluation. Because uniform criteria set up by the government do not properly account for the distinct features of school organizations and regional differences, they are not suitable for reward policy. Thus, a policy to grant autonomy to each school that reflects the needs and characteristics of the school and its teachers is an important factor in practicing the reward policy.
References


Research of Evaluation about The General Education of Taiwan Hakka Culture in A University

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*E-MAIL : joshsm1236@hotmail.com

ABSTRACT:

The aims of the research are: 1. planning and implementing the general education of Taiwan Hakka culture in university. 2. Realizing students’ motives about choosing the general education of Taiwan Hakka culture. 3. Evaluating students’ satisfaction of the courses of Taiwan Hakka culture. 4. Collecting up students’ opinions about the general education of Taiwan Hakka culture.

The research uses an action research; they make the decision of the courses’ theme and teaching methods after discussion, and they co-operate with school’s Internet teaching platform, also during the process randomly collect students’ opinions and feedbacks after courses, the total is more than 300 sheets. On the other hand, the researchers planed the survey of the evaluation about the courses, and they collected opinions and motives from 58 students in the courses. The researchers used the statistic analysis of depend variables by EXCEL on the results of the survey, on the other hand, they used the qualitative research to analyze the answers form the opening questionnaires and the discussion between teachers and students.

The finding of the research indicates that the teaching method that included the origin and lives (involve food, clothing, housing, transportation, education, entertainment.), and combined with the traditional teaching, the Internet learning, seminars, field trips in Hakka villages, students’ presentations, etc., the acceptance of most students about the general education of Taiwan Hakka culture is high, the evaluation tends to ‘satisfy’ or ‘very satisfy’.
In types of themes, the daily Hakka, Hakka food and Hakka nursery rhymes have higher acceptance; otherwise, field trips in the Hakka village-Meinong also made students to be impressive. The analysis of students’ background revealed most of them (more than 80%) are not Hakka speakers and live in Minnan communities, those students use Taiwanese and Chinese mostly in daily lives, only 1% uses Hakka. Students surf the Internet about Hakka frequently when they take the Hakka culture course, or they rarely visit Hakka websites.

In sum, choosing the course can enhance students to know the Hakka culture and the learning motives. For teachers and students with Hakka background, in addition to the feelings of fresh and exciting, using the native language teaching, discussion in the classroom can also improve the use of Hakka and the rates of the language exposure, inspire the sense of belonging and identification.

Keyword: Hakka culture, Hakka village, native language, race culture, general education
Introduction

The Hakka culture in Taiwan has been well-established, which gradually spreads out its glamour in the integration of multiple cultures through the time and also acquires the respect and recognition. However, because of the change of the time, Hakka culture in Taiwan also forces series problems about the outflow of Hakka speakers and the inheritance and promotion of the traditional Hakka culture. Therefore, how to conserve and promote Hakka culture is a continually serious task for people who strive on cultural development, which should not be neglected.

Reviewing the promotion of Hakka culture, Council for Hakka Affairs (CHA) aggressively and systematically promotes the development and recovery of Hakka culture, besides universities domestically found graduate schools about Hakka and centers for Hakka studies. CHA (2006) further subsidizes universities to promote Hakka culture by setting up programs, speeches and general courses, which is worth praise. Recently, the news reports that the general course of Hakka in National Taiwan University (NTU) is popular for students to enroll, thus setting up a course of the general education in universities is a feasible method to promote Hakka culture. (Wong, 2008) Nevertheless, how to set up a program of Hakka culture in advanced education, plan the learning resources and programs and implement the promotion of Hakka culture should be defined further.

Huang (2004) pointed out the implementation of the general education in universities could be categorized into four types: 1. 2. 3. 4. Through analyzing the programs of Hakka culture in universities, most programs that are categorized into elective courses of the general education are belong to one of programs in the humanities. In order to promoting Hakka culture in universities, besides the traditional programs of the general education, countering the need of themes of the general education through the way of general education speeches can instruct students on more levels. Thus, including the Hakka issues can deal with the insufficient programs of Hakka culture.

Therefore, the study based on programs of the center of general education in Chia Nan University of Pharmacy and Science, and planed three goals: 1. Discuss the instruction of the program content. 2. Record students’ reactions. 3. Implement the survey after programs;
the three goals explored relevant problems about programs of Taiwan Hakka culture that has been implemented in universities, and the result will be a basis for setting up programs in the future, also encourage more discussions further, which is expected to carry out the goal of Hakka culture in higher education.

**Instruments and Methods**

The study used the action research in general education programs of Hakka culture in Chia Nan University of Pharmacy and Science. Before the programs started, the crew decided theme contents and teaching methods after collected references and discussed, and they co-operate with school’s Internet teaching platform, also randomly collect students’ opinions and feedbacks during the process. The researchers planed the survey of the evaluation about the courses, and they collected opinions and motives from 58 students in the courses. The researchers used the statistic analysis of depend variables by EXCEL on the results of the survey, on the other hand, they analyzed and discussed the answers form the opening questionnaires and the discussion between teachers and students.

**Results and Discussion**

**Results**

Culture is a consequence of racial life accumulation, which involves attitudes of things, belief, ceremony, system and the integration of life styles. The origins of culture developments from different races are similar, even though culture developments and contents from different races are not the same. Thus, it is an opportunity for Hakka students to find out the culture origin through the self-consciousness and build up the confidence of Hakka culture; for non-Hakka students, besides the cognition of culture features from races, realizing differences of people who are from diverse cultures is also through re-recognizing process that was from others cultures to ours; therefore, this way will confirm the culture and also tolerate others. Hence, the program design includes: Taiwan Hakka (the background and history), Hakka in Taiwan (the population and habitations), Hakka (Let’s talk in Hakka-daily Hakka), traditional and modern Hakka music, Hakka features, traditional Hakka belief, Hakka food and Hakka ceremony (including weedings, funerals, joyous ocassions and celebrations). Consequently, the study mentioned three contents of theme topics: 1. Taiwan racial integration. 2. features of Hakka culture. 3. differences between diverse racial cultures.
Implication of Programs

From the following students’ reviews, it revealed that students were inspired to reflect on Hakka culture after programs and also recalled a culture connection from their daily lives. Those results exceeded researchers’ expectations, and the following reviews that were cited from students:

Review (1)

In my mind, I have an unbeatable spirit that was made by my ancients and named “Ying-jing.” When I was a child, my family had the same blood relationship, speak the same language and eat the same Hakka food “ban-tiao” that was made with rice, and I could not distinguish the differences between others who were not Hakka. As a school-age student, I felt lonely, because my classmates could not understand Hakka; I had no friend because of misunderstandings caused by languages. Thus, I started to learn Mandarin Chinese and dislike to speak Hakka, because others thought you were weird, not special; I started to find chances to practice Chinese when I was in senior high school, and I also engaged in speech and oral reading competitions. However, now I started to think I am really special, because I love my Hakka culture and the difference between others. Unfortunately, I was not familiar with my culture, and a serious problem in the society was there were more and more invisible Hakka who abandoned their Hakka culture. For Hakka, it may be saved in history after decades, but it may be an extinguished language because of the lack of speakers.

Program evaluation and satisfaction analysis

Part one:

An analysis of sex and races:

There were totally fifty-eight students (eight males and fifty females) to select the program, males were 13.79% and females were 86.21%, so females were obviously more than males in the study. The data shows that most students’ parents are Taiwanese who speak Fukien dialect. Students considered they are Taiwanese (72.41%), which is higher than others considered they are Hakka (20.69%), and the rate of Hakka is similar to the rate of their fathers’ race.

Inhabitation:
Taiwanese speakers are the majority around students’ inhabitations; however, there are also few students live in integrated inhabitations of races, which means that the convenience of transportation makes students to have chances to expose different racial cultures.

**Languages used frequently in lives**

The result showed that students used a language most frequently at home is Taiwanese (53.45%), and the next one is Mandarin Chinese. Mandarin Chinese (81.03%) is used frequently in social lives, and the next one is Taiwanese (17.24%). The investigation revealed that people use Taiwanese and mandarin Chinese as major languages in conversation, regardless of their homes or lives. Only six students (10.34%) use Hakka at home and one of six students use Hakka in his daily life, both of rates are lower than the rate that students considered they are Hakka; because of many factors, the rate of using Hakka in students’ daily lives is not high, even though some of them are Hakka. Participants thought they just could comprehend and speak a little Hakka in Hakk listening and speaking. Only nine students can fully comprehend in listening, and two students can speak Hakka fluently. Thus, we can know how seriously the outflow of Hakka from participants.

**The situation of contact with Hakka culture**

The investigation showed participants never (32.76%) and rare (39.66%) watching Hakka TV programs are major; participants never (40.4%) and rare (47.1%) surfing Hakka websites are major, in addition to the rate of surfing Hakka websites in class.

**Social culture:**

The result revealed most of students never (43.1) and rare (43.1%) actively introduced which races they belong to others people, also never (46.6%) introduce their racial cultures to others. However, participants thought that learning their own racial cultures and languages are important (55.2%) and very important (36.2%). Almost all participants (98%) thought that Hakka culture is very special and valuable and should be protected. Participants expected that primary school students can take a Taiwanese course as their mother tongue as major, and the second choice for students is Hakka; some participants also thought it is appropriate to take a culture course in primary school or kindergarten, and others (13.4%) thought it is appropriate in universities, reasons should be discussed in further studies.
Participants in the program who considered they were Hakka have better Hakka listening competences than others, but their speaking competences do not. The result indicated those participants who considered they were Hakka had more opportunities to receive Hakka from elders, but they only got few chances to speak, this situation also revealed the importance of Hakka programs.

Therefore, participants who considered they were Hakka did not have more interesting in exploring Hakka issues than others (included watching Hakka TV programs, websites and culture), so the result revealed those participants did not have specific interesting in Hakka culture. However, after took the program, participants who considered they were Hakka had higher identifications in Hakka culture than others did in other races, so the result showed it could help Hakka participants to increase their identifications in their culture after took the program. (See Table 1)

**Table 1: One-way ANOVA of different racial students’ Hakka competences, interesting and identifications in the program.**

<table>
<thead>
<tr>
<th>items</th>
<th>race</th>
<th>?</th>
<th>mean</th>
<th>Standard dev-iatio</th>
<th>compariso</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening competence</td>
<td>Taiwanese</td>
<td>4</td>
<td>2.2</td>
<td>1.2</td>
<td>5.33* Hakka&gt;mainland</td>
</tr>
<tr>
<td></td>
<td>Hakka</td>
<td>1</td>
<td>3.6</td>
<td>.6</td>
<td>Hakka&gt;other</td>
</tr>
<tr>
<td></td>
<td>Mainlander</td>
<td>2</td>
<td>2.0</td>
<td>.6</td>
<td>Hakka&gt;Taiwanes</td>
</tr>
<tr>
<td></td>
<td>others</td>
<td>2.6</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening competence</td>
<td>Taiwanese</td>
<td>4</td>
<td>2.2</td>
<td>1.4</td>
<td>.7</td>
</tr>
<tr>
<td></td>
<td>Hakka</td>
<td>1</td>
<td>1.9</td>
<td>.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mainlander</td>
<td>1</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>others</td>
<td>3.0</td>
<td>1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploring</td>
<td>Taiwanese</td>
<td>4</td>
<td>2.0</td>
<td>.5</td>
<td>.61</td>
</tr>
<tr>
<td></td>
<td>Hakka</td>
<td>1</td>
<td>2.2</td>
<td>.6</td>
<td></td>
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<tr>
<td></td>
<td>Mainlander</td>
<td>1</td>
<td>1.6</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>others</td>
<td>2.2</td>
<td>.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification culture</td>
<td>Taiwanese</td>
<td>4</td>
<td>2.3</td>
<td>.4</td>
<td>10.55* Hakka&gt;other</td>
</tr>
<tr>
<td></td>
<td>Hakka</td>
<td>1</td>
<td>3.2</td>
<td>.7</td>
<td>* Hakka&gt;Taiwanes</td>
</tr>
<tr>
<td></td>
<td>Mainlander</td>
<td>2.3</td>
<td>1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>others</td>
<td>2</td>
<td>.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Theme and satisfaction of the program
After a semester, participants’ satisfactions to the program are ‘very satisfied’ (69%) and ‘satisfied’ (29.3%), they were also glad to learn various themes, and the acceptance of the program from high to low were Hakka food, daily Hakka, nurse rhymes of Hakka and Hakka music. From the result, introducing Hakka culture from participants’ food in their daily lives will be more acceptable by them.

Part two: answers of the opening questionnaire

The timing and rate of using Hakka:

For Hakka students, they used Hakka most frequently was at home and talked with elders in hometown. After left their hometown, students rarely spoke Hakka because others could not understand Hakka, and they even did not talk in Hakka with people form their hometown.

Te following was a student’s reflection

Especially talking with elders, I will speak Hakka as possible if I can, and I will actively talk with others in Hakka because it is seldom to meet Hakka and difficult to meet a Hakka friend out of my hometown. The reason why I actively speak Hakka is that we might try hard to talk with foreigners and do not afraid of their ridicule, even though our English or Japanese competence was low. Now Hakka is one of dialects in Taiwan, and Hakka speakers why not try to speak Hakka in lives. Let’s have a try! Jusf do it, no matter you can speak Hakka or not, the growing starts from learning.

We have to try to make a friendly Hakka environment that can encourage students to speak Hakka in schools, because Hakka students have only few chances to use their mother tongue at normal situation. Hence, this way can make Hakka to have chances to speak, learners to keep practicing and people who cannot speak Hakka to get chances to listen.

Learning experience of the Hakka program

Many students indicated that they had no learning experience of formal Hakka programs, and few students told they had learned Hakka with their family or friends. Participated in the general education of Hakka program was their first time to contact, so we can see the importance of setting up Hakka programs in universities.

Motivations of selecting the Hakka culture program

For Hakka students, they selected the program to enhance their knowledge in Hakka culture, and also prove themselves are Hakka. The following is a student’s description:
for non-Hakka students, they selected the program because they want to know more about different racial cultures, satisfy their curiosity and understand transportation Hakka in lives; there were few chances to know systematically Hakka culture, students hope they can know more multiple cultures of Taiwan through the process.

**How to use Hakka knowledge that learned from the program**

Some students expected they can talk simple Hakka with their family, this way can also make them closely to know more about Hakka culture through watching Hakka TC programs and listening Hakka music. Students who majored in department of childhood education and nursery can use nurse rhymes and songs learned form class to teach children in the future.

**Motivations of learning racial culture**

In order to knowing more our culture, talking with others, understand others’ background, promoting our culture and inheriting the Hakka spirit, those reasons motivate students to learn the culture. The following answer by a student indicated ‘If I do not understand and prove my culture, I cannot convince others that I am a Hakka. Sometimes I cannot define Hakka culture if I am a Hakka, but now I learn the background knowledge of Hakka, even introduce it to others after taking the program.

**Elements could be taken and enrich the program.**

Most of participants thought the program content was sufficient that means there was no more element should be taken into the program, but the content can be modified to take more Hakka element to make participants to practice and learn daily Hakka, such as Hakka food, figures and the 12 Chinese Zodiac animals.

**Discussion**

In order to promoting features of Hakka and cultivating Hakka culture in Taiwan, setting up Hakka programs is necessary and immediate, and students can not only learn Hakka culture, also deliberate the culture during the learning process. This way can expand personal views on cultures and tolerate and appreciate differences of races, and it can also help students to make connection with others under globalization. The result of the study pointed out two important messages: 1. The racial identification of Hakka should be established immediately. 2. Differences between races can be integrated and tolerated. The two messages implicated reflections of different cultures do not contradict tolerance of
different cultures in the youth. Thus, there is no doubt that setting up Hakka programs has progressive and positive influences. It is impossible to fully comprehend Hakka culture in only one semester, but the design and implement of a program can inspire students to learn, we hope this way can make them to integrate their lives, so that they can achieve their life-long study.

References


Weng, C. P. (2008). The popular course-Hakka programs in National Taiwan University. CAN, Taipei.


E-learning in University-level English

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Abstract

This paper presents a case study of using e–learning to supplement classroom learning in the Communicative English for Careers course at Kasetsart University. The purpose of this study is to enable students to study on their own efficiently. It also aims to compare the achievements of two groups of students: The first group studies Communicative English for Careers only in the classroom. The second one studies Communicative English for Careers supplemented by e–learning outside the classroom. The research was conducted using both qualitative and quantitative methods. The statistical methods used are mean values. The findings show that the use of the e-learning program can develop students’ language skills and it could play a positive role in supporting English language learning. The students in this study expressed positive attitudes towards the supplementary e-learning program, both in becoming autonomous learners and in motivating their learning.

Keywords: e-learning, learner-centeredness, learner autonomy, Communicative English for Careers

Introduction

Computer-based training is gathering force around the world as a means of supplementing and supporting in-class teaching. Developed effectively, it can help build the vital skills of critical thinking and self directed learning. This type of learning is conducted on the Internet. It is described as “anywhere – anytime” learning. The learning takes place under two conditions: It is self-directed learning and autonomous. With this kind of learning, learners and instructors can communicate, consult and exchange their opinions as they would in a typical classroom by using modern communication technology, for example, e-mail and web–boards. E–learning is characterized as life long education which is in line with the current Thai Education Plan.

Literature Review

E-learning is a new innovation of technology in teaching and learning which is gaining popularity. E-learning in several universities both in Bangkok and other cities has increased. Chula Online at Chulalongkorn
University and KULN Learning Network at Kasetsart University are examples of University based facilities. In addition to educational institutions, other government institutions provide online learning. For example, the National Science and Technology Development Agency (NSTDA), in collaboration with the Thailand Graduate Institute of Science and Technology, has launched a website called Learn Online, a web portal for web-based courses from leading universities and business organizations in Thailand (OEC, 2004). In 2005, Hanmongkolpipat conducted a study on the development of e-learning using statistical hypothesis testing with the purpose of enabling students to study alone through the use of electronic technology. It also aimed to compare the achievement of students before and after using the e-learning method and to investigate the learners’ attitudes towards using this program. The study also revealed that the adoption of this form of teaching and learning brought with it changes in a number of aspects of teacher and student behaviour. Students were encouraged to develop their skills and think independently. Moreover, the materials which the teacher provided under the e-learning system were relevant to the lessons in terms of language used, sequence of content and examples used for explanation. Rush (2001) investigated an analysis of an intranet-based learning project for the Bangkok Marriott Resort and Spa (BMRS) hotel. The study examined the emerging emphasis of constructivism as an epistemology driving the development of a pedagogy which stresses the relative autonomy of learners and the transformation of teachers from lecturers into coaches. It has noted the merits of such an approach but also recognized that the development of a constructivist pedagogy is still ongoing, especially as it relates to the presentation of materials in online environments. The resistance of some students to the challenge to take on more responsibility for their learning has also been touched on, with particular mention made of the learning environment at the Bangkok Marriott Resort and Spa hotel. The problem is there is also little attention paid to the development of learner communities as nearly all the material emphasizes individual participation. In this sense, the site is reminiscent of an electronic textbook, and does not efficiently promote knowledge construction. However, it is recommendable that the facilitator is presented as a coach who is there to give advice, rather than to show learners how to do things. The findings of these two studies accurately reflect the current state of e-learning today.

Background to the study.

In traditional classroom teaching, students will be taught by a teacher or a team of teachers. Students will listen to the lecture and take notes. However, students are different in terms of intellectual ideas and perceptions. Wasanasomsithi (2000) points out that different learners have different learning style preferences. Some students can learn and understand quicker and easier than others. Therefore classroom
teaching is not enough to suit individual differences, so we need modern technology to serve each student’s needs.

Subjects.

The subjects in this study were Kasetsart University students, Kamphaeng Saen Campus who registered to study 01355251 Communicative English for Careers for the second semester 2009, which is designed for students who have already passed three compulsory foundation courses. This course focuses on improving the four language skills (reading, listening, speaking and writing) to help the students succeed in getting a job. However, most students who register for this course are from different faculties—Agriculture, Liberal Arts and Science, Engineering and Education and Development. Most of them lack the skills to use English effectively because they lack the opportunity to practice it. Therefore, using e-learning to supplement classroom teaching in the Communicative English course will be useful for Kasetsart University students and students from other Universities. E-learning is developed to help students learn on their own at any time and anywhere. It provides the students with an opportunity to adapt themselves to the computer era and equip themselves with the skills to be ready for e-University.

Research procedure

Two groups, each comprising 20 students, were selected after pre-testing to determine homogeneity. In the first group, students studied Communicative English for Careers in a classroom setting. Students in the remaining group supplement their studies at will, using e-learning procedure.

Research instruments.

In order to evaluate the effectiveness of the use of e-learning to supplement classroom learning, the following research instruments were used:

1. E-learning lessons developed by the writer for students who studied Communicative English for Careers at http://pirun.ku.ac.th/~faaschb/engforcareers/main.html through the Internet used by Kasetsart University.

2. The test was divided into two parts: In the first part students read the article and chose the best answer. In the second part students read the article and answered the questions given.
3. Questionnaire: The questionnaire (See Appendix) was used to obtain students’ reactions towards using e-learning to supplement Communicative English for Careers.

The subjects’ responses to the questionnaire were analyzed in terms of mean scores which were interpreted as follows.

- 4.21 to 5.00 = Extremely
- 3.41 to 4.20 = A lot
- 2.61 to 3.40 = Fairly
- 1.81 to 2.60 = Not much
- 1.00 to 1.80 = Not at all

4. Semi-structured interview: To provide further support, 15 students were randomly selected for interviews at the end of the experiment. Students were asked for their opinions on using e-learning to supplement Communicative English for Careers.

Findings from the application of the three research instruments

Findings from the test

The test was done by both groups of students in the allocated time limit of 20 minutes. To reiterate, Group 1 had received no supplementary e-learning program, while Group 2 had received supplementary e-learning program. The test was measured by the number of correct answers from each group. Then the mean values obtained from the two groups were calculated for each exercise, as presented in Table 1.

<table>
<thead>
<tr>
<th>Test</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (control)</td>
<td>16.21</td>
</tr>
<tr>
<td>Group 2 (experimental)</td>
<td>24.28</td>
</tr>
</tbody>
</table>
Table 1. The mean values for the test of the two groups

From the mean-value of the test presented in table 1 the mean – value of the two groups with and without treatment were calculated as follows:

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Number of students</th>
<th>Mean</th>
<th>SD</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>20</td>
<td>16.21</td>
<td>4.94</td>
<td>-2.86</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>20</td>
<td>24.28</td>
<td>4.67</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Comparison of the mean values relating to the test

Table 2 shows that the mean value recorded from the test was higher in Group 2 (with treatment) than values recorded in group 1 (without treatment). The significant difference shown in the mean values comparing the two groups highlighted the potential for accelerated development of language skills through the use of e-learning.

Findings from the questionnaire

In the questionnaire, the subjects were asked to specify their attitudes toward using the e-learning program.

<table>
<thead>
<tr>
<th></th>
<th>The content of this e-learning program helps the students understand the lesson better.</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>4.4</td>
</tr>
<tr>
<td>2</td>
<td>The lessons in this e-learning program are sufficient for the students to develop their language skills.</td>
<td>4.25</td>
</tr>
<tr>
<td>3</td>
<td>The illustrations in this e-learning program are suitable.</td>
<td>3.8</td>
</tr>
<tr>
<td>4</td>
<td>The exercises in this e-learning program are related to the lesson and cover the content.</td>
<td>4.2</td>
</tr>
</tbody>
</table>
As can be seen from the table the students had favourable attitudes towards using e-learning to supplement their studies in Communicative English for Careers class. They considered the supplementary program interesting and user friendly. There was a favourable response relating to overall content and motivational aspects delivered through the use of the technology. Despite less appreciation for the illustrated content, students saw the e-learning program as helpful in developing their language skills. Finally, students felt that this program could both facilitate and enhance their learning experience. It should be noted that the mean values of question 10 is lower than other items. Students commented that this program doesn’t provide an opportunity to practice speaking like a real communication.

**Findings from the semi-structured interviews**

The results of the semi-structured interviews show that most students had positive attitudes toward using the supplementary e-learning program. Students in the experimental group considered this program to be more interesting than normal classroom learning. They could study by themselves without being bored.

The following are some quotes from students concerning their attitudes towards this program:

“This program helps me develop my listening skills. First I can not understand what they say. So I listen again and again until I can understand. I can listen as many times as I like”
“I like the e-learning program because it is simply accessible anytime and anywhere”

“This program helps me to think and develop myself”

“Traditional classrooms are teacher-centered but in e-learning we did everything by ourselves”

“I like this teaching program because I feel relax and enjoy learning.”

“I think teacher should develop a program which give students more opportunity to practice speaking English”.

“I prefer reading and doing exercises by e-learning because the presentation is interesting and stimulating. There are a lot of visuals and sounds which make it similar to a real communication in the classroom. Moreover, material is easy to follow.”

“The task that I like most is listening to completing the conversation. It is challenging and I find that simultaneously checking the answers by myself is very interesting.”

However, two extracts also highlight negative aspects of the e-learning program:

“Sometimes the computer is so slow that I am wasting my time while I wait to be connected”.

“I can’t find the server, so I can’t use e-learning”.

**Discussion and practical applications.**

The data obtained from all three sources indicates that the supplementary e-learning program helps students develop their language skills.

The transfer of learning emphasis from teacher to student self-help suggests considerable changes in the delivery of language skills. The qualitative data presented above gives evidence of learner-centeredness and a consequent transformation of the role of the teachers from lecturers to facilitators as well as encouraging motivation and learner autonomy.

**Learner-centeredness**
The results from the semi-structured interviews indicate that the roles of the teacher and students had been shifted from being teacher directed to learner-centered. Hedge (2000) points out that the term learner centered has four central characteristics. The first is that learners participate in the whole process of designing the course content and selecting learning procedures. The second is that learners participate in the design of language activities. The third is that learners are encouraged to take responsibility to a great degree for their own learning. The fourth characteristic is that of enhancing learner autonomy.

This focus upon the learner results in a “bottom up” program being developed through collaboration between teachers and learners, rather than one introduced by specialists in a “top-down” or “specialist” approach, (Johnson 1989, cited in Tudor, 1992:32). Through this collaboration, learners are expected to be actively involved in their learning. By the same token, students and teachers are also expected to collaboratively make decisions concerning assessments and evaluation (Nunan, 1998; Tudor, 1992; Nunan & Lamb, 2001).

**Changes in Teacher and Learner Roles**

Due to changes in the roles of teacher and students, classroom interaction in the e-learning program was considerably different from the students usual classroom studies. The role of teacher in their normal classroom can be summed up with Hammond’s (1990) notion of an “authoritative” teacher, and with the principle of interactive approach.

The e-learning program offered students roles as active learners. The students actively participated in learning tasks. The students liked their roles as “active learners” and they were conscious of the benefits of "collaborative learning". Overall, they expressed positive attitudes towards this new learning experience. Students also appreciated the move between the role of the teacher as scaffolding builder to facilitator. Students regarded this program as a helpful tool for them to learn English.

**Motivation and Learner Autonomy**

The data from the questionnaire shows that the use of e-learning can motivate students to develop their own learning. This motivation can often encourage learners to become more responsible and willing to engage in their own learning, which is defined as learner autonomy. (Blin, 1999; Lightbown & Spada, 1999; Toyoda, 2001). In the context of autonomous learning, learner’s interests can be maintained depending on whether they find the materials they use interesting and useful (Frankel, 1982; Hughes, 1982).
It has also been noted that there were some difficulties relating to the computer system and the internet connections. Teachers should be aware of possible technical problems and tackle them by giving CD Rom to learners who do not have an internet connection at home.

Conclusion

E-learning allows students to develop and practice English language skills outside the classroom. It can be used to supplement and even replace in-class teaching material. This move to decentralize learning is becoming a major trend around the world. Most importantly, the success and value of any e-learning program cannot be gauged by the ability to make use of technology but rather the ability to maximize students’ learning effectively.
Appendix 1 Questionnaire

Please write your name and put a cross (x) to indicate your studies. Indicate your attitude to the comments on the grid by putting X under the appropriate number of your choice relating to each comment.

1. Gender (  ) Male (  ) Female

2. Faculty (  ) Education (  ) Liberal Arts and science
   (  ) Engineering (  ) Agriculture
   (  ) Veterinary Medicine

3. Year (  ) 2 (  ) 3 (  ) 4

Please specify your attitude towards using e-learning to supplement classroom teaching in Communicative English for Careers.

5 Extremely 4 A lot 3 Fairly 2 Not much 1 Not at all

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>The content of this e-learning program helps the students understand the lesson better.</td>
<td></td>
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<tr>
<td>2</td>
<td>The lessons in this e-learning program is sufficient for the students to develop their language skills.</td>
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<tr>
<td>3</td>
<td>The illustrations in this e-learning program is suitable.</td>
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<tr>
<td>4</td>
<td>The exercises in this e-learning program are related to the lesson and cover the content.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Teacher should use this program to supplement in class teaching.</td>
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<tr>
<td>6</td>
<td>This e-learning program can motivate students to develop their learning.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>This e-learning program can facilitate and enhance students’ learning experience.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The presentation of materials makes the lesson more interesting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>This e-learning program is easy to use.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>This e-learning program covers all the skill areas – reading, writing, listening and speaking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The answer key in the e-learning program helps the students understand the content better.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>The number of the exercises and the level of difficulty are suitable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2 Questions of Semi-structured interview

1. Do you think e-learning helps you in learning English?
   (reading skills, writing skills, listening skills and speaking skills)

2. Tell me about the teaching and learning situations in the program.

3. How do you think the teacher's and students' roles in this program are different from those in your normal classes?

4. Can you identify the aspects of this program that you liked?

5. Were there things about the program that you didn't like?

6. What tasks did you like most in this program and what tasks did you dislike most?

7. Would you like other teachers to use e-learning to supplement English classes? If so, how?
8. Do you prefer reading and doing exercises from a book to e-learning?

9. What do you think about this teaching program?

10. Are there any other comments you want to make about the program or about what you have learned in the program?
Example of the course syllabus
The main objective of the course
1. Study vocabulary used in different situations.
2. Modeled dialogues and role play practiced in pairs and small groups.
3. Practice the four language skills-listening, speaking, reading and writing.
4. Practice listening for the gist of the conversation and to pick up specific points of information.
5. Practice various types of writing tasks.
6. Create self-confidence by using the language.
Unit 1
Introduction

Objective: To become acquainted with people you work with

Tasks:
- to introduce yourself to new workplace colleagues
- to swap information about jobs and responsibilities
- to find out about other people's jobs
- to read a personal profile
- to role-play in different situations

Example of a lesson
Example of an exercise for choosing between formal and informal

Now listen to some more people meeting one another and tick whether it is a formal or an informal greeting. Then write the clues.

<table>
<thead>
<tr>
<th>Conversation</th>
<th>Formal</th>
<th>Informal greeting</th>
<th>Clues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Listen</td>
<td>✓</td>
<td></td>
<td>Good morning. May I introduce you to. How do you do?</td>
</tr>
<tr>
<td>2 Listen</td>
<td>✓</td>
<td></td>
<td>May I introduce you to...</td>
</tr>
<tr>
<td>3 Listen</td>
<td></td>
<td>✓</td>
<td>Hi, Hello</td>
</tr>
<tr>
<td>4 Listen</td>
<td></td>
<td>✓</td>
<td>Hi, You too.</td>
</tr>
</tbody>
</table>
Example of the exercise which the students have to type the answer
References


From Gifted Student to Teacher:

Transferring personal experience into professional practice

Topic Area: Gifted Education

Presentation Format: Workshop

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From gifted student to teacher: transferring personal experience into professional practice

ABSTRACT (for Workshop)

Giftedness has traditionally been perceived as an innate, natural talent indicated by remarkably high levels of performance in one or more areas, compared to others of a certain age.

However, cannot giftedness also be created and nurtured?

If the mind is cultivated at an early age, students can expand their minds and enhance their cognitive development at an increased level and rate. Giftedness can be created not only by expanding what is in the box but by expanding the box itself.

This workshop will firstly explore how a unique holistic, educational upbringing can enhance and accelerate giftedness.

My education was not by any means a classic example of an education location: There was no bell signaling the end of classes; no buzzing of the hallways as groups of children gather to discuss what holds a special meaning for them; no rush for the cafeteria in school breaks; no scores of children milling outside classrooms waiting for a teacher to permit them to enter the room that would be their domain for cognitive expansion for the next class period: there was no school with a body of teachers, bands of students, and multiple classrooms.

But, there was one classroom, one teacher, and two students.

The classroom was situated in my house – my home; the teacher was my mother; and the students – I and my twin brother. My home was set in a quiet, suburban, middle-class area with a looming forest behind me and the breadth of an open quarter-acre field of grass before me. The classroom was in a quiet area towards the back of the house, secluded and private but still connected to the goings-on of daily life outside the learning space. A door – the entry to my formal world of learning – on one side of the classroom and a clear window on the other provided a sense of openness in what could otherwise have been a rather closed and ‘busy’ space.

Upon entering the classroom, the primary domain in which my learning occurred, I, along with any spectators, could immediately discern its purpose; its role in the process of my formal education: The teacher’s desk was stationed center front, while my and my brother’s desks were side by side slightly inverted towards each other. The whiteboard hung on the front wall surrounded by a series of graphic organizers as large as posters. The whiteboard and the teacher’s presentations were visible to both students. A stimulating and inviting vision, there was a planned complexity in the classroom with a balance of order and novelty: previously-used advance organizers on the walls, a large world map on
the back of the classroom door, science models hanging from the ceiling, shelves of books combing the back wall, stationary and learning utensils neatly organized in cupboards. All material was arranged to maintain visual order and aesthetic harmony in the classroom, while resources were easily accessible and stored and displayed to encourage independent use.

Throughout my formal education, the learning environment was frequently adjusted. During my secondary years of schooling in particular, the location of my formal education moved beyond the classroom into other areas of the house and outside, where ICT could be more easily accessed and my need for variety in learning places could be satisfied. Discussions, brainstorming, the viewing of educational videos, and general academic study expanded in location beyond the classroom to the lounge room, which included sofas, a larger table at which both teacher and students could be seated, and a kitchen, and increasingly beyond the house. Thus, both the classroom and the lounge room – quiet, stimulating, and visually inviting areas – were integrated into my learning environment, the location of which throughout my formal education was primarily my home. As my formal education was set in an informal setting, the home, when the education location was expanded to increasingly informal settings, a change of perception towards the learning environment was also necessary on the part of the student. Barriers or partitions were initially utilized to indicate the learning area, the classroom. However, in the secondary years of my formal education, an internalized set of barriers developed, in which a space with few architectural features or physical markers distinguishing the area as a learning place was imbued with meaning as a place of learning through psychological rather than physical markers.

The implications of the physicality of my education location for the environment and context of my education were manifold, reflecting a series of ideals and philosophies that surrounded the deliverance of an individualized, home-based, accelerated education in a personal learning environment that served to address my needs as a learner.

The physicality of my primary education location enabled the establishment of a more relaxed, familial, and personal learning environment. The home was not only a model, a natural laboratory for my learning; it was the primary location of a holistic education. The learning space became a learning place, as the home in addition to being recognized as a place for living, became imbued with value as a place for stimulating cognitive, affective and psychomotor development. Far from being relegated to the confines of an age-segregated institution disassociated from the lives of those closest to me, I was dominantly situated during my formal education in a warm, caring, familial environment which encouraged a sense of belonging, safety and security. The learning climate thus allowed me to feel comfortable with explaining my ideas, expressing my opinions, and venturing my personal and creative thoughts about topics.

However, the learning environment not only established order and an atmosphere of warmth and security; it also provided novelty. The learning environment in which I immersed myself during my formal education provided an element of excitement which encouraged intellectual growth, and stimulated accommodation and adaptation to increase development. The high quality, high quantity learning materials and resources which I was fortunate enough to have at my disposal encouraged significant cognitive, affective and psycho-motor advancement. My learning environment was hardly confined to a classroom or home; rather every sight, every sound, every experience was perceived as an opportunity for learning . . . and I was taught to appreciate each experience as an opportunity to expand my knowledge and understanding of the world around me. A clear balance between the construction of efficient routine and allowances for spontaneity provided order yet flexibility, novelty and variety in my educational experiences, to broaden the vista of my world-view and enhance my cognitive, affective and psycho-motor development.
As a child, I was exposed to a nebula of experiences designed to maximize the development of the five senses as well as my “kinetic sense”. These experiences served not only to enhance my academic abilities, but also to develop my character, my sense of aesthetic appreciation, and my understanding of beauty, finesse, and subtle variations. My education was intended to progressively develop all my faculties and abilities, and thus to facilitate my development as a multi-dimensional human being. From an early age, I became involved in the dancing arena – developing my skills in ballet, contemporary ballet, tap, and jazz, as well as singing and acting. I dedicated between twenty and thirty hours a week to dancing – my passion and my primary interest outside of study for the majority of my schooling and tertiary years. Through my dancing and for instance through state-wide competitions, I was able to interact frequently with students my own age. However, I was also able to extend the age boundaries of my interactions with people, as I often performed for church groups and multicultural groups. For instance, in January 2005, my brother and I performed for the humanitarian aid relief concert in Brisbane for victims of the Boxing Day tsunami. Sports activities such as “Little Athletics” and T-Ball, as well as group oriented activities such as Girls’ Brigades, similarly served to simultaneously enhance my social and psycho-motor development.

However, during my formative years and beyond, in what could be perceived as more academically oriented activities, aesthetic appreciation and opportunities for creativity were maximized – whether it was attending science exhibits, exploring parks and botanical gardens, or viewing art museums. Furthermore, I was also fortunate to have had a wide range of cultural and social experiences, in which I was perceived as a respected member of the group with something to offer. These experiences facilitated my interaction with different groups – with people who had the same interests as me regardless of age – whether it involved meeting and having comprehensive discussions with professors from universities such as Australia’s University of Queensland or America’s University of California or discussing the context of exhibitions with the artists themselves.

Even discussions with my own parents – something one might take for granted – served to foreground the importance of an open mind, compassion and understanding with regard to international, multi-faceted communities. As a first generation migrant from Egypt, who arrived in Australia prior to the era of multiculturalism, my mother has been able to offer great insight into the plight of minority ethnic groups in a society. Furthermore, the stories she has revealed to me stemming from her own Greek heritage has made history come alive for me – a major contributing factor to my passion for both learning about and teaching history. Having a highly multicultural family with a strong European heritage has also engendered in me sensitivity to historical crises and their effects on actual people and societies.

Thus, throughout my education, I was encouraged to see all learning places and experiences as opportunities for me to exercise my powers as a meaning-maker, as a problem-solver and as a contributing member of society.

The very nature of the education location – homeschooling with a ratio of one teacher to two students - enabled the construction of a learner-focused classroom. A crucial element of the learning environment was sufficient allowance for individuality. My learning was neither anonymous nor impersonal; rather it epitomized the extreme implementation of the concept of differentiated instruction, allowing for accelerated learning, which could not have occurred in such an extreme manner without the academic confines and freedoms created by the home environment.

Intricately related to my mother’s decision to conduct my formal education in a home-based setting and to implement the pedagogical practice of differentiated instruction through accelerated learning were her philosophies on the purpose and qualities of a ‘good’ education. Education was perceived to be the
right of every human being; however, with that right came certain social responsibility. Motivated by
the search for universal truth and the inextricably related critical analysis of knowledge to discern
inherent power relationships and extract insights on the sources of social inequality, fluency and
flexibility in divergent thinking were encouraged and developed in my education, as were critical
thinking skills and metacognition to critique acquired knowledge and the concept of knowledge itself.
This social element of education, promoted during my years of schooling, required a heightened sense
of agency, as there was an overriding emphasis in my education on the social values of collaboration,
compassion for others, and concern for the qualitative improvement of the status of the disadvantaged.
High expectations, self-efficacy, and aspirations for personal achievement accompanied by future
orientation, an intrinsic motivation for success, and a desire for recognition were also inherent in my
belief system, intricately linked to my constructed view of the purpose of my learning and the desired
outcomes of my education.

However, the comparison of acquired knowledge and ideals with reality in my life and the lives of
those in the wider community as well as my recognition of uniqueness and difference in a social
context were not only influenced by my own socio-cultural background but also by my informal
education, which included frequent interaction with multicultural groups, general social interaction,
documentaries and cultural exposés, and cultural enrichment programs. The exposure to other cultures,
frequent during my informal education, encouraged a new insight into social issues as well as an
empathy and compassion towards other members of society. Both my formal and informal education
were actively directed at providing me with the cognitive and metacognitive skills to address larger
social issues, by recognizing and understanding the depth and breadth of their establishment in
contemporary society, by theoretically criticizing power relationships and their implications for the
welfare of all socio-cultural groups in society, and by actively working towards deconstructing these
power relationships and advancing the cause of those members of society subjected to social injustice
and inequality.

This recognition and understanding of individual differences was modeled by my teacher in the world
of intellectuality and cognitive development. Inherent in the implementation of differentiated
instruction were the positive recognition of learner differences and the acknowledgment of the right of
equal participation in learning environments. As a student with a ‘high intellectual potential’, I
exhibited an above average ability to learn, a high level of creativity, and a high intrinsic motivation to
learn and achieve shown through my level of commitment to the task at hand – qualities which required
conversion into talent. However, such a conversion could not occur without self-confidence and self-
efficacy generated by the belief that my uniqueness as a learner was embraced as an attribute not as a
tendency or as a problem by the teacher. A holistic education which maximized the benefit of
environmental factors such as parental, teacher, encouragement, a positive learning environment and
high expectations and personal factors, such as motivation, interest in acquiring knowledge and self-
efficacy, thus combined to maximize my learning potential, enhance my cognitive development, and
increase the potential benefits of differentiated instruction in a home-based setting at an accelerated
pace.
CONNECTION TO CURRENT PROFESSIONAL PRACTICE AS A TEACHER OF SENIOR HISTORY, GEOGRAPHY AND ENGLISH

My education was by no means a classic example of an education location, environment or context. The nature of the learning environment – personalized, structured, familial - established throughout my education and the context of my education as both modeling and encouraging recognition of individual differences and divergent viewpoints has significantly influenced my path in the post-school academic arena and indeed also my own burgeoning pedagogy and epistemology as a teacher. Having developed a love of learning and in particular a love of history during my secondary schooling, I began a Bachelor of Arts Degree, at the age of eleven, majoring in Australian Studies (History) and with sub-majors in English Communication and Visual Culture. Highly valuing the illumination of interdisciplinary connections, I developed my knowledge in the Humanities arena and my understanding of the interrelationships between specific disciplines such as English, History, Studies of Religion, Visual Culture, and Media Studies. Having completed my Bachelor of Arts Degree from Griffith University at the age of fifteen, I then commenced postgraduate studies in the field of modern history and completed a Masters of Letters in History. Stemming from my postgraduate studies, I authored a book on the economic and socio-cultural relationship between Pacific Islander communities and Queensland, Australia.

Recognizing the importance of the study of History and English for the development of a new generation that is knowledgeable, literate and compassionate as well as the crucial role of members of the teaching profession in imparting that knowledge and understanding to this young and vibrant generation, I focused my efforts on completing a Graduate Diploma of Learning and Teaching, which I began at the age of seventeen.

My personal interest in secondary schooling can be attributed to my belief, supported by literature on the subject, that these years are a critical turning point in a child’s education. I believe that just as the early years of a child’s life are crucial for maximizing neurological development, early adolescence is similarly a crucial stage, during which teachers have the opportunity to instill in students a more positive and open-minded attitude towards education. Consequently, using the Dimensions of Learning framework, I have, while catering to all students along the abilities spectrum, implemented unique strategies to motivate and extend high achievers and gifted and talent students in the Senior Humanities arena. I implement a multitude of innovative pedagogies to make learning engaging for my students and to maximize the effectiveness of the learning experience for students along the range of the abilities spectrum. As an advocate of the Multiple Intelligences theory, I facilitate a comprehensive understanding of concepts, events, and processes and foster the development of skills using a variety of methods, including incorporating music, videos, artworks, written text, and ICT. The incorporation of ICT in particular serves both to enhance the learning experience for my students but also to address their needs as a generation which is highly technologically aware and competent. In addition, valuing the development of interpersonal skills as well as self-evaluative skills, motivation and self-directed learning, I incorporate both group work and independent study in my lessons. While I encourage students to develop their more forthright intelligences, I also provide an open-minded, supportive environment in which students can feel safe in ‘revealing’ and developing their weaker intelligences.
As a strong supporter of a holistic education, I facilitate the development of not only my students’ cognitive dimensions but also the emotional, social, and spiritual aspects of their being. I am a strong believer in the importance of the core Christian values of compassion for others, empathy, respect, justice, responsibility for one’s actions, and belief in the goodness of humanity. Consequently, I endeavour to model these values and provide a supportive environment in which my students can evolve as conscientious citizens. As part of my classroom practice, I focus on my students’ perceptions of themselves and the wider community and their integral role in its transformation. I encourage my students to develop a sense of self-respect, and I empower them to feel unique and to recognise that their opinions are valued. I assist my students in identifying their strengths and maximizing their learning potential; while providing a supportive environment in which they can expose and improve their cognitive and affective ‘flaws’. Modelling a strong motivation to learn, an optimistic outlook on life, and strong social values, I also encourage my students to develop a sense of self-efficacy which aids not only the process of self-improvement and self-understanding but also the process of understanding the perspectives, cultures, and values of other members of society. Furthermore, I provide my student with self-management training, enabling them to understand that learning is a life-long process, that they can enhance the benefits of their learning experiences, and that they can maximize their learning potential and cognitive development. Thus, through a holistic education, my students can develop the skills required to behave not only competently but exceptionally in ‘adult’ life. Furthermore, they can develop a heightened sense of agency, self-confidence and self-efficacy, encouraging them to feel empowered and able to transform society and introduce qualitative improvements.

However, most importantly, I recognize due to my own non-traditional educational upbringing which extended beyond the cultural construct of a typical K-12 education, that each student deserves the opportunity to be motivated, interested and extended.
This workshop will thus also give participants the opportunity to formulate their own conclusions on gifted education and develop a range of strategies for differentiation in the field of gifted education.

In this workshop, participants will have the opportunity to work as a community of inquiry to construct their own definition of giftedness, in the process commentating on the nature versus nurture debate and deliberating on the ‘myths’ surrounding giftedness and gifted education. Participants will also analyse and develop their own conclusions on the work of a highly gifted, accelerated student.

Participants will also reflect on and endeavour to apply to their own sector and specific subject area a range of strategies I have successfully implemented to motivate high achievers and gifted and talented students, sustain their interest and extend not only their cognitive development but also their affective development. Strategies designed to motivate and interest students to be discussed include illuminating interdisciplinary connections, developing individualised curriculum by incorporating student-specific interests, encouraging creativity, incorporating ICTs, connecting humanities curricula with the creative arts, and curriculum compaction and modification. However, while practices such as the afore-mentioned which serve primarily to extend their cognitive development will be explored; so too will strategies I have successfully implemented in order to enhance the affective development of students and bridge the boundaries between cognitive and affective development – which students in their formative years so often perceive to be entirely divergent and disassociated. These strategies to be explored in the workshop include conducting workshops on metacognition and on developing partnerships with other students, parents and teachers, and educational institutions, in-class and extra-curricular philosophy and critical reasoning activities, and service learning.

As well as gaining insight into the implementation of these strategies, participants in the workshop will develop an understanding of how these practices in fact stemmed from my own upbringing and unique holistic education as a gifted student and how they served to enhance cognitive and affective development during my own formative years and beyond.

Thus, through their involvement in this workshop, “From gifted student to teacher: transferring personal experience into professional practice”, participants will be able to gain first-hand information on the experiences of a gifted student during her highly accelerated, unique holistic education and early entry into university. They will also develop an understanding of how one’s own experiences as a student can be reflected on to enhance one’s own professional practice as a teacher. Finally, participants will acquire a breadth of strategies on implementing differentiation for gifted education in the context of a mainstream classroom and as part of an extra-curricular program.

Katherine Alpert
1. Introduction

In all Japanese public elementary schools, all the students in the fifth and the sixth grades will learn English in the period of foreign language activity once a week from 2011. The aim of foreign language activity class proposed by the Ministry of Education, Culture, Sports, Science & Technology (MEXT) is to form the foundation of pupils' communication abilities through foreign languages. Classes of foreign language activity will be carried out orally in principle, and the letters of the foreign language will not be instructed there. Does mainly oral education at elementary school smoothly link to literal education at junior high school? Is letter learning indeed unnecessary for foreign language activity in elementary school? Are children who are learning the content of the school subjects with reading and writing in their mother tongue satisfied with oral instruction in classes of foreign language
activity cognitively and affectively? If literal learning is incorporated in class of elementary
school foreign language activity, what introduction can help children to begin to read? This
study shows that an introduction of literal learning is needed at elementary school, and
proposes voluntary reading in which the child is exposed to contextualized literal input with the
sounds and the pictures at elementary school as one of introductory ways to literacy.

There have been arguments for and against incorporating the instruction of the
letters in elementary school foreign language learning of Japan. Some researchers have been
anxious about instruction of incorporating the alphabet letters in class of elementary school
foreign (here, English) language activity in Japan. Others have proposed that elementary
school children should be familiarized with the alphabet letters or learn to read some
three-letter words. However, it is controversial how the letters of the alphabet should be
instructed and what should be instructed: for example, knowledge of letter names, how to read
words, how to spell words, or how to read sentences. How should the letters be incorporated
into elementary school foreign language activity in Japan?

Generally, reading picture books to children is said to be one of the important factors
in developing their reading ability of their native language. Children look at the pictures and
sometimes follow the letters which are read, by listening to the sound which is read aloud. All
of these three factors, i.e. the pictures, the letters, and their sounds which children hear are
integrated and contextualized in the book and support children’s understanding of the text. In
this way, native children can recognize the letters consisting of the words with hearing the
sounds while understanding the meanings. In other words, the input which is comprehensible
to native children who do not yet learn to read and elicits recognition of letters from them
consists of the letters which constitute words whose meanings are clarified by the context in the book, i.e. contextualized, the sounds as in which they are pronounced, and the visual materials, the pictures, which shows what it refers to in the book. In this paper, what these three factors are integrated in is called contextualized input and exposure to contextualized input in the book is called contextualized reading.

If children who learn a foreign language and do not yet read in the learning language do contextualized reading, can they notice the letters consisting of the words with hearing the sounds while understanding the meanings? The aim of the study investigates whether contextualized input in the book influence on the development of language learning of elementary school children of Japan who do not yet learn to read in the learning language and how they perceive the experience of contextualized reading.

2. Introduction of literacy; Native young speakers and reading

Reading picture books to the child seems to provide them with a stimulus for the start of reading. The child who is read picture books to comes to recognize the shapes, the names, and sounds of the letters gradually. Once s/he is interested in letters, s/he may ask her/his parents to ask how the word s/he is seeing in the book is pronounced, or which the word on the page her/his parent or caretaker is reading aloud now is. In this way, the child learns to read, sometimes to remember how to pronounce the words, or sometimes to analyze the relationship between the sounds and the letters names while her/his parent or caretaker is reading picture books to her/him with no intention of teaching her/him, the listener, how to read the words in the book. Then, s/he gradually begins to read aloud by themselves. In other
words, exposure to letters which have meanings contextualized in the book with the sounds which are read aloud by the reader and the pictures which shows what the text refers to plays an important role to stimulate children’s literacy.

Some researchers have investigated that knowledge of letters of the alphabet is important for the starting of reading. Adams (1990) proposed that having familiarity with the letters of the alphabet, especially knowing letter names, is advantageous to learning to read, as follows:

1. A child who can recognize most letters with thorough confidence will have an easier time learning about letter sounds and word spellings than a child who has to work at remembering what is what.

2. Children who automatically see the letters as wholes will see the words as patterns of letters. Children who do not, will have to work on the patterns of the individual letters as well.

3. There is evidence that a comfortable knowledge of the names of letters hastens children’s learning of their sounds because it mediates their ability to remember the sounds. (1990, p.63)

By having familiarity with the letters, children come to know each letter shape accurately and quickly, and to learn letter sounds and word spellings smoothly. Furthermore, they can automatically recognize a spelling not as a line of individual letters but as a pattern as a whole, and can find that the names of some letters are clues to their sounds, so they can read some words easily (Treiman, Weatherstonn, & Berch, 1994; Treiman, Tinoff, Ruth, & Eichmond-Welty, 1997).
As English native children are surrounded with oral and literal input of their mother tongue, English, they usually come to familiarize themselves with the letter names and shapes of the alphabet, hearing their sounds. Therefore, they can smoothly begin to read words and sentences in picture books by themselves. In other words, exposure to oral and literal input gives familiarity with and knowledge of letters, which can supply children with clues to reading.

3. Introduction of literacy; fifth- and sixth-grade learners of Japanese elementary school and the alphabet letters

As stated above, having familiarity with and knowledge of the letters seems to facilitate children to read smoothly. Do fifth- and sixth-grade students of Japanese elementary school learn about the alphabet letters?

In Japan, letter names and shapes of the alphabet are usually introduced to third- or fourth-grade students as Roman representation of Japanese. This is the first time for most students in Japan to learn them in formal instruction. They learn the letter names, letter shapes, how to write each letter, and how to represent Japanese words by using the alphabet letters with instruction of the phonological system of Japanese, in six-hour classes of romaji of the school subject of Japanese. However, this instruction specializes in Japanese, not for English.

In some elementary schools of Japan, the alphabet letters are incorporated in foreign language activity, while in other schools it mainly focuses on oral communication, not on literacy education. In the latter schools, the fifth- and the sixth-grade students have no experience of learning of the alphabet letters as representation of English in classes of foreign
language activity. Therefore, all fifth- and sixth-grade students in Japanese elementary schools know the letter names and shapes of the alphabet, but not all know them as representations of English.

As Introduction stated, there have been arguments for and against incorporating the instruction of the letters in elementary school foreign language learning of Japan. Some researchers have opposed it. Considering that there are just thirty-five foreign language classes in a year, this objection is a matter of course, because incorporating the alphabet letters in foreign language activity may possibly burden the student of elementary school with load.

On the other hand, Arakawa et al. (1998-1999) reported that some fifth and sixth graders had anxiety in learning English orally, that some stated that they could easily remember what they would say when the alphabet letters were shown to them in class, and that some felt comfortable when the letters were used in class, while the ways of showing the letters to the students were reported to be various. Arakawa et al. (1998-1999) mentioned significance of showing the letters in oral foreign language learning, as follows:

1. Showing the letters in oral foreign language learning satisfies fifth and sixth graders’ intellectual craving.

2. Showing the letters in oral foreign language learning hastens fifth and sixth graders to grasp the sounds consciously and analytically.

3. Showing the letters in oral foreign language learning helps the content to be memorable and accumulated in the children.

Showing the alphabet letters in oral foreign language class seems to facilitate cognitively and affectively development of children’s foreign language ability. However, Arakawa et al.
(1998-1999) warned that to add the letters to orally foreign language activity is not effective and may confuse fifth- and sixth-grade students of elementary school, unless there is enough oral input. Therefore, teachers should be extremely careful about introducing the letters to foreign language activity in elementary school of Japan. In this way, the introduction of letters seems to be effective in foreign language learning of fifth and sixth graders in elementary school of Japan, when children are not forced to read letters, words, and sentences, but shown them with the aid of the sounds and the visual materials from which children can easily guess the meaning of the words.

4. Reading and gaining vocabulary

As stated above, the researchers investigated some clues or introduction to reading either in the first language acquisition or in foreign language learning. People who can read have a lot of advantages. Generally, both in acquisition of mother tongue and in learning of a foreign language, what children/learners should first do is to understand oral input and then they learn to read, although in the past, the students in junior high school of Japan started oral learning and literal learning simultaneously. In each case, language learners must recognize the relationship between the letter and the sound to catch the meaning of a mass of letters they are seeing. Kavanagh and Mattingly (1972) stated that “The process of learning to read is the process of transfer from the auditory signs for language signals which the child has already learned, to the new visual signs for the same signals”(p. 134). “The process” stated by Kavanagh and Mattingly means to a process of recognizing the relationship between the letter and the sound, and this process is letter learning. It is the basis of reading, and therefore,
important. Even if the reader is able to know the sound (pronunciation) of a word, and if s/he does not know its meaning, what s/he does is not really reading. Reading means to get the meanings from the literal representations. Therefore, to increase vocabulary whose meanings the reader know is also important.

Krashen (1989) suggested that “A large vocabulary is, of course, essential for mastery of a language. Second language acquirers know this: they carry dictionaries with them, not grammar books, and regularly report that lack of vocabulary is a major problem” (p. 440). A small amount of vocabulary does not enable the foreign language learner to understand the meaning of utterances in communication, while increasing the amount of vocabulary makes input more comprehensible.

There have been various strategies to gain vocabulary. Memorizing meanings of words independently without context has been one of popular learning strategies for foreign language learners in Japan. However, some researchers doubted its effectiveness (Krashen & Terrell, 1983; Nagy, 1997). Nagy (1997) stated that “Definition-based learning typically involves memorizing (or attempting to memorize) brief definitions representing only a single meaning of the word to be learned, and hence leads to only a shallow level of word knowledge” (p. 73), and that “[t]he abstract definitions that must be postulated to account for the range of contextual specific meanings” are far from “the learner’s actual knowledge of words” (p. 72). Nagy (1997) proposed that a word must be gained when it “is encountered repeatedly in context” (p. 74), because “No single encounter with a word, whether instruction or in the course of reading or listening, can lead to any great depth of word knowledge” (p. 74). The word which is encountered repeatedly in various contexts could be deeply understood and then stored in the
learners’ long-term memory (Krashen & Terrell, 1983; Arakawa et al., 1998-1999). In other words, the more frequently they meet a word in different contexts, the deeper learners’ understanding of it is and they can build up a concept of the word as a mental lexicon. Through this process, they can gain and use vocabulary appropriately. Therefore, gaining vocabulary requires learners to have chances of meeting a word in context repeatedly. One of the chances is reading. Nagy (1997) reported that both L1 and L2 readers can gain vocabulary from context when they read a lot of books. Especially, he indicated that “The benefits of the book flood notion may stem from the fact that second-language readers encounter unfamiliar words at a greater rate, and hence have more opportunities to learn from context” (p.76).

Therefore, reading is one of the best ways the learner can meet words in context. However, the novice or the less proficient learners cannot read through a book deeply and quickly enough to gain vocabulary. Grabe (1991) pointed out that “Less proficient readers often appear to be word-bound, and this phenomenon is often taken as evidence that students are “stuck” on words. … students were not sampling rapidly enough and were afraid to make guesses, to take chances” (p.391). Novice learners tend to adhere their eyes to every word and cannot read on the book with guessing a context, because they do not rapidly elicit the appropriate meanings of words from the present context. In order to solve the problem, extensive reading is helpful. In extensive reading, the reader can start reading books whose level is easier than the levels of her/his proficiency. At the beginning to read easier book, the process of reading becomes rapid and easily automatic. The texts which consist of words known to learners are easy for them to guess, and thus they do not have to stick to every word. In progressing reading step by step, they can get to guess from the context the meanings of
words which they do not know. Successively reading promotes automatic processing of reading and allows learners to guess the meanings of unknown words from the context. In other words, the context helps learners to understand the meanings of the words unknown to them. When learners continue to read books extensively, learners can meet a word in context over and over, guess its meaning from context, and gradually understand the concept of the word. In this way, learners can increase vocabulary through extensive reading. According to Miller (1941) quoted in Krashen (1989), individuality and autonomy in extensive reading also help learners to gain vocabulary.

In addition to reading extensively, reading freely, which means to read what the reader likes to read in her/his own way, seems to be more effective. From the experiments in Krashen (1989), he stated that there were some facts “that those who report more free reading outside of school have better vocabularies” and some facts “that those who participated in in-school free reading programs show significant vocabulary gains” (p.444). As books contain a huge number of words with context, reading extensively and/or freely can provide learners with chances to meet various words in context to gain them.

Finally, when learners do not yet learn to read or can not read on a book smoothly, reading with the aid of sound and visual materials seems to have effect of gaining vocabulary. Wells (1986) reported that children who heard more stories during their preschool years were judged by their teachers to have better vocabularies. Li (1994) indicated from some researches that “Captioned television has been used to enhance language skill development of L2 students. It gives students a chance not only to hear, but also to read what is being spoken” (p. 33). In addition, Li stated that learners of all of the beginning, the intermediate, and the advanced
levels comprehended better when they used captions. Adding reading to hearing facilitates all-level learners’ comprehension. In other words, sound, texts (letters), and visual materials (pictures) in context and seem to be helpful for understanding the input constituted by vocabulary. So this is congruent with what is elicited by reading picture books to children.

In sum, language learning exclusively includes gaining vocabulary. Reading needs mastery of a certain amount of vocabulary while reading is one of the best chances to gain vocabulary. In other words, reading and gaining vocabulary are deeply related with each other in language learning.

5. Research questions

Native children come to read through having familiarity with letters with seeing and hearing picture books which are read aloud by the parents or the caretaker. The literal input whose meaning is contextualize in the book, the sound as in which it is pronounced, and the pictures which show what it refers to play an important role in the start of reading smoothly. Therefore, when novice language learners are exposed to these three factors, they can begin experience of reading, which is called contextualized reading as stated in Introduction. If contextualized reading is one of reading, does it allow novice language learners to gain vocabulary?

Furthermore, showing letters of alphabet in classes of foreign language activity is cognitively and affectively suitable to fifth- and sixth-grade students because some of them, who might are familiar with oral and literal learning of school subjects in Japan, feel anxious about oral instruction in classes of foreign language activity. Research questions come from the
ideas that vocabulary is gained in reading and that some of fifth-grade students feel easier when they are shown letters with aid of oral instruction of foreign language activity, as follows:

1. Can fifth graders of elementary school in Japan gain words from contextualized reading?

2. What kinds of words do fifth graders of elementary school in Japan gain?

3. How do fifth graders of elementary school in Japan feel about contextualized reading?

6. The study

6.1 The participants

The participants were seventy-nine fifth-grade students of Totsuka Dai-ichi elementary school in Shinjuku-ku in Tokyo. They had fifteen-hour English class per a year in the first and second grade, twenty-five in the third and fourth, and thirty-five in the fifth. Totally they had given 115-hour instruction, which is content-based or theme-based. However, they did not yet learn reading formally.

6.2 The materials

In this study, we used The LeapFrog Tag Reading System. The LeapFrog Tag Reading System is an electronic book reader for children, including paper pages and a wireless, battery-operated pen and using proprietary technology that embeds, in a tiny dot pattern on the books' printed pages, about 150 sounds in each book. Each picture plays music and sound effects that vary each time children click. Children pass the pen over the words to hear the story in English, or they can click on a picture for a sound effect. Children are able to control
the reading of the book by placing the book pal on the word or sentence and other images. After children have played, teachers or parents can connect the book pal to the online LeapFrog Learning Path to see the children progress and get printable activities to expand the learning.

We used eight English picture books: *1-2-3 Dora!, The Opposites, ABC Animal Orchestra, Pooh Loves To..., Curious George Color Fun, National Geographic Kids(tm): Activity Cards - Land Animals, National Geographic Kids(tm): Activity Cards - Birds and Sea Animals*, and *Super Speller*. Some of them are translated into Japanese, but whether the participants had read them in Japanese was not investigated.

6.3 The procedure

Before the experiment, the students read the books for ten days in February and March, 2010, when English class was not held. In this reading session, each student chose a different book which s/he wanted to read, with a pen in ten or fifteen minutes every day, while the time of reading was not fixed in a day, but rather different, dependent on the school schedule of each day. Every student had a pen in which all the verbal materials and the sound in all eight books which would be used for this study had been copied from the server of the company which developed the system of the books.

6.4 The method

The experiment was carried out in the students’ classrooms three days after the reading session finished, in March, 2010. In the experiment, the students answered the questionnaire of what words they got to know from the books in the reading session and how
they perceived contextualized reading. The form of the questionnaire is open-ended, and the students described their answers on the sheet. It was not instructed whether their answers could be described in katakana (sounds of English) or in translation to Japanese. The experiment was managed by the students’ homeroom teachers.

6.5 The result

6.5.1. Possibility that the students could gain vocabulary

The participants in the reading session were seventy nine students, while the number of those who responded to the questionnaire was sixty five. Fourteen students were absent when the experiment was carried out.

Sixty students, 92%, mentioned the words that they gained. Thirty-nine students, 60%, mentioned more than five words, and three, 5%, more than ten. The maximum is fourteen words. Five students, 8%, mentioned that they remembered no words or that they did not gain any words.

Some students described all their answers in translation to Japanese, some all in katakana (sounds of English), and others describes their answers in mixture of katakana and translation.

6.5.3 Words gained by reading and hearing books

The words which were referred to the most frequently are included in a category of colors. Most words are both/either in katakana and/or in translation. A girl wrote that she could memorize all the colors and all of the colored things included in *Curious George Color Fun.*
The words which were referred to the second most frequently are names of animals. Especially, twelve boys mentioned a word, ‘king cobra’. It might be that they were at the age when a person is interested in such a mysterious animal as king cobra.

Most students mentioned nouns as words they gained, while some mentioned verbs, adjectives, adverbs, and interrogatives like ‘touch’, ‘run’, ‘dry’, ‘wet’, ‘slow’, ‘where’, and ‘what’. The words ‘run’, ‘dry’, ‘wet’, ‘slow’, ‘where’, and ‘what’ are concerned in the content of the books, while the word, ‘touch’, was frequently heard when the pen explained how to operate in the book. The girl who wrote the word ‘touch’ might listen carefully from the beginning of the book explaining how to operate. Furthermore, a remarkable description here is “ぬれていること”, which expresses the state of being wet in Japanese. The student tried explaining the word ‘wet’, not fitting a word of Japanese to the English word.

Some students mentioned not just individual words but categories of things, like colors, rainbow colors, fruit, numbers, animals, musical instruments, the alphabet, shapes, self-introduction, and greetings. As they are ten or eleven years old and thus they can naturally classify Japanese words into categories, they may transfer their knowledge of categorization in Japanese to in English. Furthermore, as the last two items, which are self-introduction and greetings, are composed of conventional phrases, which the students have always heard in classes of foreign language activity for five years, they could easily grasp the meanings or hear them as a whole when they met them in the books, so that those phases might remain in the students’ memory and mentioned them.

Other items which were mentioned by the students are the words which are written or said in the books, as follows:
6.5.4 Description of the students' perception of contextualized reading

More than half of the students described that extensive reading with sound was of fun or pleasant, and some of them stated that they wanted to read more. A boy mentioned that he enjoyed reading in English as well as in Japanese. Another boy stated that the book of animals was interesting.

Six students mentioned that they could remember some English words and twelve students stated that they could understand what the books wrote or said. A boy wrote that he enjoyed learning and remembering more English words by using the books than in usual English class. A girl stated that she easily understood various words with sound, which facilitated her English learning in the private school of English.

Some students mentioned pronunciation in the books. A boy stated that as pronunciation which the books said was strange, he could understand little. A girl described that although what was said in the books was hard to hear because the native speaker's pronunciation in the books was different from pronunciation of English by Japanese, she could understand by inferring with some words which she had known.

Some students mentioned good points of free or extensive reading. A boy stated that he enjoyed various kinds of books. This may mean that free or extensive reading allows the reader to choose what s/he wants to read voluntarily, not forces her/him to read books in the fixed order. A girl stated that she could hear a word repeatedly until she was able to
understand or remember it. This means that free or extensive reading allows the reader to read on in her/his own style and her/his own pace, not forces her/him to read a book within a limited time. Another girl, who is a returnee, stated that she understood Spanish words in *1-2-3 Dora!*, which said both English and Spanish. This means that free or extensive reading allows the readers of different levels to enjoy reading in different ways.

On the other hand, there are some negative descriptions. A girl stated that she enjoyed reading early in the experiment while she gradually got to lose interest in reading the books. Another girl wrote about a decrease of her interest in reading the books although she first had interest in the books and the pen which could speak. Because the books prepared for the ten-day reading session was just eight kinds, some of the students might be interested in the contents of the books from the beginning of the reading session or some might lose interest in the limited contents. Furthermore, some students stated that they could not understand so much what the books said. Especially, a girl indicated that the pace at which sentences were read was so fast that she had difficulty in hearing and in understanding them. This might mean that it is hard for novice foreign language learners to understand a series of utterances at a natural speed of native speakers. Only one boy stated that he wanted to hear Japanese with English. It might be expected that he could understand what the books said, although he wanted to see whether what he could think to understand was right or not. This is one of the important matters, because some students tend to tolerate ambiguity while others do not. Therefore, the latter may not be fond of guessing the meaning of the word from context, but s/he may be fond of be taught it in formal instruction. Teachers should not overlook each student's tendency (Brown, 2007).
7. Discussion

The study investigated whether contextualized reading, which can supply the reader with contextualized input which consists of written words whose meanings are contextualized in the book, with the sounds as in which they are pronounced and the pictures which show what they refer to, could help the fifth-grade students to gain vocabulary, and how they perceived contextualized reading.

The result, first, shows that 92% students mentioned some words which they got to know in reading of the experiment. Although some of the words which were described in their responses had been already instructed in foreign language activity before the reading session of the present study, the students which mentioned these words might be aware of and pay attention to them just when the students met them in the books in the reading session. In other words, input is not intake until the learner notices it and wants to know its meaning voluntarily. Some students described the words which are not in the books. It is why they might guess the meanings of the words only from the pictures, not from both sound and context, or that the pictures might not appropriately match with the meanings. This is an issue to be considered for future studies. However, from the present study, contextualized reading largely allowed the students to pay attention to the words and to understand their meanings, although it is uncertain whether the gained vocabulary will remain in their memory. Secondly, most students also saw contextualized reading positively. More than the half of the students liked contextualized reading and some of them wanted to continue it. As the written words and the written sentences were contextualized in the books with the sounds as in which they are pronounced and the pictures which show what they refer to, the children could easily
understand the meaning of words and sentences. Furthermore, as some students indicated, in the reading session the students read the books for pleasure or to know the content if they wanted to, in their own ways. They were not asked about the content of the books. This means that they read voluntarily and did not have to read all of the books but could read just parts in the book which they wanted to read. Furthermore, they could read the same books, the same page, the same sentence, or the same words as many times as they wanted to read. This free-style reading might enhance their motivation for their autonomous reading. Some could voluntarily remember some English words, some could remember some Spanish words included in the book, 1-2-3 Dora!, and some could remember all lines on the pages in a certain book.

Finally, the students rarely mentioned that they could read words or sentences without the sounds, and that they could be aware of the relationship between the letters and their sound. Therefore, it is not certain that the alphabet letters with the sounds could give the students direct impetus or clues to letter learning and reading. The quantity of the input in the books might be not enough for the students to notice the relationship between a letter and its sound, or the quality of the input might be inadequate. This issue, henceforth, should be investigated.

8. Conclusion

This study researched whether contextualized reading in foreign language could allow children to gain vocabulary and how they perceived contextualized reading. As a result, most of the participating students could gain vocabulary in contextualized reading and positively saw
it. It is probable that contextualized reading, in EFL environment like Japan, will be one of the ways which provide children with valuable input which will probably become intake.

Gaining vocabulary is necessary for “cultivating children’s communication ability” proposed by MEXT. However, thirty-five foreign language classes in a year are not enough to expose children to contextualized input of the learning language and to allow them to gain vocabulary. Additional ways should be considered to build vocabulary in children in order to cultivate children's communication ability. This study suggests that contextualized reading may be one of them.

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References


Utilizing On-line Lectures and Split Classes are Effective in Delivering Instruction to a Large Laboratory-Based Applied Exercise Physiology Course

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INTRODUCTION

The Exercise Science program in the Kinesiology, Recreation, and Sport Department at Western Kentucky University recently underwent a paradigm shift regarding course loads and teaching equivalencies. Previous to 2009, class sizes were capped at 30 students and courses within the major were taught frequently (usually each semester, and during winter or summer sessions at times). As the university wishes to shift from a regional comprehensive institution to one with a national/international presence, the role of scholarly research has been emphasized. Therefore, to align itself with the direction of the university, and to carve out more time in the laboratory pursuing scholarly research, the Exercise Science faculty opted to teach courses with double the student number (60) but less frequently (only once per year, in a set Fall/Spring rotation).

Applied Exercise Physiology is by nature a laboratory-intensive course. Students complete six specific labs at the beginning of the semester including: anaerobic exercise, submaximal aerobic activity, maximal oxygen consumption, lung volume and ventilation, range of motion, and body composition. Throughout the semester, laboratories are incorporated to teach components of an effective scientific write-up (i.e. Introduction, Methods, Results, and Discussion sections). At the end of the semester, students complete a mini-study using the laboratory techniques gained through the course, and culminate with a simulated research conference in which their work is presented to their peers in both poster and oral format.

To overcome the logistical complications of having approximately sixty students in the laboratory all trying to complete experiences, this past year we utilized on-line video lectures to relay information such as laboratory protocols, computations, and to demonstrate procedures. Because instruction was delivered through a web-based format, it allowed us to effectively split the class, where half of the students attended lab on the first day and the remaining students completed the laboratory experience on the second day. The purpose of this abstract is to assess the method of delivery and instruction described above compared to a smaller class (N=31) taught the
METHODS

Data was collected from two Applied Exercise Physiology courses (EXS 325) taught at Western Kentucky University. The first class (N=31 students) was offered during 2009 and the traditional method of instruction was provided, with students responsible for attending class each day. The second class (N=58 students) was offered during 2010 utilizing on-line Tegrity lectures for delivering instruction and split laboratory experiences (i.e. 29 students attended lab on Tuesday, and the remaining 29 students completed the same laboratory experience on Thursday). Students were expected to have watched the on-line video lectures and completed assigned homework prior to their scheduled laboratory day (i.e. on the day in which they were not in class). Each individual was assigned into a laboratory group (with 5-6 students per group), and six groups attended on their assigned lab day. To further alleviate logistical concerns, two graduate assistants took charge of three laboratory groups each and assisted students through a rotation of laboratory experiences. For example, a student completing the anaerobic capacity laboratory would collect data for the 40-yard dash, then rotate to the vertical jump, and finish the rotation with the Wingate cycle test (while being instructed to utilize downtime between stations to complete power output calculations).

For comparison, similar assessment elements from each class were evaluated. Specifically, four laboratory write-ups (representing an Introduction, Methods, Results, and Discussion), two examinations, and the final group project were included in our data analysis. As points for graded assignments and exams differed between classes, we chose to convert raw scores for each student into a standardized z-score. The z-score formula is the raw student score – mean for the class / standard deviation. The combination of the four individual write-up z-scores was summed so that a single value represented the variable (i.e. a write-up standard score), the combination of two individual examination z-scores was added to denote the score for exams, and these were both added to the z-score representing the final project to give an overall class standardized score (write-up + exam + final project = overall).

Differences between classes in the four areas (write-up, exams, final project, and overall) were determined using independent samples t-tests assuming equal variance. Significance was accepted at the P≤0.05 alpha level.

RESULTS

No differences were observed in any of the areas assessed. Classes were statistically similar in terms of write-up assignments (F=0.277, P=0.600), examinations (F=0.133, P=0.716), final group projects (F=0.000, P=0.990), and an overall combination of these areas (F=0.252, P=0.617). Variance in standard scores for each area are displayed in figure 1.
DISCUSSION

The purpose of this investigation was to evaluate the impact of utilizing on-line lectures to replace in class instruction, and splitting class laboratory sessions in a large lab-based course. Our findings show that students performed similarly in terms of laboratory write-ups, examinations, as well as completing group culminating projects. No differences were observed, despite these students not attending roughly half of the classes compared to the traditional instructional method. While more investigation is necessary, subjective comments from selected students indicated that use of on-line modules allowed them to proceed through the material at their own pace, as well as the option to view the instruction multiple times if desired. The on-line materials were particularly useful to students reviewing for examinations, and as a resource leading up to the final group project. Based on the preliminary data provided in this study, we propose that web-based only instruction and splitting laboratory time between groups can be an equally effective mode for disseminating course information in a large laboratory-based class compared to traditional classes with smaller numbers that meet each period.

Figure 1. Plots displaying the variance of standardized scores for write-up, exam, final project, and combined measures between a large class in which on-line lectures and split labs were utilized, and a small class instructed through traditional means.
Predicting National Dental Hygiene Board Examination Success Based on Specific Admission Factors

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Abstract

**Purpose:** The purpose of this study was to determine if there are specific admissions criteria that are significantly correlated with a student’s National Board Dental Hygiene Examination (NBDHE) total score and case-based score. Specifically, the study examined the relation between an individual’s reading acuity and their scores on the NBDHE. Because of the competitive nature of most dental hygiene admissions, selecting those applicants who are more likely to be successful in the academic program and pass the NBDHE is critical.

**Methods:** Total NBDHE scores and case-based scores of 214 students attending Western Kentucky University’s Program of Dental Hygiene between 2002 and 2010 were examined to determine if significant correlations existed. Specific factors examined were each student’s total NBDHE score as well as the score on the case-based section of the examination, age, Microbiology lecture grade, Microbiology lab grade, Anatomy and Physiology grade, college GPA, English grade, Psychology grade, composite ACT® score, and subcomponent scores of the ACT® (Math, Reading, English, and Science).

**Results:** Results revealed that the strongest predictors of total NBDHE scores were the score on the Reading portion of the ACT® ($r = .715, r^2 = .511, p = 0.01$) and the grades in Microbiology lecture ($r = .644, r^2 = .414, p = 0.01$). Results revealed that the strongest predictors of scores on the case-based portion of the NBDHE were a student’s score on the Reading portion of the
ACT® ($r = .673$, $r^2 = .452$, $p = 0.01$) and the Microbiology lecture grade ($r = .637$, $r^2 = .405$, $p = 0.01$).

**Conclusion:** Traditionally, schools have looked at specific science-based pre-requisite courses as a means of determining admission to schools of dental hygiene. Findings from this study suggest that a broader approach may need to be taken, specifically as it concerns a student’s reading aptitude.
Having acknowledged the interactive nature of conversation as a process that requires constant role switching between the listener and speaker and frequent conversational repair, leaders in the field of aural rehabilitation are developing therapies for hearing impaired clients that emphasize conversational management as a tool for effective communication. Conversational management includes the use of an assertive communication style as well as facilitation, conversation, and environmental strategies.

The presenter will share insights and practices from the field of aural rehabilitation as they can be applied to listening and speaking instruction in ESL. Suggestions for practical exercises in the ESL conversation class will be made, and participants will have the opportunity to analyze and engage in ESL classroom exercises.
Use of Audience Response System in Language Courses: Engagement and Comfort

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Abstract:

Audience Response Systems (ARS), or clickers, are becoming more commonly used in all levels of education with positive results. The literature suggests that students are more engaged when ARS are used and are more comfortable responding to questions. The scholarly literature minimally addresses the use of ARS in language-learning courses. The purpose of this research project is to determine if the use of ARS increases students’ engagement and comfort in a language courses, specifically in courses that use a language immersion approach.

Students enrolled in introductory American Sign Language (ASL) courses at a university in the southeastern United States will participate in this project. Three sections of the ASL course, all taught by the same instructor, will participate. In two sections of the ASL course the instructor will incorporate the ARS technology. In the other section of the course, the instructor will use traditional instructional techniques, without ARS. Course mid-point and end-of-term questionnaires will be distributed to students to ascertain their engagement with the course and comfort in the language immersion environment. Course grades will also be analyzed.

Given the literature of ARS, students will likely be more engaged in the sections of the course that use ARS. Since the ASL language immersion environment does not allow the use of spoken English, the students’ native language, it is expected that the use of the ARS will
correlate with higher levels of comfort in the immersion classroom. Additionally, students in the language immersion classrooms are expected to have higher course grades than those in the non-ARS section of the course. This study is being conducted during the fall 2010 semester. Preliminary results will be shared at the conference.
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**Paper:** Localizing MDGs—Fighting Practices Hampering Women’s Development

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Localizing MDGs—Fighting Practices Hampering Women’s Development

On the outskirts of the model village, Vieri in the Wa West district, poles are erected in honour of men who have been able to elope with a female. Most of the girls eloped with are pulled from the basic school level. A man from this village could elope with more than one female in a lifetime. The trend is to send the woman home after she has had a number of children, then look for another woman to elope with. Marriages resulting from elopement are not sustainable, mostly, because of their precarious beginning.

Introduction

``The Millennium Development Goals (MDGs) are eight goals to be achieved by 2015 that respond to the world's main development challenges’’ (UN Millennium Development Goals, 2007). The Goals are meant to be intervention to reduce inequalities and sweeping challenges facing majority of the world’s population by the target date. The time limit and desire for results have set the nations making huge efforts to achieve the set goals. The aim is to halve poverty by 2015. Countries have already begun working towards achievements of the goals. For that to happen, however, certain social structures must not only be introduced in these countries, they must be sustained (Michalos, 2009). According to the United Nations Secretary-General, Ban Ki-Moon, “success will require sustained action across the entire decade between [the period of commencement] and the deadline” (UN Millennium Development Goals, 2007). Indeed, such action must become part of the living conditions of people in very poor countries.

Negotiating their own spaces, culturally, socially and economically, has never been an easy task for the feminine gender,
across cultures and civilizations. As the “other”, the female is not considered an agent for change who can “prove and improve [herself]” (Anderson, 1996, p. 215). For many communities across the globe, one herculean task is to shake off paternalistic attitude towards women and grant females the needed space to maximize their potentials and in so doing, break the vicious cycle of poverty. So whilst certain cultures have made admirable strides not only in recognizing feminine strength, but also in allowing females to aspire to their highest potential, “[t]he landscape for women’s right has changed dramatically over the past century” (Women Make History, 2009, p. 2), other cultures seem determined to trample on female initiative and rights. The danger in the on-going struggle for negotiating female spaces lies in the possibility of allowing the increased levels of recognition for women in several areas of human endeavour, to gloss the significantly large numbers who are still heavily and painfully silenced by various unproductive customs and theories (hooks, 1991; Toward a Common Framework, 2007). Indeed, the 2008 Millennium Development Goal (MDG) Report rightly points out the increases gained in female voices heard in public decision making processes but admits that “progress is erratic and marked by regional differences”.

That the world generally recognizes that the silenced majority on the globe are probably females may explain focusing a number of the MDGs on women. Undoubtedly, the silenced majority needs to be heard, even more so for the silenced in low-income countries (Parenting Support, 2009). Hearing may be done in two ways: First, increase the educational campaign for the exposure of practices that hamper the development of women; second, institute radical yet sustainable cultural and socio-economic measures that would compel a change of attitude in low-income communities. The three major
The district was selected for the research for a number of reasons: It is very remote and violence against women may go unreported or get reported too late (UN Study, 2009; Why Focus, 2009). Most of the villages are not covered by telephone services; at the time of this research in September 2008, in Wechau, the District capital of Wa West, mobile telephone services were available only at a particular spot under a particular tree. Such communication challenges in the district contribute to atrocities against women going unreported (Mobile Phones, 2008). Also the poverty rate in the district is extremely high and there is a very high female drop-out rate at the primary level. A Girl may be forced into marriage to generate a dowry for her brother. Where there is opposition to early or forced marriage, girls may elope or be abducted to neighbouring Burkina Faso. Fathers simply do not value girl-child education, to mention these. Due to the enormity of the challenges facing girls/women in the district, and the remoteness of the location, research is the best medium to bring it to the notice of other communities.

Acknowledging that Africa is sometimes underrepresented in global issues, this paper aims at adding to existing--local and international--knowledge of atrocities committed against females in some remote parts of the continent. The information is also meant to echo the warning that poor living conditions of such communities would prevent their respective countries from achieving the MDGs meant to improve quality of life for citizens, though improvement means different things to different communities.
Localizing MDGs, in the context of this paper, implies targeting traditional rural practices which hamper women’s progress in remote areas in order to explore holistic measures through which to effectively counter those.

**Elopement: A Liberatory Concept Gone Bizarre**

Traditional Brifor elopement, like the Western concept, creates a leeway for a couple to get married without the consent of their families. Being an agricultural community, once a girl is betrothed to a man—young or old—the man is obliged to work on the farm of his future father-in-law until the marriage takes place. However, the father in question might be unwilling to part with the free labour he receives from the young man and may keep postponing the wedding\(^1\) of his daughter. As long as the *wedding* has not taken place, the future-son-in-law would continue to labour for the future father-in-law. When the exploitation becomes too much, the girl’s mother may connive with the young man’s family to free the young man. So the young woman secretly sends her belongings—in bits—to the man’s house. When everything is sent, the couple elopes. The man would send a word to the father of the girl that the daughter is with the betrothed. Marriage is deemed to have taken place; the dowry would be provided later. But elopement may occur under different circumstances.

To defy her family, a girl being forced into marriage would elope with a man of her own choice. In a spurt of anger, a married woman may succumb to the amorous advances of another man and elope with him in order to escape the shackles of a tyrannical

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\(^1\) The term is used rather loosely here. Among the Brifors, a woman stays with a man—voluntary or involuntary—for a period before the dowry is paid; such cohabiting is regarded as marriage.
husband. In the same manner, a woman trapped in a marriage due to an expensive dowry may elope with a rich man in order to end her marriage; the new partner would compensate the husband by replacing the dowry—priced by the husband. Should that marriage also not work out, the woman must endure it till another man of means, prepared to handle an exorbitant dowry, comes along. Thus marriage can be a trap for females in those communities. Nevertheless, in all the instances of elopement cited above, the woman has a voice; the element of consent is very much present. The man does not decide for the woman though he may initiate the elopement plan.

But over the years, elopement has degenerated into a practice in which a man can abduct a girl or a woman and hide her for a period before informing her parents or family of the whereabouts of their child/relative. In some cases, nothing may be heard of the couple until the man asks the woman to return to her father’s house, after a number of children. A man would coax a married woman into eloping with him just to prove his prowess as a conqueror. Sometimes, the abduction is engineered by members of the extended family. Since it is a patriarchal community, an aunt may decide that her son must marry her niece—brother’s daughter—in order to preserve marital property. The aunt could plan her niece’s abduction with her son. The father of the girl may or may not be aware of the planned abduction. Also where a girl has been betrothed to a man and it is realized that the girl has no interest in her betrothed but is rather interested in another man or desires to get educated, the families that agreed on the betrothal could arrange the abduction of the girl in order to prevent her from disgracing the family and also to forestall compensating the betrothed for whatever he may have invested in the girl.

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2 It is strongly believed that sometimes men cast spells on women to make them agree to elope.
A school girl’s abduction could be arranged so that a male relative could use her dowry--cows--to pay his bride price. In other tribes, to beat other competitors, a suitor would abduct the girl he is interested in. There is yet another crude form of abduction in which two or three young men would pounce on a girl and carry her away on a village market day; the girl in question may be running an errand or on her way to the farm. If she is able to resist her abductor, the accomplices would move in and physically restrain her so that copulation could occur. Sadly, even when abduction is executed in broad daylight, no one goes to the rescue of the girl because in such communities abduction, erroneously referred to as elopement, is a norm. After keeping her for some period, the man would notify the father of the whereabouts of his daughter. In all such circumstances, the woman would already have been coerced into having sex with her abductor; once the family is informed, she is considered married (Sub-theme Forced and Early Marriage, 2009). Yet the situation gets even complex.

In these communities, elopement/abduction--generally a male initiative--would usually precede marriage. Additionally, he who elopes with a female is a hero; he displays an exceptional valour if the female happens to be another man’s wife. A white-flagged pole erected on the outskirts of a village indicates the man in question eloped with a virgin or a single woman; a red-flagged one symbolizes the conquest of a married woman. Fathers are proud of daughters whose beauty attracts enough to motivate elopement; females pride themselves on arousing such desires in men. It is a social stigma on the woman and her family if she does not go through a history of elopement at some point in her life. The situation could assume an international dimension. Some of
the communities are border towns; sometimes, abductors from Burkina Fasso would

cross over to Ghana in search of victims and vice versa, effectively covering their tracks.

Subsequently, once a couple elopes, it is difficult--sometimes impossible--to trace

them. Even if they remain in the country, they relocate to another community, sometimes

a hinterland in Southern Ghana. In the hinterland, the trend is for the woman to become a

farmhand like the partner. In very rare cases, parents may seek the help of the police and

social services to have their abducted girl returned to them so she may continue her

schooling and get the opportunity to pursue her ambitions. Recently, zealous social

workers and community groups interested in girl education and rights have also been

making efforts to resist abduction/elopement. However, the girl in question might be

flattered by the male attention and return to her abductor. Note that the female under

discussion believes that her worth as a human being revolves around marriage though it

hardly qualifies for an equal partnership. Even the forward-looking Brifor males

interviewed could not conceive that a female could take an independent decision not to

marry.

Thus whereas abduction is always an imposition as well as a violation of female

rights, elopement—usually initiated by the man--could be consented or imposed. Where

there is consent, the female may consider elopement as a way out of a domestic

predicament though she may actually be placing herself in another. She could be elderly

or a girl pulled out of school--class six. Whatever the status of the woman involved, one

certainty is that abduction/elopement handicap females in the villages.

First, it prevents the community from achieving gender parity in primary and

secondary education; whilst girls are pulled out of school, boys continue schooling.
According to a Brifor male teacher, girls usually outnumber boys at the enrolment stage--basic school. Starting from primary four, however, families begin to pull the girls\textsuperscript{3} out, skewing the history of female education in the district. If about sixty girls are enrolled in primary one, only five or six may make it to primary six. As at September 2008, only one woman from Vieri had been able to complete post-secondary education. At the time of this research, she was a social worker, at the Gender Desk, in her home district. According to two social workers, in more than a decade, only two girls from the village had finished class six; for the first time in the history of the village, four girls qualified for the Junior High School for the 2008/2009 school year. Sadly, some girls desire formal education but lack support since most fathers do not believe in girl education, and mothers usually have no financial strength to fund their girls’ education.

Secondly, a girl pulled out of class six has no skills, barely any knowledge to guide her in life, in decision making or being assertive (Combating Early and Forced Marriage, 2009). She thus becomes completely dependent on her male partner and must obey him, even in health matters. A health worker’s concern is that girls who are forced into elopement/marriage are not physically mature for motherhood; they are also in no position to negotiate safe sex. The men simply dictate to them. In such circumstances, females become easy prey to sexually-transmitted diseases: “... women represent a growing share of people living with HIV” (Goal 6 Combat HIV/AIDS, 2008). Without knowledge or skills to earn a living independent of her partner, the woman or girl-child is tied to the man until he tires of her and orders her to return to her family home--so he can look for another victim, possibly from class six or below. Once a couple separates, the

\textsuperscript{3} Children start school very late. A thirteen year old girl may be in class one, so by primary four, she has developed physically enough to be given away in marriage.
male would not cater for mother and children; they thus end up destitute or perhaps as farmhands and/or livestock keepers.

Marriages resulting from elopement/abduction are usually not sustainable due to their precarious beginning, yet they invariably produce children. Ironically, whereas families readily negotiate betrothal/marriages and communities pride themselves on elopement, they are not so apt in helping the victimized single mothers upon being deserted by their men though in most cases, the woman cannot cater for her children. The woman is thus placed in a painful isolation in her own home; the nexus of security becomes the source of betrayal. Paradoxically, every such act of betrayal for purely lustful and chauvinistic reasons further entrenches the community in its vicious cycle of abject poverty. Consequently, human and community development are seriously hampered by the practices of elopement/abduction.

For the northern communities, life revolves around this practice of elopement/abduction. Because it is traditional, members—women included—do not consider the harm being done. Yet there are real dangers involved; these are life-threatening situations. One partner could be harbouring infectious diseases such as hepatitis, HIV, other sexually-transmitted or life-threatening diseases; the other partner automatically becomes a victim. Thus this practice could be a contributing factor to the spread of HIV in some of the communities.

The woman’s utter dependence on the man is a threat to her life. Should she contract HIV from her husband or partner, the same factors listed above may prevent her
from visiting the hospital so she could be tested early and put on the necessary medication. If pregnancy occurs, such negligence would expose the foetus to the infection (Expanded Treatment, 2010). During pregnancy, ante-natal clinic attendance is conditional upon the man’s approval. A female in such a situation could carry a full term pregnancy without ever attending a clinic, due to economic reasons or geographical ones. When she goes into labour the same factors may place her in the hands of an unskilled birth attendant, one of the major causes of high maternal/child mortality rate. Should the man be in favour of abortion, the female is likely to attempt to get rid of the foetus through herbs or a quack doctor, either of which alternatives could end her life prematurely.

Abduction/elopement has several adverse implications for the health of women, and which if not tackled diligently and strenuously, have the potential to prevent women in Northern Ghana from attaining sound health, thus prevent the country from achieving goal number five. The urgency of the situation stems from the reality that the practices have intertwining effects which would prevent the achievement of other goals as well, especially, aspects of goals one, two, three, four and six. When these unskilled females burn trees for charcoal, they endanger the environment, thus jeopardize the community’s chances of achieving goal seven (Millions, 2007). Thus eradicating or, at least, reducing the practice of [elopement/abduction] would help achieve “[su]bstantial progress on a number of the Millennium Development Goals” including poverty reduction, child and maternal health, education, the environment, “ health and social justice” (Moving Forward, 2010) in Northern Ghana.

The practice of elopement/abduction also has far-reaching adverse effects on children’s education. There is a constant high probability of children from such broken
homes being deprived of basic education. Because the women are forced into motherhood at tender ages, and because they usually work as farmhands, which work is extremely demanding yet poorly paid, they do not get the opportunity to learn any trade or skills (Million, 2007). As such when they are deserted by their male partners, they have no realistic means of supporting themselves and their children. If she lives in town, the mother would very likely solicit the help of her children in petty trading or offer them as domestic hands to other households, sometimes for a pittance, exposing them to extremely dehumanizing living conditions. Where there is limited opportunity for education, the girl-child would help the mother generate income to fund the boy-child’s education. Ironically, girls who are enthusiastic about education may have their education curtailed for the sake of brothers who may not pursue education to any appreciable level, doubling the losses of the community.

Since women are not entitled to land, such deserted women have very limited chances of getting access to sizeable lands that would enable them to farm at a commercial scale. They are thus left with the option of backbreaking subsistence farming supplemented by equally arduous work such as producing charcoal, brewing local drinks or producing sheabutter. They carry such heavy loads to towns or villages on markets days when they can get competitive bargaining; the day’s sales is used to buy fish, soap and other necessities for the home. There is hardly extra income for other necessities of life or for a rainy day.

As if growing in such needy circumstances may not be enough, a girl in such a family might be married off early to enable her brother start his own family, thus replicating the vicious cycle of poverty. Elopement/abduction and early/forced marriages
are practiced in northern Ghana, though more intensely in some remote communities than others. In view of the impediments in the way of women, it is crucial to scrutinize traditional practices among communities where women’s development is often sacrificed for chauvinism and moribund customs.

**Countering Harmful Traditional Practices Through Systematic Education**

The year 2000 population and housing census of Ghana shows that the Upper West has an illiteracy rate of 75.5%. (as cited in Addai-Mensah, 2008). Of this total, male illiteracy rate is 69.4 % whilst that of females is 80.6%. No details were given for the districts but with social practices such as elopement/abduction and poor attitude towards female education, one can appreciate the high female illiteracy rate. This does not compare favourably with the systematic growth of population in the region, especially, if the illiteracy patterns are replicated. The population of Wa West grew from 60,782 in 2003 to 67,052 in 2009⁴; the trend is the same throughout the region. An educated population is an asset to every community but if majority of a population are illiterates, the prospects of development for that community are gloomy. Efforts must therefore be harnessed towards empowering the ever growing population of Wa West with dynamic knowledgeable skills; it is not the time to replicate ignorant patterns.

To empower indigenous peoples, local customs and cherished practices detrimental to education and human development must be refined to suit community interests (Elopement, 2010). Clearly, the challenge does not lie in merely identifying harmful practices, as important as that step is. Rather, it lies in the local people realizing that the practices no longer serve human and community needs and as such must be refined for community advancement (Family Health, Behaviour change, 2002). Evidently “[a]__________

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⁴ Ghana Statistical Service, Wa.
collective shift is necessary; change can come only when a ‘critical mass’ of families in a community abandon the practice” (Addressing Violence, 2009)

Because traditions form part of a people’s world view, any call for changes thereof must be characterized by utmost diplomacy in order not to unnecessarily antagonize indigenous people. There is “need to be careful about ‘othering’ indigenous or traditional communities, or religious or ethnic minorities, and labelling their practices unacceptable” (Kiro, 2009). Societies must be respectfully and gently prodded to revisit the philosophies behind elopement/abduction and weigh them against current developmental trends in, health, gender, education, the fight against poverty and environmental degradation, to name five. Consequently, concerned groups must collaborate strongly with the local people who must have the commitment and the willingness to modify harmful ways for quality life (Family life, Theory, 2002).

Indigenous people must reach deeply inwards to find the strength to will themselves into fighting long-held traditions and customs which have metamorphosed over the centuries into agents of abuses and have since seized serving the good purposes for which they have existed and been cherished (Increased Health Risks, 2007; Moving Forward, 2010; Family Health, Behaviour, 2002). One way would be questioning the patriarchal hegemony of the District whenever necessary. Male offences against females are either trivialized or simply ignored or at best, handled at the local palace. Members constituting judiciary committees at the palaces are all men who, out of traditional sentiments and male solidarity, would not handle genuine female allegations of domestic abuses against men objectively. A woman would invariably be prevailed upon to forgive the husband for extreme atrocities against her; she could even be swayed from decisions
that could save her life. The communities must be helped to appreciate that recognition of female rights and dignity and loyalty to community must precede filial and/or misplaced sense of loyalty to gender.

 Achieving the MDGs is already proving to be an evasive task for a lot of the poor countries for whom the whole idea of poverty eradication was conceived. In some cases, even monitoring community progress has become problematic (Tracking MDGs, 2008). The 2007 United Nations Development Programme (UNDP) report on Africa and the Millennium Development Goals states: “sub-Saharan Africa is not on track to achieve any of the Goals” (Millennium Development Goals Indicators, 2007). Though some gains have since been made, if female issues were seriously tackled, it would expedite sub-Saharan Africa’s chances of attaining the goals.

 People whose lives have been seeped in extreme poverty should want to make efforts to escape such limiting conditions altogether. They should invest in the future by engaging in insightful sustainable acts, socially, culturally, economically. However, the communities under discussion here, by their everyday acts, appear to live just for the present. If they educated girl-children, they would be investing heavily in the future. The womenfolk could increase their contribution to the communities many fold if they were educated. By habitually curtailing girl-child education, the males in the communities not only do a great disservice to their communities and perpetuate their poverty-ridden existence, they lay the foundation for the same gloomy future existence for their progeny.
The practise of recycling dowry favours men but further restricts women in a society which has already taken so much away from women. Girls and women are hemmed in by violent social structures, closing opportunities for female initiative. There is urgent need for intensive sustained education against elopement/abduction and to maximize community sensitization for (girl) education. Yet the challenge goes beyond one district.

**Localizing MDGs: ‘Mainstreaming’ Elopement**

Though the research targeted Wa West District some social workers from the other districts participated. During the radio discussion, listeners lauded the initiative and alerted the panellists that elopement/abduction is practiced extensively in some remote parts of Jirapa and urged the researcher to extend the study to those areas. Other stakeholders also informed the researcher that the practice cuts across Northern Ghana. Consequently, there are urgent reasons for systematic research on the issue across the entire north. Such investigation would enable stakeholders to probe the extent to which the practice is destroying female lives. Since elopement carries extensive developmental implications, targeting it would mean giving it a central focus on the development agenda, for district, region and nation. Mainstreaming the fight for elopement/abduction could provide an avenue through which to unearth some effective means to mobilize resources for development.

Indigenous people may be trained as community resource persons plus pressure groups to assist security agencies in pre-empting elopement or help track culprits in the district. In circumstances of searching for victims, such groups may be of immense assistance to the police. Out of sheer distrust, indigenous people may not release
information vital to saving a girl’s life to strangers even if they are the police. The involvement of community groups may thus help expedite proceedings to free a victim. In a country where mobile telephone services are sometimes highly questionable, even in urban areas, the human approach may prove more reliable in those remote communities, when it comes to dealing with elopement. In effect, such a move would create jobs for the local people.

There is also a need for international co-operation between the police forces of Ghana and Burkina Faso since culprits from either border towns sometimes abscond to the other country to avoid discovery. If the forces on both borders were alerted and properly motivated, they could apprehend culprits and save victims the ordeal of rape, maltreatment and other indignities (Protection from Torture, 1998; Respect for Human Dignity, 2005). There could be spill-over effects; such collaboration might even save victims of female circumcision, some adherents of which also cross the borders in order to execute their destructive plans. Executing such a move would be exploring bilateral relations in fighting gender-based violence.

Another way of localizing the MDGs as well as mainstreaming is for the Upper West Region to integrate HIV and AIDS stigmatization education with the campaign against elopement/abduction, since there is a possible connection between the practice and spread of the disease. Abduction is an offence in Ghana; perpetrators must be seriously sanctioned in order to deter others from emulating such bad examples. There is, therefore, need for concerted efforts to counter the practice; the Domestic Violence and Victims Support Unit (DOVVSU), the Social Welfare, the health sector and the Ministry of Education must work hand-in-hand to combat elopement/abduction. Such a move
would also rope in local people, change agencies--civil societies, female advocacy
groups, world bodies, government agencies, security services—to name a few. Yet the
situation cannot be generalized.

The concepts of challenges”, “sustained action” “and “progress” will differ from
one community to another, depending on gender, geographical, economic and socio-
cultural factors, amongst others (Mangahas, 2009). Progress will depend on designing
programmes that could effectively meet local needs, granting ownership to local people,
and above all, sensitizing indigenous people to the fact that willingness and ability to
change unproductive ways for progressive ones constantly human dignity. For the target
communities, one local challenge is the practice of elopement/abduction; and for women
in the communities to be genuinely empowered, that practice, an obstacle to community
and human development must be eradicated. Elopement effectively blocks female
empowerment and perpetuates poverty among women. It renders northern women
susceptible to HIV and AIDS and other sexually-transmitted infections. Worst of all, it
heaps indignities on females by denying them the right to make some of life’s major
decisions. Holistic efforts are, therefore, urgently needed to address those challenges to
women’s progress. Most importantly, avenues of redress/refuge must be opened for
women, especially in remote communities, so that they are not always hemmed in by
stifling as well as unproductive traditional/social practices.

Any sustainable sensitization programme would depend on mainstreaming the
complex practice for a holistic approach towards curbing the practice. Adherents of the
practice must be gently prodded onto the realization that they must change negative
lifestyles for productive ones (Family Health, Behaviour Change, 2002). Regular
reminders of the possible harmful effects of their actions and empirical evidence might gradually yield a change in attitude. For that to happen researchers and female advocates must target the practice in the same manner in which female genital mutilation was mainstreamed (Toward a Common Framework, 2007; UN Study, 2009). Systematic research of elopement would enhance knowledge of the practice and inform stakeholders of the extent of its harmful effects. A thorough study would enable proper documentation on the practice and as well effective approaches to curbing it. Systematic research would enable proper collaboration among various stakeholders for effective tackling of the issue, hence this clarion call for an international collaboration to combat a tradition that blights female existence in Northern Ghana.
REFERENCES


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ABSTRACT

Much has appeared in the media lately about young adult college students without ADD (attention-deficit disorder) or ADHD (attention-deficit, hyper-activity disorder) using or abusing the same drugs that have been prescribed for those with ADD or ADHD. Colleges and Universities across the nation are struggling with dealing with this latest trend, trying to understand why perfectly healthy students are opting to take a drug meant for students with this condition. Studies will nonetheless come out focused on the impact of this latest craze, and it will be interesting to see if more attention and focus is placed on these student than on the students actually suffering with ADD.

Attention-deficit-disorder or ADD in young adults is still a relatively new area of study, especially as it relates to college students. Unfortunately, there is a belief that if a young person has ADD during their elementary and high school years, they magically are “cured” in the three or so months between high school and college. But this is definitely not the case.

This study reviewed the literature on ADD, in order to create a backdrop to study who would be considered “legitimate” ADD college students. It further investigated the role that colleges and universities play in providing support for ADD students. The primary purpose of this study was not to focus so much on the drugs or medications that ADD students were taking but instead to explore the utilization of assistive technology in support of college students with ADD. The study examined institutions by size, type, degree granted, and availability of both traditional accommodations and assistive
technology, with a hope of finding possible patterns and trends. Because of the exploratory nature of this study, cross-tabulations even without the use of statistically significant testing did enable differences to appear. The study also looked at institutions where students with learning disabilities, including ADD, had been accepted, to see if there was a difference between these types of institutions and other institutions in servicing students with ADD.

One hundred three administrators and 22 college student respondents hardly represent all administrators directing offices of disability services, or all college students with ADD. Although this study explored areas not often studied, both quantitative and qualitative information from this study reflect compliance on the part of institutions relative to dealing with ADD students, and a positive movement in higher education towards a better understanding of college students with ADD, and their obligation to provide these students with accommodations, including assistive technology. This study only serves to start the process of understanding ADD college students, yet encourages all those involved with students with ADD to do what is needed to provide the type of learning environment that will help these students succeed.
INTRODUCTION

A person with a disability is defined by the Rehabilitation Act of 1973 and by the Americans with Disabilities Act of 1990 as an individual who has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. According to NPSAS 2000, the National Postsecondary Student Aid Survey 2000, students reporting learning disabilities represented 9.3 percent of all undergraduates or 1.53 million students (NPSAS, 2000). In another study conducted by HEATH, the Higher Education and Adult Training for People with Handicaps Resource Center of the American Council on Education, nearly one-third of all incoming college freshmen reported having a learning disability (HEATH, 2000). Other HEATH reports reflect that since 1985, the proportion of first-time, full-time freshmen with learning disabilities attending college has at least doubled from 15 percent to 32 percent (HEATH, 2000).

Researchers are not sure how many college students are arriving at college with a particular type of learning disability known as attention-deficit-disorder or ADD; estimates range from 0.5 to 5 percent, or 65,000 to 650,000 students (NPSAS, 2000). What is suspected, mostly through anecdotal accounts from faculty and staff, is that the number of college students with ADD continues to increase (Henderson, 1999). Henderson (1999) suggests that this increase is because more children are being diagnosed with attention-deficit-hyperactivity disorder or ADHD. In addition, these
students have gained increased legislative backing and support through Federal and State legislation enabling them to continue on to postsecondary education.

**ADD--One Particular Type of Learning Disability**

ADD is suspected to be a neurological brain disorder that affects both behavior and learning. The direct causes of ADD are still unknown (Quinn, 2001; Weiss, 1992; Purdie et al, 2002). ADD is not thought to be caused by food allergies, excess sugar, too much TV, poor parenting, poor home life, or poor schools (Quinn, 2001).

The frontal lobe of the brain has been identified as a major area responsible for some of the symptoms of ADD. Researchers at the National Institute of Mental Health found that several regions of the brain (the right prefrontal cortex, the basal ganglia, and certain regions of the cerebellum) are smaller in those with ADD than those without it. These brain regions are rich in dopamine, one of the brain's neurotransmitters that conveys signals from one neuron to another and known to regulate motivation, attention, working memory, drive, interest, impulsiveness and motor control, the ability to retain, associate, and manipulate information in real-time as well as the ability to think ahead and anticipate future needs (Barkely & Grodsinsky, 1994).

Imbalances in dopamine appear to be closely related to ADD symptoms and subsequent behavior. Most practitioners in the field now agree that the characteristic problems of people with ADD stem from a genetically based neurobiological malfunctioning (Quinn, 2001). These genes regulate the transport of the chemical dopamine. There is, however, no single lesion in the brain, no single neurotransmitter
system, no single gene that has been identified that triggers ADD (Hallowell & Ratey, 1994); thus accounting for the uneven distribution and variety of prevailing symptoms that make up ADD.

ADD is often associated with hyperactivity. Onset of ADD with or without hyperactivity is normally before the age of seven. Many children are initially diagnosed as ADHD but it is suspected, although not proven, that symptoms associated with hyperactivity tend to decrease as the child emerges from adolescence into adulthood. Beginning in the 1970's several studies were published which followed children who had originally been diagnosed with hyperactivity a decade earlier, and traced their development into adulthood. These studies established that for some attention-deficit-hyperactive children, ADD symptoms persisted into adolescence and even into adulthood. (Weiss & Heckman, 1993; Mannuzza et al, 1993). Wender, et al (2001) contend that one to two-thirds of children continue to have ADD symptoms as adults.

It has been speculated that most ADHD adults are more often displaying signs of ADD rather than the combination of ADHD. An official definition of ADD-RT (Residual Type, which applies to adults) states that an adult first must have exhibited ADD symptoms as a child and after that an adult must demonstrate attention span deficiency, motor abnormalities and exhibit at least two of the following symptoms: poor impulse control, low stress tolerance, poor organization with poor task completion, extreme mood swings in response to events in the external environment, or short excessive temper (Woods, 1986).
College students who still exhibit this disorder, symptoms may include physical restlessness and inability to sit for long periods of time, difficulty following instructions, listening or concentrating, reading comprehension problems, poor time management skills, distractibility, blurting out answers, poor handwriting, difficulty with math problems, inability to listen selectively during lectures, problems with note taking, difficulty in formatting essays and written work, difficulty in preparing class assignments, keeping appointments, attending class on time and turning in assignments when due, distractibility, impulsivity, mood swings, frustration, mental restlessness, forgetfulness and procrastination (Quinn, 2001; Weiss, 1992).

Current Treatment

Current treatment approaches for both adults and children include both pharmacological and behavioral management (McMullen et al, 1994; Pelham, et al, 1998; Barkley, 1990, Wilens et al, 1996). There are a limited number of controlled pharmocologic studies of this disorder as most of the trials have focused on psychostimulants (Wilens et al, 1996). Because desipramine has been found to be effective in treating ADHD in children, the Wilens study (1996) tested its efficacy in adults with ADHD. The authors conducted a randomized, 6-week, placebo-controlled, parallel-design study of desipramine at a target daily dose of 200 mg in 41 adult patients diagnosed with DSM-III-R ADHD. Findings showed a marked difference in the reduction of ADHD symptoms between adults receiving the desipramine and the placebo. These differences accounted for a reduction of between 12 and 14 symptoms including
decreases in hyperactivity, impulsivity, and inattentiveness. Placebo-treated patients showed no differences. The authors believe that they demonstrated the effectiveness of the drug desipramine with adults with ADHD, and were able to isolate its effects from gender, level of impairment, and lifetime comorbidity with anxiety, dyslexia, or other depressive disorders.

Psychopharmacological treatment and the use of psycho stimulants seem to be the most effective treatment for adults with ADD (Wilens, et. al., 1996; Purdie et al, 2002, Halloway, 2002). Studies have shown that stimulant medication such as Adderall, Dexedrine and Ritalin, work by increasing the levels of dopamine in the brain. Dr. Edward Hallowell, Harvard professor and co-author of *Driven to Distraction: Recognizing and Coping With Attention Deficit Disorder From Childhood Through Adulthood*, claims that the use of Ritalin has gone up by 500 percent in the past 12 years (Hallowell, 2002). According to Dr. Hallowell, medications work for about 80 percent of the people (Hallowell, 2002 ). A newer product marketed by Eli Lilly and Co., called Strattara, is fast becoming a popular choice among children and adults suffering from ADD. Other treatments include the use of biofeedback therapy, self-control or cognitive therapy, and also diet and megavitamin theory (Quinn, 2001). It appears that researchers, both medical and academic, are only beginning to understand the nature of ADD in adults, its biological underpinnings, and effective ways to treat it.
Recognition and Legislation that have helped ADD college students

Attention to students, specifically children, with learning disabilities (LD) emerged as a diagnostic category in the 1950's. LD has been termed as Minimal Brain Disjunction, Hyperactive Syndrome, Hyperkinesias, and Hyperactive Disorder of Childhood. Beginning in 1968 the Diagnostic and Statistical Manual of Mental Disorders known as DSM-II, identified minimal brain damage and other problems such as hyperkinesias as a childhood disorder characterized by overactivity, restlessness, distractibility, and short attention span (American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders, 1968). The Individuals with Disabilities Education Act also known as IDEA, Public Law 101-476, which amended the Education for All Handicapped Children Act, Public Law 94-142, coupled with the National Joint Committee on Learning Disabilities, focused on learning disabilities. Together they provided definitions more appropriate for children than adults and emphasized skills important to elementary and secondary education such as reading, writing, and mathematical skills.

In 1980, DSM-III reflected and helped facilitate an interest in hyperactivity and attention deficit *beyond* childhood. The range of behaviors included within the official diagnosis became more comprehensive. Furthermore, in 1985, The Rehabilitation Services Administration's definition of a learning disability provided more application for adults by including in its definition the provision for a deficit in attention, reasoning, processing, memory, communication, social competence and emotional maturity. The
1987 revision, DSM-III-R, officially recognized the term "attention-deficit-hyperactivity-disorder" as a mild to moderate learning disability. This revised diagnostic, while not specifically referring to the disorder in adulthood, opened up the possibility of diagnosing adults who may not have been diagnosed in childhood (Wolraich, 1996; Conrad & Potter, 2000).

By 1994, DSM-IV reflected the growing consensus that adults could be diagnosed with ADD, provided they had exhibited symptoms as children before age seven. According to a study conducted by Wolraich & Baumgaertel (1996), changing criteria from DSM-III-R to DSM-IV resulted in an increase in diagnosis of ADHD among children in elementary school. The subtypes created in DSM-IV enabled a clearer diagnosis to take place thereby isolating behavior anxiety and depression, among other factors, from the diagnosis and enabling treatment of ADHD as a separate disorder that could and should be addressed in a more comprehensive manner earlier in student's school life.

Legislation has also played a major role in aiding individuals with disabilities. Section 504 on Postsecondary Education of the Rehabilitation Action of 1973 had a major impact on Americans with all kinds of disabilities including learning disabilities. Subpart A of this document defines terms, general prohibitions, and the obligations of recipients of federal funding to appoint and maintain at least one person to comply with the requirements and the process of an Office of Civil Rights investigation. In addition issues related to admissions, financial aid, housing and most important, academic
adjustments are specifically spelled out. The purpose of this legislation was to enable students moving through the educational system and into postsecondary to be better serviced with accommodations appropriate to their identified needs.

In 1990, President Bush signed The Americans with Disabilities Act (ADA) which prohibits discrimination against people with all kinds of disabilities in areas of private employment, public accommodations and services, transportation, and telecommunications. Much of what appears in the ADA was borrowed from Section 504 of the Rehabilitation Act of 1973, and the Civil Rights Restoration Act of 1983 which requires recipients of federal funds, which includes colleges and universities, to insure that qualified individuals not be excluded from participation in campus programs solely because of their disability (ADA, 1990).

At the postsecondary level, the American with Disabilities Act (ADA, 1990) and Section 504 of the Rehabilitation Act, obliges college and university disability service providers to provide reasonable accommodations to students with documented disability and to provide equal access to the general curricula, programs, courses and activities. Furthermore, a student's individualized educational program (IEP), as mandated by Congress in IDEA and The Disabilities in Higher Education in the United States Amendment, PL 101-476 (U.S. Congress, 1990) must contain information regarding the relationship between a student's plan of study and his/her goals beyond secondary school, and must clarify both the transition services required by the student and the responsibilities of adult agencies to assist in providing such services.
Technology and ADD students

Other legislation has also paved the way for individuals with learning disabilities, including ADD, to have the same if not more opportunities to enrich their lives and be better prepared for the quality jobs that they seek (Wallace et al, 1995). The Technology-Related Assistance for Individuals with Disabilities Act of 1988 also known as The Tech Act, requires States to develop State-wide, consumer-responsive programs of technology for disabled people of all ages and all disabilities. The intent of this legislation was to increase the awareness of the needs of individuals with disabilities for assistive technologies (AT) devices and to increase awareness of policies, practices, and procedures that impact the availability of such services and devices. The Tech Act offered the first federal definition of what constituted an assistive technology device or service. Assistive technologies are applications either hardware or software that are developed specifically to assist disabled individuals in overcoming barriers.

Assistive technology is widely regarded as holding potential for enhancing access, inclusion, productivity and the quality of life of individuals with all types of disabilities. More than 5 million students in grades K-20 with a broad range of disabilities in the United States benefit from this technology. (Garner & Campbell, 1987; Sawyer & Zantaler-Weiner, 1993; Wisniewski & Sedlack, 1992).

Although assistive devices and services are not explicitly stated in the Education for All Handicapped Children ,P.L. 94-142, the Tech Act established a foundation for the
use of supportive aids and services. Definitions from the Tech Act 1988 were incorporated into the passage of the 1990 IDEA, P.L. 101-476.

In 1994, Congress amended the Tech Act of 1988 to address barriers that persons with disabilities experienced in gaining access to assistive technology devices and services. In passing the Technology Related Assistance Act Amendments of 1994, P.L. 103-218, federal legislation also sought to mandate the creation of an infrastructure to enhance the integration of assistive technology devices or services into the lives of individuals with disabilities.

In 1997, reauthorization of IDEA further emphasized the importance of technology in the lives of students with disabilities, and the need to share cutting edge information about advances across the K-12 environment. The reauthorization mandated education programs to consider and include assistive technology for all children, including those with mild or moderate disabilities. It further stated that assistive technology needs must be distinctly considered by every IEP team for students found eligible for special education services. Technology was to be considered a viable instructional tool addressing cognitive needs of students with disabilities (Council for Exceptional Children, 1998).

Statement of the Problem

It is only recently that longitudinal studies have provided the evidence to link ADD to adulthood (DuPaul, et. al. 2001, Weiss, et. al. 1979, Weiss, et. al. 1993; Hill & Schoener 1996). Studies have been conducted on college students with learning
disabilities. Few, however, have focused specifically on college students with ADD as a learning disability or on accommodations provided to ADD college students (Ofiesh & McAfree, 2000; Heiligenstein, et. al., 1998; Wilens, et. al., 1996).

ADD has long been associated as a childhood disorder. Indeed, there is much literature addressing children with ADHD. The focus of much of this literature has been primarily medical in nature or addressed types of interventions and accommodations provided to students in kindergarten through twelfth grades. For example, Purdie, Hattie and Carroll (2002) conducted a review of the research to see what interventions and accommodations worked best with ADHD children. Their meta-analysis examined 74 studies in which there had been an intervention aimed to improve behavioral, cognitive, and/or social functioning of children with ADHD.

A question is raised as to why so few studies have been conducted on older students with this disorder. One answer may lie in a study conducted by Heiligenstein in 1998. Heiligenstein suggests that the degree of ADD in college students may be more modest; students by the time they come to college may have lost much of the hyperactivity associated with ADHD disorder and are better able to cope with their ADD symptoms.

Purpose of the Study

As the apparent trend for students with learning disabilities including ADD to attend college increases, so has the need to provide accommodations, and specifically assistive technology (AT), for these students (Higgins & Zvi, 1995; Lance, 1996; Raskin,
According to a recent student by Ofiesh, et. al, (2000), most studies addressing the use of assistive technology have focused on all students with learning disabilities, without singling out students with ADD.

The primary purpose of the study was to explore what assistive technology (AT) some colleges and universities have available for ADD college students and the utilization of AT by ADD college students. This study also explored what other accommodations colleges and universities have available to ADD college students and what students may be using.

It might be expected that with all of the legislation supporting students with disabilities, especially the Technology Act, that colleges and universities are, indeed, making assistive technology available. It might also be expected that with the integration of technology into the K-12 classrooms, more college students will be using or demanding the availability of technology to enhance their learning capabilities. Furthermore, it might be expected that when a college bound student has a particular condition or need such as ADD, he or she would seek out an institution that will best accommodate that need. Additionally, it might be expected that some institutions rather than others will support and provide more accommodations.

An additional purpose of this study was to examine whether some institutions, that are known to accept students with ADD, would provide more accommodations than others that are not necessarily known for such acceptance.
Methodology

The research that was conducted for this study utilized a combination of both qualitative and quantitative techniques. Two models were used: a dominant-less-dominant design and a mixed-methodology design. Two surveys were created. One survey was administered to a sample of 410 colleges and universities administrators. Although the same survey was administered, the sample was divided into two distinct groups. The first group of 210 represented what is known as a purposeful or judgmental study. The participants in a purposeful study are specifically hand-picked rather than randomly selected. The purposeful sample of colleges and universities that was selected represented institutions that were known to have students with learning disabilities including ADD, apply to and be accepted by them. The second group of 200 was randomly selected from a list of colleges and universities throughout the United States. Dividing the sample into two groups enabled comparison between those institutions to which ADD students have been accepted, and those that are not necessarily known for catering to or providing accommodations to these special students.

While collecting information from these institutions was primary to this study and critical to its completion, also important was to hear from students who are using devices and services to enhance their learning experiences. The second survey was administered to two groups of college students. The first group came from the colleges and universities that made up the first part of the study. Assistance was achieved from the service providers from the 410 colleges and universities receiving their own
questionnaire who were then asked to distribute a survey to ADD college students at their institutions. Additionally 35 LD/ADD college students who were graduates of a special high school with learning disabled students were provided the student survey.

It is important to note that the information generated from the college students was expected to be more exploratory and qualitative in nature due to number of factors. First, the survey sent to the 35 students identified above was sent out by the high school from which they graduated. The researcher had no knowledge of who these people were nor whether they were still attending college or not. Another factor was an unknown number of surveys that college administrators would be able to hand out depending on the number of students who have self-identified or the number of institutions that did not require approval from an institutional review board in order to distribute the questionnaire to the student. Finally, the researcher does not anticipate a large number of completed college student surveys returned.

Due to these distribution methods and the more qualitative and open-ended nature of the information collected, the results from these student surveys should not be considered representative of all college students with ADD and cannot be generalized. Nonetheless, the student perspective provided valuable information relative to their experiences in college and their familiarity with, availability of, and use of, assistive technology and other accommodations.
Research Questions

The research questions sought to gather information that would fill in gaps that exist in the current literature and bank of knowledge relative to ADD college students and their use of various accommodations including assistive technology. Taking into account information from the literature review, the primary data enabled a richer and more comprehensive understanding of this topic. The following represents the primary research questions that were addressed in this study.

1. How do the colleges and universities fit into Categories #1-4 of disability services?

2. Do colleges and universities provide ADD students with accommodations and what type of accommodations are they providing.?

3. Are the purposeful institutions that are known to have LD and ADD students apply and be accepted to them, providing these students with more accommodations than the randomly selected institutions?

4. Is there a perceived gap between student need and actual provision?

Definitions

Learning Disability (LD)

A learning disability or LD is a developmental disorder affecting a realm of cognition, which occurs in the presence of adequate intelligence and preserved skills in other cognitive realms. The specific weakness in cognition can affect spoken language, written language, mathematics, visual-spatial skills, executive functions and problem-
solving abilities, attention, or learning and memory. A learning disability significantly limits one or more aspects of a person’s life including schoolwork, professional work, home and social interactions. Many studies focus on learning disabilities without singling out specific learning disabilities. The reader should be aware of some overlap between the use of this term and the two terms that follow as the ability to separate LD, ADHD and ADD at times is difficult to do.

**AD/HD**

AD/HD stands for attention deficit hyperactivity disorder. “AD/HD is a commonly seen neuropsychiatric syndrome that is characterized by two distinct sets of symptoms: inattention and hyperactivity-impulsivity. Although these symptoms usually occur together, one may be present without the other.”


**ADD**

ADD stands for attention deficit disorder and recognizes that the hyperactivity associated with children is not as apparent in adults. ADD without hyperactivity is the focus of this study as this disorder relates to college students.

**Institution Categorization**

To enable a framework of analysis to be used in the analysis of the colleges and universities that participated in this study, four categories of disability service involvement were identified.
Category #1—postsecondary institutions that fall into this category are those that do not have well defined disability offices or spaces but subscribe to the letter of the laws that are required of them. In other words, there is no “Office of Disability Services” on campus. These institutions provide minimum accommodations and are more reactive than proactive when it comes to accommodating students with learning disabilities. Students often have to go to the Office of the Dean or the Dean of Student Services to make any requests.

Category #2—postsecondary institutions that fall into this category are those that not only subscribe to the law but have a defined office or space that has the words “disability services” in the title. They have “coordinators” of this service who are trained in disability issues. They tend to be more pro-active than Category #1 institutions.

Category #3—postsecondary institutions that fall into this category are those that have a defined office or space, and have a “Learning Disability Specialist” or “Director” and at least one or two staff members. These institutions are more proactive than either Category #1 or #2, and provide more accommodations beyond traditional accommodations, and often include assistive technology devices.

Category #4—postsecondary institutions that fall into this category are those that go way beyond the letter of the law and are considered premier institutions when it comes to providing accommodations for their learning disabled students. They openly advertise their office and location. The director has two to three staff members and most often holds a PhD in a related area such as Special Education or Psychology. This office
applies for and receives grants, and is often looked to as the leader in the field with published research appearing in respected journals.

The Technology-Related Assistance for Individuals with Disabilities Act of 1988

The Technology-Related Assistance for Individuals with Disabilities Act of 1988 also known as The Tech Act offered the first federal definition of what constituted an assistive technology device which is defined as: any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

Assistive Technology Devices

Voice Activation Devices are those that enable individuals to use voice commands to control their computer. Products such as ViaVoice from IBM (www.ibm.com) which is a speech diction product and WordWave from WordWave, Inc. (www.wordwave.com), which enables voice-activated Internet searching using standard Internet search engines, and uses synchronized text with video and audio content, allow students to search digital multimedia such as websites and a variety of software programs.

Touch Control Devices provide the ability to touch the computer monitor to control the mouse and other functions. The TouchWindow from RiverDeep Interactive Learning (www.learningneeds.com) is a touch-enabled monitor that can be connected to any computer. ELO Touch-Systems (www.elotouch.com) added this technology to
iMacs. The Gemini from Assistive Technology, Inc. (www.assistivetech.com) is another computer that can accommodate many different ways of using the computer. It has a touch screen, switch input, on-screen keyboard, external keyboard and mouse, joystick and headmouse.

Speech-To-Text and Computer-Generated Voice Devices convert in real-time, speech-to-text, speech-to-computer generated voice and text-to-computer-generated voice. Dragon Naturally Speaking® Version 5 software from Lerout and Hauspie, Inc. (www.lhsl.com) allows users to dictate into a PC recorder. This recording can be used to create documents and emails, create and fill out forms, retrieve, share, and manage information and browse the web. The Kurzweil 3000™ System from Kurzweil Educational Systems (www.kurzweiledu.com) reads and highlights scanned or electronic text aloud using human sounding synthetic speech. ZoomText Xtra from Ai Squared (www.aisquared.com) is a screen enlargement program that integrates technology for screen magnification and screen reading. This program is a text-to-speech and allows the user to hear controls on the screen. JAWS for Windows 3.0 is a complex screen reader for navigating and reading in a multiwindow screen environment and enables the user to navigate numerous Web pages that include a multitude of graphics.

Alternative Mouse and Keyboards such as AbleNet’s Jelly Bean Switch (www.ablenetinc.com), and Discover Board from Don Johnson, Inc. (www.donjohnson.com) enable individuals to move any body part through an infrared beam of light to click the mouse and operate their computer or use larger keyboards,
which helps in navigating a keyboard. IntelliKeys from IntelliTools, Inc. (www.intellitools.com) changes the way a keyboard looks and functions by sliding different keyboard overlays over a standard keyboard. Standard overlays feature large, well-spaced keys in high contrast colors to make it easier for individuals to locate letters and numbers.

Importance of Study

A lot of attention has been directed toward students in K-12 with attention-deficit-hyperactivity disorder while neglecting these students as they pursue higher education. Today’s students, learning disabled or not, come to college expecting to learn about technology as well as learn using technology (Asen, 1994). Technology products are becoming more abundant and knowledge of their availability and ability to assist students with ADD has become crucial. There is no doubt that research needs to be conducted regarding the use of assistive technology to meet the needs of postsecondary students with ADD. This study has provided a unique and powerful contribution to the literature which is so apparently absent.

The study also built on several studies addressing college students with learning disabilities. One such study is the Ofiesh and McKee 2002 study of service providers and their service decision-making practices relative to college students with learning disabilities. The Ofiesh study focused on whether service delivery decisions are based on information from psychoeducational and neuropsychological evaluations, which sections of these tests were most useful in making service delivery decisions, and provider
satisfaction or usefulness or the tests and measurements used in making service delivery decisions. A second Ofiesh study in 2002 surveyed assistive technology use across disabilities but failed to single out students with ADD and to identify what types of assistive technologies are currently being provided by colleges in support of their student population with ADD and subsequently used by the students.

Limitations

A perceivable limitation lies in the two models that were used as the research design. These designs combine both qualitative and quantitative dimensions and could be criticized by a purist in either camp because of the mixing of methodologies that has taken place. Another limitation to this study is that it is exploratory in nature. As noted earlier, one portion of this study was a purposeful or judgmental study, limiting the generalizability of this study. In addition, the researcher could not be assured that the colleges and universities could or would pass along the student survey to their ADD students thereby further limiting the number of students who could or would provide valuable information pursuant to this study. It should also be noted that there is an acute deficiency in the amount of literature and studies directed specifically at this topic thereby preventing any replication of past surveys or use of other researchers’ questionnaires. Finally, every effort was made to craft the questions and surveys in an understandable form as questions directed at ADD students might have caused confusion to them resulting in an inability or unwillingness to respond.
Organization

This study is organized into five separate sections. The first section serves to introduce the study to be undertaken, the statement of problem, purpose of the study, the type of study, research questions that were addressed in both the literature review and through survey analysis, the study’s contribution to already existing literature as well as limitations to this type of study. The next section provides a review of the literature but notably lacks substantive research on the use of assistive technology by college students with ADD as noted as a limitation. The next section addresses the design and methodology of the study including the surveys that were administered and type of analysis that was conducted on the responses. The next section focuses on the results of the data. The final section provides conclusions and recommendations that include suggestions for future research.
LITERATURE REVIEW

There has been a phenomenal growth in the literature on the topic of attention-deficit disorder with and without hyperactivity. Purdie, Hattie and Carroll (2002) reviewed research on attention-deficit-disorder with hyperactivity (ADHD) and found 1,379 citations in Medline, 2,546 in PsychLit and 436 in ERIC over a period of time from 1990-1999. When attention-deficit disorder was addressed by itself, that is, without hyperactivity or simply ADD, they found 450 citations in Medline, 833 in PsyLit and 82 in ERIC, compared to 40 citations in Medline, 317 in PsyLit, and 35 in Eric just a decade before.

Challenges in finding specific studies relative to this study first surfaced with adequate identification of ADD in adults, which presented problems for several reasons. First because no single, specific diagnostic test exists for this disorder. In addition, issues of comorbidity of attention-deficit disorder with hyperactivity, mood disorders, dyslexia, anxiety, depression and other learning disabilities also make it difficult to single out ADD as a primary diagnosis (Biederman et al, 1991). Furthermore, most of the studies that have been conducted relating to attention-deficit-disorder, do not specifically address college students with ADD. Instead these students have been subsumed under the general category of students with learning disability. Consequently, much of the research centers around the term “learning disabilities” which encompass more than ADD.
Information related to the inclusion and practice of assistive technology is also relatively new and consequently limited (Izen & Brown, 1991; Parette & VanBienwliet, 1990; Parker et al., 1990; Ofish, et. al., 2000). It became equally clear in doing this review that there is relatively little research available concerning colleges students as a segment of the population with ADD as a learning disability (Ofiesh, 2000, Heiligenstein, et. al., 1998, Wilens, et. al., 1996). There is even less research on ADD college students when addressing their use of assistive technology (Ofiesh, 2000).

In order to study college students with ADD and their use of assistive technology a number of different areas of research were considered. First was to study the literature pertaining to children and adults with ADHD or ADD without going too far off the subject of this study by focusing on all adults with these disorders or children. Some review of studies involving children was important in order to better understand how ADD is still a part of the child who is now the adult.

Next was to study the literature on college students with ADD, their experiences at college and to look at what accommodations are being made for students with this or other learning disabilities. Next was to address the topic of assistive technology and its impact on education. Finally the challenge was to determine if any previous studies have addressed ADD college students and their use of assistive technology.
ADD as An Adult Disorder

Traditionally, ADD has been recognized as a disorder of childhood (Quinn, 2000, Weiss, 1992). Most often the disorder was identified as attention deficit hyperactivity disorder or ADHD. According to a study conducted by Wolraich and Baumgaertel (1996), changing criteria from DSM-III-R to DSM-IV resulted in an increase in diagnosis of ADHD among children in elementary school. Their study obtained teacher-reported prevalence rates for ADHD using a draft of the new DSM-IV criteria. The purpose of the study was to compare rates with the prevalence found under DSM-III-R within the same population of elementary school students, to examine the factor structure of the items within this population and to examine the relations between DSM subtypes and perceived behavior and academic problems and demographic variables. In addition the authors wished to examine the current rate of diagnosis and treatment and examine the degree of impairment among the subtypes. Results from the study indicated that changing criteria from DSM-III-R to DSM-IV resulted in an increase in diagnosis of ADHD from 56 percent to 63 percent. ADHD was characterized by academic problems with additional cases also having behavior anxiety or depressive symptoms.

A problem with the Wolraich and Baumgaertel study, however, rests with the fact that the information was derived solely from a teacher questionnaire with no parental information and no information about the pervasiveness of symptoms as required by the DSM-IV. Nonetheless, the subtypes created in DSM-IV seemed to enable a clearer diagnosis to take place by isolating behavior anxiety and depression among other factors,
from the diagnosis, thereby enabling treatment of ADHD as a separate disorder to be addressed in a more comprehensive manner earlier on in student's school life so that more reasonable and appropriate accommodations could be provided in a more timely manner. An assumption might be made that these newly diagnosed students, moving through the educational system and into postsecondary education, could be and should be better serviced with accommodations, whatever the accommodations may be, and with accommodation that are most appropriate to their identified needs.

While the vast majority of studies on ADHD have been conducted with school-age children, it is only recently that longitudinal studies have provided the evidence of attention–deficit disorder in adulthood (DuPaul, et. al., 2001, Weiss, et. al., 1979, Weiss, et. al. 1993). The 1979 Weiss studies followed 75 hyperactive children and 45 matched control children for 15 years. When compared to the control group, the children diagnosed with hyperactivity were found to have clear ADD symptoms that persisted into adulthood with 66 percent demonstrating at least one symptom. Most notable was the persistence of restlessness and poor concentration. Several follow-up studies have also clearly established that children diagnosed with ADHD continue to have symptoms of ADD into adolescence and adulthood (Heilgenstein, 1998; Nadeau, 1994).

Hill and Schoener (1996) conducted a longitudinal study of nine cohorts of children with ADHD who were reexamined 4-16 years after their initial diagnosis and from that study suggest that the rate of ADHD appears to decline by 50 percent approximately every 5 years. Given this decline, they project that the estimated rate of
adult with some form of ADHD or ADD would be expected to range from 0.8 percent at age 20 to 0.05 percent at age 40.

The importance of these studies is in their contribution of knowledge regarding the awareness of ADD in adults.

ADD and The Transition to College

Rojewski (1999), studied occupational and educational aspirations of young adults with and without learning disabilities (LD) 2 years after high school completion. This study is a typical example of research focusing on the larger dimension of learning disabilities rather than addressing specific learning disabilities such as ADD. Rowjewski studied the The National Education Longitudinal Study: 1988-1994 (NELS:88; 1996), which was administered by the National Center for Educational Statistics of the U.S. Department of Education.. Log-Linear analysis was used to examine the potential interactive effects of gender and disability in three areas: the successful attainment of a high school diploma or equivalent; status 2 years into postsecondary education; and occupational aspirations. Analysis revealed that individuals with LD reported lower high school graduation rates and were more likely to aspire to moderate or low-prestige occupations. They were more likely to be employed versus pursing postsecondary education. Higher educational aspirations were noted by those completing Grade 12 especially by those who completed an academic or college-prep program. Problems with delayed or impaired career development and lowered academic performance as adolescence were seem to contribute to lower rates of eventual enrollment in
postsecondary educational programs, as well as lowered levels of employment and less overall satisfaction in employment.

Rojewski concluded that the 2 years immediately following high school are a critical time in the lives of LD individuals. Professionals must be sensitive to the potential influence that high school placement decisions and general teacher expectations have on postsecondary education choice as well as career or occupational preparation and the transition process that must be incorporated. The role of professionals becomes vital at the secondary level advocating selection of educational tracks or possible career options.

Another issue relating specifically to the transition of ADHD/ADD students from high school to postsecondary education is a student's individualized educational program (IEP), as mandated by Congress in IDEA. The IEP must contain information regarding the relationship between a student's plan of study and his/her goals beyond secondary school, and must clarify both the transition services required by the student and the responsibilities of adult agencies to assist in providing such services. However, despite IDEA regulations specifying postsecondary education as an important outcome for IEP teams to address, a study conducted by Shearin, Roessler and Schriner (1999) discovered that a vast majority of the IEP plans that they reviewed contained little if any information about this transition.

The Shearin study (1999) addressed the transition component of IEPs of secondary students with all disabilities and did not single out students with learning
disabilities such as ADHD or ADD. Four raters evaluated the transition content of 68 Individualized Educational Programs (IEP) following the Congressional mandate to include school-to-work and school-to-school goals and linkages using an outcome-skill checklist. Two high schools in a moderate size city in Arkansas were selected for the research. The plans they reviewed included few linkages with adult agencies or with postsecondary institutions. Vocational rehabilitation, for example, was mentioned in only 7 percent of the plans. The study suggests that the key transition stakeholders must participate more actively in determining the transition services a student needs. IEP teams need to monitor their efforts to ensure goals are included and if not, provide a justification for not including this information. The study also suggests that although this particular study was not generalizable, the use of the Outcome/Skill Checklist for Transition Planning should be better used for IEP team training.

While difficult to determine the severity of ADHD or ADD in elementary and high school students, Heiligenstein, Conyers and Andrew (1998) suggest that the degree of ADHD/ADD in college students is more modest and that a cutoff score of 4 for current symptoms of inattention and hyperactivity-impulsivity would be sufficient to identify a college student as distinct from the norm. The Heilgenstein 1998 study used a modified version of the Attention Deficit Hyperactivity Rating Scale which was administered to 468 students at a large Midwestern university. They found no differences in the summation of item scores with respect to gender, ethnicity, education level, and the inattention item score. They did find a significant negative relationship between age and
hyperactivity-impulsivity item scores and the total item scores. The hyperactivity and
total item scores declined with increasing age. The authors concluded that the findings of
the study provided preliminary evidence that the present DSM-IV thresholds for
diagnosis of ADHD are too high when applied to college students. They recognized a
limitation to their study in using one type of college campus and underrepresented ethnic
minorities when compared with a national sample of college students.

For students with ADD, moving from high school to college is particularly
difficult because of the freedoms and distractions of campus life (Weiss, 1994:
Heiligenstein, et al, 1999). In the 1999 Heilgenstein study, psychological and academic
impairments in college students were assessed in a retrospective chart review using
specifically defined diagnostic criteria, which were then compared to a control group.
The primary investigator retrospectively reviewed charts of 508 students seen for an
initial assessment during the 1997 fall academic semester.

The initial review of the Heilgenstein study yielded 69 charts meeting the
inclusion criteria of either a documented diagnosis of ADHD or a request for career
testing. Following further screening for active psychiatric or medical comorbidity, the
final review resulted in a total of 54 charts. The control group consisted of 28 students
who had requested a Strong Career Interest Inventory and did not ask for or require
counseling and accommodations beyond the inventory. Students with ADHD had a
significantly lower mean grade point average, were more likely to be on academic
probation, and reported significantly more academic problems. No significant differences were noted based on age, ethnicity, and level of education.

The Heilgenstein study noted that even though ADD has been increasingly recognized as a valid adult diagnosis, clinicians at college health services continue to struggle with case identification of ADD because of the inherent uncertainties of the DSM-IV definition of impairment as this definition relates to adults, and they suggest that future revisions of DSM-IV should consider linking specific patterns of impairment to diagnosis.

In a study of university students from three different countries (United States, Italy and New Zealand) the researchers actually found that American students diagnosed with ADHD, displayed fewer symptoms of both attention-deficit and hyperactivity when factors such as completing tasks, sustaining attention, forgetfulness, organizational skills, controlling one's self, impulsivity, excess talking and interrupting others were compared to students in the other two countries (DuPaul, et al, 2001).

The DuPaul study sampled 1,209 university students from Italy, New Zealand, and the United States who completed a 24-item self-report measure (The Young Adult Rating Scale) to examine whether their symptoms conformed to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and whether symptoms vary across gender and country. The study expanded upon the preliminary work by Heiligenstein in 1999. Factor analysis supported the bidimensional symptom structure among U. S. and New Zealand students. Participants did not vary significantly by gender. Students from
New Zealand and Italy reported significantly more inattention symptoms than did U.S. students. Italian students reported more hyperactivity-impulsivity symptoms than U.S. students.

The DuPaul study, as directed toward college students, was exploratory in nature rather than diagnostic, however, the results provide initial evidence that a percentage of university students in the three countries studied report clinically significant levels of ADHD or ADD symptomatology and also that the DSM-IV conceptualization of this disorder has some basis of support in this population.

The autonomy and the big blocks of free time associate with higher education can also exacerbate some bad habits. Distractions abound in dormitories and in lecture classes full of other students. Classes scheduled for varying times throw off a regular sleep schedule (Weiss, 2000). The social environment at college can also be an issue for students with ADD. "The biggest problem for me and my colleagues is that there's a real disconnect between the K-12 system and the collegiate system," says Ross Pollack, director of the student-resource center at Manhattan College in Riverdale, N.Y. "We see students who do well before they get to college, and then barely bump along when they get there".

Steinberg (1998) also agrees that LD students with ADD are at greater risk for being placed on probation or dropping out of college. She believes that time management and organization tend to be the weakest areas for these students and are therefore in the most need of proactive and creative interventions. Results from additional studies by
Weiss and Hechtman (1993) indicated that, in comparison with matched control groups, ADD adults moved their residences more frequently, were more involved in car accidents, failed more grades, had more court appearances, abused drugs more often, had more impulsive and immature personality traits, rated their childhood more negatively, had lower self-esteem, and had less efficient social skills.

Research addressing college students with learning disabilities, as well as accommodations provided to these college students resulted in several studies. It is important to remember that legislation, including the ADA, has mandated that college campuses provide "reasonable" accommodations for all disabled students including those with ADHD. However, the term reasonable is subject to a variety of interpretation. Undergraduate, graduate, or professional school students are encouraged to seek out disability support service or person, identify themselves as a student with a LD, and provide the needed documentation to support their claim. This documentation includes psychoeducational and neurobehavior tests. These evaluations are used to establish both eligibility and specific accommodation determinations.

Ofiesh and McAfee, (2000) evaluated service providers and found prior to their research that there is little research available which validates the use of psychoeducational evaluations in making service delivery decisions for postsecondary students or the perceived usefulness of the various components of the evaluations. Ninety-one service providers of college students (2- and 4-year colleges and universities) were surveyed to determine whether service delivery decisions are based on information
from psychoeducational and neuropsychological evaluations, which sections of these evaluations are most helpful in making service delivery decisions, and administrators’ satisfaction with the tests and measurements for service delivery. The findings supported the common, though mostly undocumented, belief that data from psychoeducational and neuropsychological evaluations are used for establishing both eligibility and specific accommodation determinations, that while all sections of the evaluations were deemed useful, test scores were considered the least useful. In this same study, the disability service providers found the recommendations of the evaluators to be the most useful along with the summary of the student's cognitive strengths and weaknesses.

Ofiesh and McAfee point out that those responding to their survey were members of the Association on Higher Education and Disability (AHEAD) and were possibly a bit more biased due to their commitment to the field, therefore, the findings may not be as generalizable to colleges and universities not affiliated with this organization. The study also did not address the criteria used for specific decisions. They suggest that service providers need to know Section 504 and ADA and to keep abreast of relevant litigation, then develop policies regarding accommodations in line with the law and policies of their own institution, and to further investigate the methods that are used to make decisions about service delivery options and accommodations.

Disability support services usually provide tutoring or individual academic assistance, study skills such as test-taking and note-taking, preferential seating in the
front of the class, proofreading services, reduced course load, or time management workshops. Qualitative research suggests that while types of services offered in community colleges and four-year colleges and universities are quite similar, the quality of services varies (Finn, 1999). Finn (1999) studied students with learning disabilities from selected Midwest colleges and universities participated in a study to determine the differences between LD programs at community colleges and four-year institutions, the level of satisfaction with college and LD programming accommodations, and the services most important to students. A series of focus groups were held at five institutions. Students were equally matched gender wise and ranged in age 16 to 56 years and were enrolled in freshmen through graduate levels.

Results of this study revealed the types of LD services offered among the institutions participating in the research were quite similar but the quality of the services varied. Students at large public institutions had difficulty getting note takers, books on tape and tutors, and obtaining assistance from LD staff. Participants from the smaller community colleges and private institutions considered the smallness of their institutions to be a benefit and noted that the LD program was easily accessible and the LD staff were always available.

Finn noted a limitation to the study in gathering qualitative data representing the perceptions and attitudes of LD students in selected institutions. Based on this research method, they conclude that their results cannot be generalized beyond the select group of individuals who participated in the study. By conducting student evaluations of LD
programs, colleges and universities can continue to identify services in need of improvement.

Based on a 1999 study, Ganshow, Coyne, Parks and Antonoff believe that graduate and professional schools are more aware of students with learning disabilities which would include ADD. Their study was a 10-year follow-up study that compared programs and services for LD students between 1985 and 1995. Surveys were sent to the same institutions (n=682) in 1995 that participated in the survey in 1985. Significant changes over the 10 years included a higher awareness about LD, evidence of more compliance with Section 504, a greater specificity of assessments required for the identification of students who are accommodated, improvement in the types and extent of services provided, and increased program visibility. LD programs seem to have garnered more visibility and provided a greater specificity of assessments required for the identification of those who need to be accommodated. There also appeared to be improvement in the types and extent of services provided. The researchers found an increase in the number of LD coordinators and in the use of a written plan. The respondents indicated an increase in the use of a written plan from 38% in 1985 to 83% in 1995.

The greatest change found in the Ganshow study in the type of services made available to LD students was in the provision of tutoring assistance (from 58 percent to 73 percent), note taking (47 percent to 71 percent), exam taking skills (50 percent to 70 percent), use of the library (52 percent to 80 percent) and the use of computers (34
percent to 68 percent). The authors reported that many of the institutions were not able to give exact numbers of students with LD or how many new graduate students they anticipated accepting. They suggest that these findings may possibly point to the students with LD not electing to disclose their learning disability or that the people responsible for coordinating LD services may not maintain adequate records about who these students are. They suggest that there is still need for improvement, especially in publicizing LD services.

Faculty Support

Bourke, Strehorn and Silver. (2000) set out to identify actual practices, versus theoretical models, used by faculty with LD students. Surveys were mailed to 485 faculty members at the University of Massachusetts, Amherst, who received an instructional accommodation form from the office of Learning Disabilities Support Services (LDSS) in the fall of 1995. The purpose of the survey was to identify actual practices used by faculty with LD students in light of the existing research which focuses on attitudes and theoretical models without delineating actual practices. The survey focused on the degree of ease or difficulty in implementing instructional accommodations, their perceptions regarding adequacy of support, and their own beliefs and understandings concerning the need for and the benefit of providing instructional accommodations for students with special needs. Data was analyzed using SPSS.

A significant difference was found between the behavior of tenure-track and non-tenure-track. Non-tenure-track respondents found it easier for them to provide
accommodations and their level of belief about the efficacy of and understanding of the need for accommodations was greater than that of tenure-track faculty. Findings suggest that the stronger the respondent's belief that accommodations helped students succeed, the greater their level of understanding concerning the necessity for such accommodations. Also the stronger the belief that accommodations helped students succeed, the easier it was for them to provide alternative types of exams and additional time for completion of assignments. The level and perception of support provided by the LDSS factored favorably into the ease of providing instructional accommodations. The authors point out the limitations of this study to include focus on a single university, what they considered to be a fairly low response rate and that those who did return the survey may be more self-selecting.

Another study found that faculty at an American university expressed a significantly more supportive attitude toward students with learning disabilities than those at the Israeli institution (Leyser et al., 2000). The Leyser study examined faculty-reported attitudes, experiences and willingness to make accommodations for these students by faculty and compared faculty views and practices in these two colleges regarding students with learning disabilities in teacher education. A related goal was to serve as an impetus for future collaborative cross-cultural studies between universities and colleges in different regions and nations.

Faculty at the American university expressed more willingness to provide accommodations for these students and reported spending more time making
accommodations. Making accommodations for them was not perceived as being unfair to other students. Overall, however, about half of the faculty in both institutions indicated that they had no teaching contact with these types of students suggesting that over the years relatively few of these students were either enrolled in their university courses or came forward to identify their disability. When aware, however, a large majority in both institutions expressed a willingness to provide instructional accommodations such as allowing students to tape record lectures; clarifying assignments on a one-to-one basis; commenting on drafts of papers; modifying the setting for exam taking, changing the timing; or allowing use of assistive technology. They were less willing to provide students with a copy of a lecture outline or with a copy of an overhead; change the presentation format of their exams; and less willing to adjust grading.

The Leyser study also found that many faculty at both institutions reported limited training in disabilities, limited knowledge of resources, limited skills in making accommodations and unfamiliarly with disability laws. These findings suggest a need for better faculty awareness of the needs of special students as well as more faculty development.

Scott and Gregg (2000) found discrepancies in their study between what might be expected of faculty with LD/ADD students in their class and the role that faculty actually played and experienced. This study addressed the evolving needs of faculty in providing access and support for these college students. The term access refers to providing an equal opportunity for students with LD in all aspects of the college experience. For
faculty this might involve the roles of teaching, mentoring, and policy development. The study was able to identify discrepancies between the evolving faculty needs, and current educational practices regarding their roles. The study clearly pointed out the importance of providing faculty with training and ongoing opportunity to apply nondiscriminatory decision-making. Faculty identified a need to having training that is convenient to a range of faculty schedules which would include incorporating the internet, email or CD-ROM all of which enable self-paced instruction. Furthermore, they identified a need for training early on in their careers. Providing some type of incentive or pay-off may also be key to encouraging faculty to work more with these students in unique ways. The authors suggest that if institutions fail to reexamine their assumptions and broaden their questions pertaining to faculty development, then there is the potential to endlessly reinvent the wheel of faculty education approaches pertaining to students with special needs. This study pointed out that lack of training, lack of awareness on the part of the faculty of LD/ADD characteristics, and lack of institutional support contributing to the gap between expectation and reality.

Accommodations

Some students who could benefit from accommodations do not get them because they shy away from informing their professors or their institutions of their disorder. In addition, it does not help that some professors view ADD diagnoses with skepticism, especially when they see such students display moments of high ability. Colleges and
universities alike continue their search to better accept and accommodate LD students with ADD.

Much of the research is showing that disability support service providers usually provide what is expected of them by law to include note-taking, preferential seating in the front of the class, reduced course load, or time management workshops. Some provide more such as tutoring or individual academic assistance, proofreading services, study skills such as test-taking. But some ADD students as well as institutions say that such accommodations often don't help, and that the pressure to finish a test quickly, for example, is what gives them the stimulation they need to focus.

One institution that challenges the conventional wisdom regarding accommodations and supplemental help to ADD students is Landmark College, a private two-year institution in Putney, Vt., that specializes in helping students with ADD learn to manage their time and to study effectively. The college's policy on test-taking is to consider giving extra time only on a case-by-case basis. While many colleges offer ADD students a note-taking service to compensate for their shorter attention spans, Landmark frowns upon that accommodation, arguing that it can reinforce a student's impulse to let his or her mind wander during class. The college has developed a system in which students are taught to take their own notes in a way that holds their attention. They are asked to divide each notebook page into two columns. On the left side, they are to draw diagrams that might help them remember things they hear, and to take "meta notes," recording broad ideas and themes from the lecture. The right-hand column is for
conventional notes. Landmark has found this method along with some unconventional methods to work well and often better than more conventional accommodations.

Assistive Technology

Assistive technology has the potential to help all learners, not just ADD students, to gather, manipulate, understand and use information more efficiently and effectively. Edyburn (2000) suggests that assistive technologies “enable students to complete tasks more efficiently and independently and results in improved performance on a variety of reading and writing tasks which in turn leads to greater academic success” (p. 122). It is widely regarded as holding potential for enhancing access, inclusion, and the quality of life of individuals with disabilities (Wilkes, 2001; Roach, 2002; DeWitt, 1991; Garner & Campbell, 1987; Sawyer & Zantal-Wiener, 1993; Wisniewski & Sedlack, 1992). Edyburn further summits that word processing programs with spelling checkers facilitate writing for students for students with learning disabilities by compensating for some of the students’ difficulties with the writing process. Lewis (1998a) purposes assistive technology as having two main purposes: to build on a student’s individual strength and to enable them to better perform on any given task.

In fall 2001, David Rose, co-executive director of the Center for Applied Special Technology (CAST), testified before the Senate Appropriations Committee on the future of educational technology. He made recommendations to this committee in three areas. First to encourage funding of assistive technologies to school districts so they can be
effective consumers of these powerful technologies; second to focus on ways to increase the use of digital curricula, and third to better address Universal Design of Learning.

In 1997, R. Mace coined this new term, Universal Design, to describe designs that considered from the very beginning the access needs of the broadest possible range of users. Being developed by CAST (Center for Applied Special Technology), The Council for Exceptional Children and others draw on and extend the principles of universal design as seen in architecture. The premise behind this design is that it is both better and cheaper to practice universal design than to retrofit solutions later. There is an enormous expense associated with retrofitting technology. The idea is that as new technologies are developed for schools, they should be made accessible to all the students in the school, right from the start. If learning spaces in schools are accessible to all students, savings will be made both in terms of short-term costs of miss-educating students in the present and the long-term-cost of not educating them for their future. Universal Design requires thinking about the needs of the entire range of learners who are and could be in today’s classroom and then designing materials, methods, and environments that support and challenge each learner as appropriately and consistently as possible.

The Technology-Related Assistance for Individuals with Disabilities Act of 1988, also referred to as the Tech Act 1988, requires states to develop statewide, consumer–responsive programs of technology services for individuals with disabilities of all ages. The intent of this legislation was to increase the awareness of the needs of individuals with disabilities for both assistive technologies (AT) devices and to increase awareness of
policies, practices, and procedures that impact the availability of such services and
devices. The Tech Act offered the first federal definition of what constituted an assistive
technology device which is defined as “any item, piece of equipment, or product system,
whether acquired commercially off the shelf, modified, or customized, that is used to
increase, maintain, or improve functional capabilities of individuals with disabilities”
(Tech Act, 1988). This Act also defined assistive technology services to include “any
service that directly assists and individual with a disability in the selection, acquisition, or
use of an assistive technology device” (Tech Act, 1988).

Assistive technologies are applications either hardware or software that are
developed specifically to assist disabled individuals in overcoming barriers. AT devices
can be categorized as high technology and low technology. Many low tech devices are
available almost anyway and can range from pencil grips, cassette recorders, head
pointers, or workbooks, flow charts, and graphic organizers (Lahm & Morrissette, 1994).
High tech devices most often include some type of computer usage including computer
chips, hand-held calculators and talking clocks (Franklin, 1994).

Although assistive devices and services are not explicitly stated in the Education
for All Handicapped Children, also known as Public Law 94-142, the Tech Act
established a foundation for the use of supportive aids and services. Definitions from the
Tech Act were incorporated into the passage of the 1990 Individuals with Disabilities
Education Act also known as IDEA and Public Law 101-476.
In 1997, reauthorization of IDEA mandated the consideration and inclusion of assistive technology for all children, including those with mild or moderate disabilities. IDEA further emphasized the importance of technology in the lives of students with disabilities, and the need to share cutting edge information about advances in technology across the K-12 environment. This reauthorization stated that assistive technology needs must be distinctly considered by every IEP team for students found eligible for special education services. Furthermore, technology was to be considered a viable instructional tool addressing cognitive needs of students with disabilities (Derer et al, 1996; Council for Exceptional Children, 1998).

In addition to cognitive assistance, Lahm, Bausch, Hasselbring and Blackhurst (2001) noted six key areas where assistive technology could be of benefit to students with mild to moderate disabilities. These included note taking, writing assistance, access to reference materials, materials modification, productivity, and organization. Studies by Bahr, Nelson and Van Meter (1996) point to difficulties in writing by students with learning disabilities. Graham (1998) cautions that too much focus on writing skills may have adverse consequences on the development of higher processing skills such as organization of writing which could lead to less-developed ideas, omission of key insights and illogical progression of information. He supports the use of technology and adds that “technology can [not only]support the basic skills of producing legible text with correct mechanics [but can contribute to] …. the more complex cognitive processes of planning, drafting, and revision of text” (Graham et al., 1998, p.410).
In a study of 39 students aged nine to eighteen, Higgins and Raskind (2000a) found that the use of voice recognition software improved reading comprehension, spelling and word recognition scores over a control group. In addition, continuous use of this type of software was seen to improve the working memory. Montali and Lewandowki (1996) suggest that the use of speech synthesis software may increase a student’s motivation to read by presenting them with a more successful reading experience. Torgesen and Baker (1995) also reported improvements in word recognition and phonological decoding abilities after students used books with a voice component. Other studies by Lundberg (1996), MacArthur (1998) McEwan, (1998), De La Paz (1999) and Hertzroni and Shrieber (2004) support and champion the use of technology such as text-to speech and speech-to text software.

Assistive Technology and the ADD College Student

The use of AT devices in K-12 does not guarantee that these devices or services will be available or provided in postsecondary institutions. The mandated consideration of technology suggests that these students will enter colleges and universities with the prescribed documentation to support their need and desire for AT. Along with the movement to use technology to promote learning for all students, disability service providers have begun to consider AT devices and services for a broader range of individuals with disabilities (Bryant et al, 1994; Higgins & Raskind, 1995, Rashkind & Higgins, 1998).
A question was posted on the Disabled Students Services in Higher Education Listserve about whether a student with ADD was entitled to use a Dragon Dictate system. The conversation centered on whether the functional limitations of ADD could manifest themselves in writing and if so, what were the characteristics. Responses included the recognition of some disability service providers that they had not even considered the use of a voice recognition system with this type of student even though research supports the substantial writing struggles of some students with ADD. Speech recognition software was originally designed for individuals with limited mobility and visual impairment. However, research from MacArthur in 1998 showed success for children with ADHD.

This application of AT directed at students such as those with ADD marks a paradigm shift in how service providers and educators view and subsequently use AT across a broader spectrum of students (Norlander et al, 1987). Lance (1996) not only found that postsecondary disability providers recognize that their students would benefit academically from the use of AT but the students themselves expressed a need for AT training and greater accessibility to AT devices.

A review of the literature revealed only a handful of studies regarding the use and the effectiveness of AT for college and university students. Hecker (2002) conducted a study on the use of assistive reading software with 20 postsecondary students. His findings indicated that the software helped students to complete assignments on time, reduced stress, fatigue and distractibility but did not show significant differences related to reading comprehension.
Ofiesh completed a study in 2002 that was designed to provide a foundation for further investigation into the practice of using AT across categories of disabilities in postsecondary settings. A limitation to their study was that their survey did not adequately represent the use of AT with students with ADD as ADD was subsumed under the category of LD. However, their research did shed light on the most frequently used AT devices in postsecondary disability settings and which devices are used across categories of disabilities. Software programs considered useful for students with language-based learning disabilities include Kurzweil 3000, textHELP, Dragon Naturally Speaking. For those with reading disorders and evidence of deficits in phonological awareness programs such as Lindamood Phoneme Sequencing program, and Phonographix were noted. No previous research from postsecondary settings exists on the actual use of AT across the differing conditions of disability.

Many of these researchers agree that there is a problem in carrying out empirical studies with students other than those with sensory or mobility disabilities. They ascribe these problems to a scarcity of data on the academic characteristics of students with disabilities such as ADD, the heterogeneity within categories of disabilities and nonstandard criteria used to diagnose disabilities such as ADD, and the differing institutional policies regarding the acceptance of documentation of this type of disability.

It appears that college students and providers alike are searching for technology to enhance learning opportunities. The research up to this point on ADD college students is limited yet leaves wide open the possibilities of new studies and a much greater focus on
this very timely topic. The need, therefore, exists to conduct additional research in this area and to find out what colleges and universities are providing and how college students with ADD are using technology in this technology rich society.
DESIGN AND METHODOLOGY

The purpose of this section is to address the specific research that was conducted in order to answer the research questions presented in the first section. It outlines in more detail the design of the research and includes the methods for gathering the information needed and the analysis that was used.

Creswell (1994) suggests that “it is advantageous to a researcher to combine methods of [research] design to better understand a concept being tested or explored” (p.177). Therefore the research that will be conducted for this study represents a combination of both qualitative and quantitative techniques. Two models that were used are known as the dominant-less-dominant design and the mixed methodology design (Creswell, 1994). The dominant-less-dominant model enables the researcher to present “the study within a single, dominant paradigm with one small component of the overall study drawn from an alternative paradigm” (Creswell, 1994, p.177). The mixed methodology design mixes the several paradigms at various steps in the design. This mixture may appear in the literature review, in the purpose statement, in the research questions, and in the analysis (Creswell, 1994).

The advantage to using these two types of design is that it allows for a more comprehensive understanding of the issue, enabling the researcher to collect limited or hard to access information in order to probe another aspect that is important to the study. Additionally, the overall design of the study is better presented by working back and forth between both inductive and deductive methods of thinking. A chief disadvantage
lies in the qualitative and quantitative purists as well as those unfamiliar with this method, who might be concerned with the match or the combination of methods.

**Dominant Paradigm**

The single dominant paradigm was a study using a sample of 410 colleges and universities. Two-hundred-ten of the 410 colleges and universities used in this study represent what is known as a purposeful, purposive or judgmental sample (Creswell, 1994; Patton, 2001; Gall et al., 2003; Bogdan & Biklen, 2003). Michael Patton in *Qualitative Evaluation and Research Methods* (2001) defines purposeful sampling as “the process of selecting cases that are likely to be information-rich with respect to the purposes of a qualitative research study” (as appearing in Gall et al., 2003). He suggests that the purpose is to develop a deeper understanding of the phenomenon being studied and that this type of sampling is not designed to achieve population validity or represent accurately a defined population. The list used for the two-hundred ten colleges and universities was compiled from lists provided by several special schools for students with learning disabilities. These specific colleges and universities that were surveyed were those institutions that are known to have students with learning disabilities apply and be accepted to them.

The second group of 200 colleges and universities was randomly selected from a list of postsecondary institutions in the United States. These institutions were not necessarily known to accept students with learning disabilities. Care was taken to balance this second group so that equal representation of 2-year colleges and 4-year
institutions could be achieved. The purpose of including this group of postsecondary institutions was to find out the same information as those institutions that had been selectively chosen. A comparison could be made between those that are known to accept LD and ADD students and those that are not necessarily known to do so. In addition, the combination of both groups provided a larger, more diverse sample of postsecondary institutions thereby enabling the possibility of generalizing more of the results.

Although part of the sample of 410 colleges and universities represented a purposeful selection, the size of the study as well as the structured instrument that was used to collect the data, was more indicative of quantitative studies. Additionally, analysis of some of the responses was conducted using SPSS for simple frequencies and cross-tabulations, which is also most often used for quantitative analysis.

**Less-Dominant Paradigm**

Collecting information from as many of the 410 institutions as possible was critical to the completion of this study. However, another important aspect was to hear from ADD college students to find out if they are using assistive or other accommodations to enhance their learning experiences. The less-dominant design of the study took the form of a student survey with open-ended questions and was more qualitative in nature. There was a reason for incorporating a qualitative approach. Qualitative research is considered more flexible with respect to sampling techniques than quantitative research. Estimating a desirable number of cases to include in the sample size is entirely a matter of judgment and does not necessarily adhere to any set of rules.
(Gall, et. al., 2003). Michael Patton (as appearing in Gall, et al., 2003) lists opportunistic sampling as a separate type of purposeful sampling. Opportunistic sampling involves the findings from one case to inform the researcher’s selection of subsequent cases. Application of this form of sampling resulted in seeking assistance from a special education high school to do a special mailing of questionnaires to ADD graduates as well as from postsecondary service providers in distributing and asking ADD college students at their institutions to complete a survey.

In this instance, there was no way to determine the sample size that would result from using opportunistic purposeful sampling. Administrators at the 410 institutions were asked on their survey if they would be able to distribute a student survey and those who responded “yes” were asked how many they thought they could distribute. This information, at least, gave the researcher some indication that a certain number of students might complete the survey. To help ensure additional student feedback, ADD college students who were graduates from a special high school for learning disabled and ADD students, were contacted by their high school and asked to complete a student survey. Thirty-five students were sent a survey to complete.

Reasons for Choosing Surveys

Survey design was chosen because it is an efficient and relatively inexpensive way to learn about a particular topic. A self-administered survey is less intrusive when sensitive issues are questioned. Care was taken to protect respondents from individual identification. Surveys, if not too long, can also be taken in a relatively short time.
For this study, surveys were used to investigate what assistive technology colleges and universities had available as well as what ADD college students were using. These surveys also addressed what other accommodations, in addition to assistive technology, colleges and universities have available for use by ADD college students. The student survey sought to identify accommodations and devices students are using and how satisfied they are with them.

Nature of the Survey: Cross-Sectional

The surveys designed for this research were cross-sectional in nature. In a cross-sectional survey, data are collected at one point in time from a sample selected to describe some larger population at that time (Gall et al., 2003; Bogdan & Biklen, 2003). The cross-sectional nature of these surveys constitutes a limitation of the design. Results from the cross-sectional surveys designed for this study are limited to those included in the sample and represent current perceptions or understandings on the part of the respondents as they exist at the time of the responses.

Survey Instruments

A review of research indicated that an instrument to assess use of assistive technology by ADD college and/or high school students did not exist at the time of this project. The researcher was left to develop a survey instrument. The development of the two surveys is described in the following sections.
Survey #1: Survey to Administrators

The purpose of Survey #1 was to find out what college and university administrators are doing relative to students with ADD. Included were mostly closed-ended questions pertaining to traditional and assistive technology accommodations available to ADD students, how service delivery decisions are made whether based on information from psychoeducational and neuropsychological evaluations or other assessments, and which sections of these evaluations were found by administrators to be the most useful in making service delivery decisions. Questions centered on what criteria administrators use to purchase assistive technology devices, and what barriers exist that might prevent either the purchase or utilization of such technologies.

Survey #1 Implementation: Survey to Administrators

The survey to the college and university administrators was administered through two options. Each institution received a cover letter and a survey in the mail. Each administrator was provided with a letter describing the study, informing them that the survey has been approved by the Institutional Review Board for the Protection of Human Subjects at American University, and that their name, school name or any other identifying information could not be traced back to them personally. Administrators were informed that all information provided to the researcher would be kept in confidence and seen only by the researcher. In the cover letter they were invited to participate in this study and given the option to either fill out the hard copy provided to them or to go to an address on SurveyMonkey to complete the survey online. With the overall growing
popularity of web surveys, it was expected that Survey Monkey would be the preferred option and that administrators would opt to complete their survey online.

Survey #2: College Student Survey

The purpose of Survey #2 was to question ADD college students about their use of accommodations and specifically assistive technology. Included were questions pertaining to what accommodations they used prior to going to college and what they are using now, whether these accommodations were of their own choosing or made available through their college, and if they are satisfied with the accommodations they are using. Students were also asked what factors influenced their selection of college, They were also asked about their greatest challenge as a college student with ADD.

Survey #2 Implementation: College Student Survey

The college and university administrators who were part of the administrator survey were asked to distribute questionnaires to the college students who had self-identified as having ADD. Similar to what was presented to the administrators, each student was provided with information describing the study, informing them that the survey has been approved by the Institutional Review Board for the Protection of Human Subjects at American University, and that their name, school name or any other identifying information could not be traced back to them personally. Students were informed that all information provided by the respondent would be held in confidence and seen only by the researcher.
Students were asked to either fill out a hard copy provided to them by their college or university or to go to an address on SurveyMonkey to complete the survey online. It was expected that Survey Monkey would be the preferred option. Each survey asked for the zip code of the institution which helped the researcher determine geographic representation.

In addition to getting information from students at the colleges and universities that were part of the 410 institutions in the sample. ADD students that had graduated from a special school for learning disabled students were contacted by their high school and asked to complete the student questionnaire. They also had the option of filing out the survey sent to them in the mail or going to SurveyMonkey to complete it online.

Research Questions

The following research questions were explored.

1. How do the colleges and universities fit into Categories #1-4 of disability services?
2. Do colleges and universities provide ADD students with accommodations and what type of accommodations are they providing?
3. Are the purposeful institutions that are known to have LD and ADD students apply and be accepted to them, providing these students with more accommodations than the randomly selected institutions?
4. Is there a perceived gap between student need and actual provision?
Several of the concepts included in the surveys developed for this study are based on those which appear in two Offish surveys mentioned in the Literature Review section. Recognizing that ADD as a learning disability was not specifically addressed in either of their surveys has required the researcher to alter questions in order to focus on this disorder. The following content areas were identified as pertinent to the research:

1. Type of diagnostic information used by service providers
2. Accommodations offered to learning disabled students
3. General category of assistive technology services and devices offered to learning disabled students
4. Accommodations used by ADD students
5. Satisfaction with diagnostic information by service providers
6. Use of accommodations by students
7. Satisfaction with accommodations by students

Survey Construction

The two surveys were made up of both closed and open-ended questions, exemplary of the mixed methodology approach used in this study. Particular care was taken with those surveys going to ADD students to make the questions clear and simple. Care has been taken to redirect respondents to branched questions. In order to help address the validity of the surveys, both surveys was submitted to two university administrators who are not part of the study but are in offices that provide special
services to learning disabled students and have ADD students as part of their population. Suggestions for revision resulted in the form that was ultimately provided to the sample.

Use of Human Subjects

The primary data collected relied entirely on the participation of human subjects. Permission for the use of human subjects was granted. Consent to participate in the study was achieved by the respondents’ agreement to fill out the survey. Risks to the participants were minimal. Responses are held in confidence, rather than anonymous, individual identities will not be revealed.

Analysis of Data

SPSS software was employed for some of the analysis of the data collected from the administrator survey. Statistical methods used for study included frequency analysis, descriptive statistics, and cross-tabulation. Specific hypotheses testing using such means as the t test, Anova, Pearson’s r, etc. were not employed due to the exploratory nature of the study. Missing values identified as “no answer” were also noted.

- Frequency tables were generated to analyze nominal and ordinal level variables. These tables provided the frequency distribution of the categories in absolute values and percentage.
- Cross-tabulation determined the relationships between relevant categorical variables.

Anecdotal responses provided in the open-ended questions were sorted and patterns or trends noted, and added to address both qualitative and quantitative findings.
RESULTS

This section provides the results from the college and university administrator questionnaire and responses from ADD college students. The reader is reminded that limited literature and research has been undertaken on college students with ADD. The purpose of the study was to explore a variety of issues as they relate to the ADD college student, consequently no formal hypotheses were created for this study or tests undertaken to determine significance of relationships. Instead the researcher sought to uncover any patterns and trends that could be noted. The results of this study can be used to gain a better understanding of how colleges and universities are dealing with students with ADD.

Questionnaire Response

One hundred and three administrator questionnaires from the list of 410 colleges surveyed were returned representing a 25 percent response rate. Seven of the questionnaires were returned in the mail due to incorrect addresses. The administrator questionnaires were administered both through the mail and online. Sent along with the administrators’ questionnaires were copies of a questionnaire for their college students to fill out. Eighteen ADD college students from these 103 institutions provided their responses to questions regarding their ADD. In addition, 4 college students who graduated from a special education high school provided input.

Generally, the responses that were returned represented a good cross section of the colleges and universities throughout the United States. It should be noted that the
overall response rate of 2-year institutions versus 4-year virtually mirrored the
distribution of community colleges and 4-year colleges and universities that was
originally identified in the samples. While the number of responses expected to be
returned by college students was a complete unknown at the time of distribution, valuable
insight was obtained by the students who did respond. In addition, these responses were
compared to information provided by the colleges and university administrators and will
be further discussed in the last section of the paper.

Administrator Participant Information

Four hundred ten questionnaires were sent to college administrators throughout
the United States. Two hundred ten of these were identified as a purposeful sample. As a
purposeful sample, these colleges and universities were hand selected by the researcher
as a result of a triangulation of lists from three special education high schools, one in
New York, one in California, and one in Washington, DC. These lists represented the
colleges and universities that their ADD students had applied to and been accepted. The
second group of 200 colleges and universities were randomly selected and were done so
without prior knowledge as to the strength or availability of disability services available
at these institutions.

Each administrator was asked to complete the copy of the survey sent to them or
to go online to an address on Surveymonkey in order to complete the survey. Fifteen
administrators chose to respond via the web using Surveymonkey. Using SPSS,
frequencies were calculated for those questions that were structured, close-ended and
could be coded. A number of open-ended questions were posed to administrators as follow-up to the closed-ended questions. These responses helped to further clarify specific areas of interest to the researcher and are presented throughout this section in support of the more structured responses.

In addition, a number of cross tabulations were conducted to identify possible trends and patterns. These patterns and trends were based on the size of the institution (small, medium, large), the type of institution (public or private), the type of degree granted (2-year and 4-year), and whether the information came from the purposeful sample or the random sample.

Simple Frequencies

The text and eight tables that follow help present overall findings of the research based on simple frequencies.

Table 1 Institutions by size, type and degree granted (n=103)

<table>
<thead>
<tr>
<th>Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>52</td>
<td>30</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>46</td>
<td>54</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree Granted</th>
<th>2-Year</th>
<th>4-Year</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>35</td>
<td>62</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Purposeful</th>
<th>Random</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>37</td>
<td>63</td>
</tr>
</tbody>
</table>

Table 1 shows that the respondents were primarily from small, private institutions, granting 4-year degrees. These results reflect the overall responses of the 103
questionnaires that were returned and do not necessarily reflect any type of conclusion that might be prematurely reached regarding which type of institution provides more accommodations for ADD student. These variables which focused on institution size, type of institution, degree granted, and sample type were later used in conducting cross-tabulations with all of the variables and examined for possible patterns and trends that might exist and warrant further more conclusive research to be conducted.

Table 2: Number of People on Staff

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person</td>
<td>26</td>
<td>25.2</td>
</tr>
<tr>
<td>2 people</td>
<td>19</td>
<td>18.4</td>
</tr>
<tr>
<td>3 people</td>
<td>23</td>
<td>22.3</td>
</tr>
<tr>
<td>More than 3 people</td>
<td>32</td>
<td>31.1</td>
</tr>
<tr>
<td>No Answer</td>
<td>3</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Table 2 shows that most of the institutions responding have more than 3 people staffing an office that serves special students. When asked if the staff was trained in issues related to disabilities, 86 percent indicated that they were. Administrators were also asked whether they had seen an increase, decrease or no change over the last five years in the number of students with ADD, 87 percent responded that they had seen an increase, 11 percent said that they did not know one way or the other and 2 percent said that they had not seen a change.

To gain a better understanding about how students learn about accommodations available from the colleges and universities, administrators were asked how a student might come to know about such accommodations. Ninety-six administrators responded
to this question and stated that information about disability services is made available in the school’s catalog, online on their websites, in all admission information, and through displays throughout their campuses. When asked if administrators share information regarding the student’s ADD with faculty who will be teaching the student, 79 percent said that they did. Further comments regarding this issue repeatedly supported what one administrator stated which was

“only if the student signs a document stating that he/she permits the Office of Disability Services to send out a form informing professors of students in their classes who are registered with us. It is the students’ responsibility to share their individual accommodation plan.”

In other cases administrators indicated that they sent out a generic or form letter from the disability office to faculty without any reference to a specific student in case the faculty found that they were in need of such information.

Several questions were asked in order to gain a better understanding of how administrators make decisions regarding the delivery of services to students with ADD. Ninety-two percent of the respondents indicated that they use psychoeducational and neuropsychological evaluations in making service delivery decisions. Table 3 shows that the majority of the institutions that use these tests in making service delivery decisions, use summary reports, followed by recommendations by assessors, and cognitive strengths and weaknesses. The use of test behavior, which basically looks at
how a person behaves during a test and is primarily noted through observation by the person administering the test, was used the least.

Table 3  Use of specific components of the Psychoeducational and Neuropsychological Tests

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Strengths and Weaknesses</td>
<td>89</td>
<td>102</td>
</tr>
<tr>
<td>Academic Strengths and Weaknesses</td>
<td>85</td>
<td>102</td>
</tr>
<tr>
<td>Test Scores</td>
<td>82</td>
<td>102</td>
</tr>
<tr>
<td>Test Behavior</td>
<td>61</td>
<td>101</td>
</tr>
<tr>
<td>Summary Reports</td>
<td>93</td>
<td>102</td>
</tr>
<tr>
<td>Recommendations from Assessor</td>
<td>90</td>
<td>101</td>
</tr>
</tbody>
</table>

Sixty-one percent of the institutions said that they use other assessments in making service delivery decisions. Further questioning regarding these assessments included a student’s IEP report, the Wechsler Adult Intelligence Scale, Woodcock-Johnson Psycho-educational Battery’s Tests of Cognitive Ability, Kaufman Adolescent and Adult Intelligence Test, Stanford-Binet Intelligence Scale, Nelson-Denny Reading Skills Test, Stanford Diagnostic Mathematics Test, the Test of Written Language, Bader Reading Inventory Slingerland High School Screening Test, Woodcock Reading Mastery Tests, the Brown Attention-Activation Disorder scale, and the Detroit Tests of Learning Aptitude. Aside from using standardized tests as noted above, several respondents also relied on the student’s personal physician or psychologist’s confirming diagnosis or recommendations for input. Many of these institutions also stated that they required documentation that was specifically outlined and prescribed by their institution.
Having determined which components of the psychoeducational and neuropsychological evaluations are most often used in making service delivery decisions, administrators were asked about the usefulness of these various evaluation components. Table 4 shows that test behavior was deemed the least useful while cognitive strengths and weaknesses were found to be the most useful.

Table 4: Usefulness of the components of psychoeducational and neuropsychological testing

<table>
<thead>
<tr>
<th></th>
<th>Very or Moderately Useful</th>
<th>Of Little or No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Strengths and Weaknesses</td>
<td>94</td>
<td>4</td>
</tr>
<tr>
<td>Academic Strengths and Weaknesses</td>
<td>90</td>
<td>7</td>
</tr>
</tbody>
</table>
Some students arrive at college without a diagnosis of ADD and either seek help at that time from the institution or have been referred to the appropriate office on campus from an instructor or advisor. When asked if psychoeducational and neuropsychological evaluation is done to determine eligibility for an individual suspected of suffering from ADD, 35 percent indicated that some sort of testing was conducted. Though not specifically asked to do so, other administrators provided additional input in answering this question, and reported that while evaluation was not done at their institution, students were often referred to outside sources for testing but that many of the students, even when referred, did not go ahead and have the testing done.

Another section of the questionnaire asked about accommodations available at the college or university for use by ADD students. The first set of accommodations listed represented what is considered traditional accommodations that is to say, those accommodations mandated by law. Table 5 shows which accommodations were identified as being available to students.

Table 5: Traditional Accommodations Made Available to ADD Students

<table>
<thead>
<tr>
<th>Percentage of institutions providing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra Time On Tests</td>
</tr>
<tr>
<td>Quiet Room for Test Taking</td>
</tr>
<tr>
<td>Note Taking</td>
</tr>
<tr>
<td>Extended Time for Graduation</td>
</tr>
</tbody>
</table>
This data clearly indicates that most respondents provided extra time on tests and a quiet room for test taking. It is also clear that not all of the above mentioned accommodations are available to ADD students.

The term *assistive technology* was also added to the traditional accommodations. Eighty-eight percent of the respondents said that their institutions provided assistive technology accommodations to ADD students. When asked if the number of students taking advantage of the traditional accommodations had increased, decreased or remained the same over the last five years, 89 percent indicated that more students were taking advantage of these accommodations. Asked if they surveyed their students to determine the level of satisfaction regarding use of these accommodations, about 44 percent indicated that they did.

Respondents were then asked about a second set of accommodations available to ADD students. This set focused specifically on assistive technology devices. Prior to asking about this second set of accommodations, participants were asked if they could define the term assistive technology. Ninety-eight percent or 101 respondents were able to provide a fairly accurate definition of this term which was similar to the definition provided in the first section of this document.

Table 6 shows the percentage of institutions that provide the different types of assistive devices available to ADD students.
Table 6: Assistive Technology Devices Available for Use by ADD Students

<table>
<thead>
<tr>
<th>Category of AT Device</th>
<th>Percent with Devices Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Activation Devices</td>
<td>50</td>
</tr>
<tr>
<td>Touch Control Devices</td>
<td>28</td>
</tr>
<tr>
<td>Speech-To-Text Devices</td>
<td>27</td>
</tr>
<tr>
<td>Computer Generated Voice Devices</td>
<td>60</td>
</tr>
<tr>
<td>Alternative Mouse</td>
<td>39</td>
</tr>
<tr>
<td>Alternative Keyboard</td>
<td>38</td>
</tr>
</tbody>
</table>

The majority of the respondents indicated that they provide computer generated voice devices for ADD students with fewer institutions providing the use of touch control devices. Though available, the percentage of students actually using these devices was less than 50 percent as shown in Table 7. Computer generated voice devices and speech-to-text devices were used the most, and touch control devices used the least.

Table 7: Percentage of Students Using Assistive Technology Devices Available to Them at Colleges and Universities

<table>
<thead>
<tr>
<th>Assistive Technology Device</th>
<th>Percentage of Student Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Activation Devices</td>
<td>30</td>
</tr>
<tr>
<td>Touch Control Devices</td>
<td>5</td>
</tr>
<tr>
<td>Speech-To-Text Devices</td>
<td>44</td>
</tr>
<tr>
<td>Computer Generated Voice Devices</td>
<td>44</td>
</tr>
<tr>
<td>Alternative Mouse</td>
<td>10</td>
</tr>
<tr>
<td>Alternative Keyboard</td>
<td>11</td>
</tr>
</tbody>
</table>
Administrators were asked what other devices or products were specifically available for ADD students other than those listed earlier in the survey. Most answered either that no other devices were available, or referred to Kurzweil 3000 or Read Please. When asked an open-ended question that sought to identify what criteria administrators used to determine purchase of any assistive device, the responses fell into two distinct categories; the needs of the students as expressed by the students, and cost of the device.

When queried, 97 percent of the institutions indicated that they provide some sort of training for faculty who have ADD students in their classes. Open-ended responses on training included brown bag sessions on ADD, newsletters, training for all new faculty, special seminars, individual memos with suggestions sent to specific faculty, individual meetings with ADD students and their instructors, web-links, yearly letters at beginning of fall term, and waiting for the faculty to come forward with questions or needs. Questioned further about faculty training, many of the open-ended responses stated that most training was optional.

Two open-ended questions appeared at the end of the survey. One question asked about the barriers that prevent administrators from purchasing assistive technology for their students. The other question asked about challenges and areas within their own institution as well as nation-wide that need to be further addressed regarding college students with ADD. One-hundred out of 103 respondents took time to respond to these questions even though they were open-ended and at the end of the survey.
Regarding the barriers they believed prevented them from purchasing assistive technology devices, three categories emerged. The most listed was “no barriers at all”, followed by students being unaware of devices available to them and needing to actually and individually come forward to request them, and thirdly cost issues.

Finally respondents were asked what areas they believed needed more focus and attention nation-wide relative to college students with ADD. Multiple responses emerged. Most noted was training and education for faculty and residence hall staff. One administrator suggested

“…a better way to communicate the need of the student from the high school to the college. Coaching students to inform the students at the post-secondary level to self advocate. [Students] are too embarrassed to identify themselves—so their parents do it, and they [the students] rarely request services”.

Another administrator echoed this last statement by saying that

“Students need to be more assertive in getting what they need in college. So I guess they need more training in how their disability affects them and how critical it is that they get help.”

Other comments centered around better disability documentation standards that are followed from the high schools, psychologists, and medical doctors; the need for summer
orientations for these students to get them off on the right foot before they actually start classes; more in-depth look at time management and organizational skills; and much more technology procurement and more utilization of technology in classroom settings so that students feel more comfortable using technology outside of the classroom.

Categorical Framework

To enable a new framework of analysis to be used in the examination of the colleges and universities that participated in this study, 4 categories of disability services involvement were identified. The researcher was able to place the colleges and universities into the categories the categories identified in the first section of this document by examining whether there was a specific office or space that students with learning disabilities could come to on campus, the title of the person in charge of the office, the highest degree in education of this person, how many people are in these offices and whether the people in the office are trained in disability services. The description of these categories are repeated again as follows:

Category #1—postsecondary institutions that fall into this category are those that do not have well defined disability offices or spaces but subscribe to the letter of the laws that are required of them. In other words, there is no “Office of Disability Services” on campus. These institutions provide minimum accommodations and are more reactive than proactive when it comes to accommodating students with learning disabilities. Students often have to go to the Office of the Dean or the Dean of Student Services to
make any requests. Tables 8 indicates that 5 out of the 103 responding institutions could be placed into this category. Tables 9 through 12 provide a further breakdown by size of the institution, type, degree granted and sample types.

Category #2--postsecondary institutions that fall into this category are those that not only subscribe to the law but have a defined office or space that has the words “disability services” in the title. They have “coordinators” of this service who are trained in disability issues. They tend to be more pro-active than category 1 institutions. Table 8 shows about a third of the institutions responding fit this description. Very few of these institutions provided more than what might be considered the normally expected accommodations of note taking, extra time on tests, and quiet rooms. This group also represented the largest gap in having assistive technology devices available to their students.

Category #3--postsecondary institutions that fall into this category are those that have a defined office or space, and have a “Learning Disability Specialist” or “Director” and one or two staff members. Institutions are more proactive than either category 1 or 2, provide study skill interventions, and provide more accommodations beyond traditional accommodations or expectations, which often include assistive technology devices. Table 8 shows that most of the institutions responding could be placed into this category. These directors all had advanced degrees that included masters in vocational rehabilitation, reading, and special education. While citing availability of the most
number of assistive devices, they were also the ones with the least number of students taking advantage of these devices excluding those institutions that fit into Category #2.

Category #4--postsecondary institutions that fall into this category are those that go way beyond the letter of the law and are considered premier institutions when it comes to providing accommodations for their learning disabled students. They openly advertise their office and location. The director has two to three staff members and most often has a PhD in a related areas such as Special Education or Psychology. This office applies for and receives grants, and is often looked to as the leader in the field with published research appearing in respected journals. Table 8 shows that slightly more institutions than those identified as fitting into category 1 could be placed in Category #4. Questions regarding the application and use of grants in relation to research were not addressed in this study, however, those in charge of the offices all held PhD degrees.

Table 8: Categorization of Institutions based on specific characteristics (n=103)

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Category 2</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Category 3</td>
<td>61</td>
<td>59</td>
</tr>
<tr>
<td>Category 4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Cross-Tabulations

Often cross-tabulations will uncover relationships, patterns or trends that are not recognized through simple frequencies. Several of the research questions suggest the need to go beyond these frequencies and study several of the key variables to determine if these variables give any particular direction to the data. However, due to the exploratory nature of this study and the limited number of responses, tests for significance were not performed rather more reliance was placed on a series of cross-tabulations in identifying any patterns or trends.

The cross-tabulations were conducted using the variables of institutional size as identified by small, medium, and large, institutional type specified as private or public, and degree granted whether a 2-year degree or 4-year degree. In addition, the two types of samples, purposeful and random, were crossed with the survey variables to examine any trends or patterns that might emerge.

Institutional Size

Table 9 address the cross-tabulation constructed for the variable of institution size. Each institution was asked if they were a small institution, medium size or large. Fifty-three institutions responded that they were small institutions, 31 said they were medium in size and 19 said they were large.

<table>
<thead>
<tr>
<th>Institution Size Variables</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>% N</td>
<td></td>
<td>% N</td>
<td>% N</td>
</tr>
</tbody>
</table>

Table 9: Cross-Tabulation of Variables by Size of the Institution

% = percentage  N = number responding
<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Private</th>
<th>79</th>
<th>42</th>
<th>23</th>
<th>7</th>
<th>37</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>21</td>
<td>11</td>
<td>77</td>
<td>24</td>
<td>63</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Degree Granted</th>
<th>2-Year</th>
<th>32</th>
<th>17</th>
<th>45</th>
<th>14</th>
<th>16</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Year</td>
<td>66</td>
<td>35</td>
<td>55</td>
<td>17</td>
<td>79</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defined Space for Disability Services</th>
<th>Yes</th>
<th>92</th>
<th>49</th>
<th>100</th>
<th>31</th>
<th>100</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>44</td>
<td>22</td>
<td>13</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28</td>
<td>14</td>
<td>16</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>4</td>
<td>39</td>
<td>12</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>10</td>
<td>32</td>
<td>10</td>
<td>63</td>
<td>12</td>
</tr>
</tbody>
</table>

| Number of People on Staff | 1 person | 44   | 22   | 13   | 4    | 0    | 0    |
|                          | 2 people  | 28   | 14   | 16   | 5    | 0    | 0    |
|                          | 3 people  | 8    | 4    | 39   | 12   | 37   | 7    |
|                          | More than 3 people  | 20   | 10   | 32   | 10   | 63   | 12   |

<table>
<thead>
<tr>
<th>Trained Staff in Disability Service Issues</th>
<th>Yes</th>
<th>86</th>
<th>43</th>
<th>97</th>
<th>30</th>
<th>68</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>44</td>
<td>22</td>
<td>13</td>
<td>4</td>
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<td>0</td>
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<td></td>
<td></td>
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<td>20</td>
<td>10</td>
<td>32</td>
<td>10</td>
<td>63</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Offices for Students to Access If No Defined Space</th>
<th>Have defined space</th>
<th>94</th>
<th>48</th>
<th>100</th>
<th>31</th>
<th>100</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Office of the Dean</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Student Services</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Other, not specified</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 9:** Cross-Tabulation of Variables by Size of the Institution

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Small</th>
<th></th>
<th>Medium</th>
<th></th>
<th>Large</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
</tbody>
</table>

Witnessed An Increased Number of ADD Students Over last 5 Years

<table>
<thead>
<tr>
<th></th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>79</td>
<td>94</td>
<td>100</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>17</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>
Number has remained same | 4  | 2  | 0  | 0  | 0  | 0  |

Psychoeducation and Neuropsychological Testing Used to Make Service Delivery Decisions
Yes | 92 | 49 | 87 | 27 | 100 | 19 |

Cognitive Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions
Yes | 85 | 44 | 94 | 29 | 100 | 19 |

Academic Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions
Yes | 85 | 44 | 90 | 28 | 84  | 16 |

Test Scores Used to Make Service Delivery
Yes | 77 | 40 | 81 | 25 | 100 | 19 |

Test Behavior Used to Make Service Delivery Decisions
Yes | 54 | 28 | 63 | 19 | 84  | 16 |

Summary Reports Used to Make Service Delivery Decisions
Yes | 92 | 48 | 94 | 29 | 100 | 19 |

Recommendations from Assessors Used to Make Service Delivery Decisions
Yes | 88 | 46 | 97 | 29 | 95  | 18 |

Usefulness to the Service Provider of Cognitive Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions
Very Useful | 47 | 24 | 70 | 21 | 58  | 11 |
Moderately Useful | 45 | 23 | 30 | 9  | 42  | 8  |
Of Little/No Use | 8  | 5  | 0  | 0  | 0   | 0  |

Table 9: Cross-Tabulation of Variables by Size of the Institution
% = percentage N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
</tbody>
</table>

Usefulness to Service Provider of Academic Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions
### Usefulness to Service Provider of Test Scores In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Informed</td>
<td>38 20</td>
<td>48 14</td>
<td>53 16</td>
</tr>
<tr>
<td>Yes, they are</td>
<td>44 23</td>
<td>48 14</td>
<td>42 8</td>
</tr>
<tr>
<td>Of Little/No Use</td>
<td>17 9</td>
<td>3 1</td>
<td>5 1</td>
</tr>
</tbody>
</table>

### Usefulness to Service Provider Test Behavior In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Informed</td>
<td>25 13</td>
<td>37 11</td>
<td>37 7</td>
</tr>
<tr>
<td>Yes, they are</td>
<td>38 20</td>
<td>53 16</td>
<td>32 6</td>
</tr>
<tr>
<td>Of Little/No Use</td>
<td>37 19</td>
<td>10 3</td>
<td>32 6</td>
</tr>
</tbody>
</table>

### Usefulness to Service Provider of Summary Reports In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Informed</td>
<td>65 34</td>
<td>83 25</td>
<td>42 8</td>
</tr>
<tr>
<td>Yes, they are</td>
<td>29 15</td>
<td>17 5</td>
<td>37 7</td>
</tr>
<tr>
<td>Of Little/No Use</td>
<td>6 3</td>
<td>0 0</td>
<td>21 4</td>
</tr>
</tbody>
</table>

### Usefulness to Service Provider of Recommendations from Assessor In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Informed</td>
<td>66 33</td>
<td>63 19</td>
<td>42 8</td>
</tr>
<tr>
<td>Yes, they are</td>
<td>26 13</td>
<td>37 11</td>
<td>53 10</td>
</tr>
<tr>
<td>Of Little/No Use</td>
<td>8 4</td>
<td>0 0</td>
<td>5 1</td>
</tr>
</tbody>
</table>

### Use of Other Assessments in Making Service Delivery Decisions

<table>
<thead>
<tr>
<th>Use of Other Assessments</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Informed</td>
<td>61 31</td>
<td>48 14</td>
</tr>
</tbody>
</table>

### Table 9: Cross-Tabulation of Variables by Size of the Institution

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Students Informed of Where To Go On Campus For Disability Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, they are informed</td>
<td>94 50</td>
<td>93 28</td>
<td>100 18</td>
</tr>
</tbody>
</table>
Testing of Suspected ADD Students
Yes  38  20  47  14  11  2

Note Taking Available from Institution for ADD Students
Yes  81  43  84  26  100  19

Extra Time on Tests Allowed for ADD Students
Yes  96  51  100  30  100  19

Quiet Room for Test Taking Allowed for ADD Students
Yes  94  50  100  30  100  19

Early Registration Allowed for ADD Students
Yes  49  26  73  22  16  3

Lighter Course Load Allowed for ADD Students
Yes  70  37  63  19  53  10

Extended Time Granted to ADD Students to Graduate
Yes  68  36  73  22  53  10

Assistive Technology Devices Available for ADD Students
Yes  79  42  100  30  100  19

ADD Students Taking Advantage of Accommodations Available from the Institutions in Last 5 years
Increased  83  44  97  29  100  19
Don’t know  17  9  3  1  0  0

Table 9: Cross-Tabulation of Variables by Size of the Institution
% = percentage  N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Survey ADD Satisfaction</td>
<td>Yes</td>
<td>42  22</td>
<td>43  13</td>
</tr>
</tbody>
</table>
Information Shared With Faculty Relative to Having ADD Student(s) in Class
Yes  79  42  80  24  79  15

Faculty Provided With Training Relative to Dealing with ADD Students in Class
Yes

Voice Activation Devices Available from Institution for ADD Students
Yes  38  20  62  18  68  13

Touch Control Devices Available from Institution for ADD Students
Yes  15  8  41  12  47  9

Speech-To-Text Devices Available from Institution for ADD Students
Yes  25  13  38  11  21  4

Computer Generated Voice Devices Available from Institution for ADD Students
Yes  47  25  79  23  68  13

Alternative Mouse Device Available from Institution for ADD Students
Yes  19  10  55  16  74  14

Alternative Keyboard Device Available from Institution for ADD Students
Yes  25  13  48  14  63  12

ADD Students Using Voice Activated Devices
Yes  17  9  28  8  74  14

ADD Students Using Touch Control Devices
Yes  0  0  10  3  11  2

Table 9: Cross-Tabulation of Variables by Size of the Institution
% = percentage  N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD Students Using Speech-To-Text Devices</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>14</td>
<td>48</td>
</tr>
</tbody>
</table>
In examining Table 9, one sees that more small private schools responded to the survey than medium or large institutions. Small institutions accounted for more 2-year degrees than large institutions and also more 4-year degrees than medium institutions. Small institutions also indicated that they did not always have a defined space for disability services and that students had to go to other offices such as the Office of the Dean or Student Services in order to get assistance with their needs. Small institutions had more offices staffed by 1 or 2 people when compared to medium and large institutions but showed more trained staff when compared to large institutions. Small institutions expressed less knowledge in knowing whether there had been an increase or not in the number of ADD students over the last 5 years as compared with medium and large institutions.

Small institutions along with medium and large schools showed relatively no difference in the use of psychoeducation and neuropsychological tests in making service delivery decisions. Small institutions relied less heavily on the use of cognitive strengths.
and weaknesses, academic strengths and weaknesses, and test scores, as did medium and large institutions. Small institutions along with both medium and large did rely on summary reports and recommendations from assessors.

Regarding the usefulness of the various evaluation components, small institutions found the use of summary reports and recommendation of assessors to be the most useful and the other components to be at least moderately useful. Small institutions also indicated that they used other assessments in making service delivery decisions more so than either medium or large institutions. Small institution said that they did not do as much testing of suspected ADD students as medium and large institutions.

Table 13A: A Comparison of Standard Accommodations with Size of Institution
Number presented are in percentages (%)

<table>
<thead>
<tr>
<th>Size of Institution</th>
<th>Note Taking</th>
<th>Extra Time for Tests</th>
<th>Quiet Room</th>
<th>Early Registration</th>
<th>Lighter Course Load</th>
<th>Extended Time to Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>81</td>
<td>96</td>
<td>94</td>
<td>49</td>
<td>70</td>
<td>68</td>
</tr>
<tr>
<td>Medium</td>
<td>84</td>
<td>100</td>
<td>100</td>
<td>73</td>
<td>63</td>
<td>73</td>
</tr>
<tr>
<td>Large</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>16</td>
<td>53</td>
<td>53</td>
</tr>
</tbody>
</table>

Regarding the provision of traditional accommodations to ADD as noted in Table 13A, students small institutions allowed for lighter course loads when compared to medium and large institutions and also allowed for early registration and extended time to graduate when compared to large institutions. There was no appreciable differences noted regarding small institutions relative to the remainder of the traditional accommodations.
which included note taking, extra time on tests, and providing quiet rooms for test taking, as nearly all of the respondents, regardless of size, responded that they provided such accommodations. Small institutions did indicate they believed over the last 5 years, that either fewer students were actually taking advantage of traditional accommodations as provided by the institution or they just didn’t know whether the number of ADD students using these accommodations had increased or decreased. Small institutions indicated that they did some surveying of students which was about the same extent as medium schools but not as much as large institutions.

In examining the provision of assistive technology accommodations and devices to ADD students as noted in Table 14, small institutions noted less availability than both medium and large. Noticeable differences in availability between institutions seems to occur with voice-activation devices, touch-control devices computer generated voice device, alternative mouse and keyboard when compared to both medium and large institutions. Speech-to-text devices were less available at small institutions when
compared to medium size institutions. Without comparing small institutions to medium or large, it is apparent in this table that less than half the students are utilizing voice activation devices, none are using touch control devices, less than half are using computer generated voice devices, or an alternative mouse or keyboard. Almost all are using speech-to-text devices. However, when compared to large institutions, more small institutions indicated that ADD students are using other devices.

Medium size institutions accounted for the largest response relative to public 2-year schools. They indicated that they had more than 3 people on staff which was much more than was indicated by small institutions and about the same as large institutions. Nearly all of the medium institutions showed that their staff was trained in disability service issues and showed a considerable gap compared with large institutions. There is also a considerable gap between medium size institutions and small institutions in their knowledge of whether the number of ADD students has increased over the last 5 years as medium institutions believe that this number has, indeed, increased.

While admitting to using psychoeducation and neuropsychological evaluations when making service delivery decision, medium institutions appeared to use these to a lesser degree than small or large institutions. They used cognitive strengths and weaknesses, academic strengths and weaknesses more than small institutions and test scores and test behavior more than small but not as much as large institutions. Of the three sizes of institutions studied, medium institutions found cognitive strengths and weaknesses, academic strengths and weaknesses, and summary reports to be very useful.
compared to small and large institutions, and to a lesser degree than small institutions, used other assessments in making service delivery decisions. Medium institutions indicated than they did more testing of students suspected of having ADD than either small or large institutions. This size institution also allowed for early registration and extended time to graduate as compared to small or large institutions.

Medium size institutions, as shown in Table 13A, showed a greater preponderance to allowing early registration for ADD students, lighter course load and extended time to graduate as compared to small and large size institutions.

Differences in making assistive technology devices available appeared more when comparing medium institutions with small rather than large institutions when looking at voice activation and touch-control devices. Whereas medium institutions appeared to provide more speech-to-text and computer generated voice devices than either small or large institutions. When addressing the availability of AT devices and the use of these devices as shown in Table 14, most students are using the speech-to-text devices as compared to using the other devices available at medium institutions. Finally there appears a considerable gap between medium sized institutions and both small and large institutions regarding other devices ADD students are using as it appears that more ADD students are using other AT devices at medium institutions than small or large institutions.

When comparing large institutions with small and medium, it is the large institutions that are most associated with 4-year degrees followed by small institutions
and then medium sized. It is the large institutions that show more than 3 people on staff
followed by small institutions with 1 person and medium institutions reporting 3 people.
Large institutions overwhelmingly claim that the number of ADD students has increased
over the last 5 years followed closely by medium sized believing this to be the case. All
of the large institutions indicated their use of psychoeducation and neuropsychological
evaluations in making service delivery decisions and also their specific use of cognitive
strengths and weaknesses, test scores, and summary reports. To a lesser degree, and less
than medium sized institutions, they are using academic strengths and weaknesses.
However, they appear to be using the components of the evaluations to a far greater
extent than small institutions. While admitting that they are using these evaluations,
comparing their responses to how useful they find each of the components nets a different
result. Aside from finding test scores the most useful, the usefulness of the other
components do not rate very high and often fall below both small and medium sized
institutions. They also indicated much less use of other assessments in making service
delivery decisions when compared to both small and medium institutions. Large
institutions, however, appear to survey their students for satisfaction with
accommodations more than both small and medium institutions and provide less testing
for suspected ADD students. Early registration, lighter course loads and extended time to
graduate do not seem to be offered to the same degree as with small and medium
institutions. Large institutions believe that the number of ADD students taking advantage
of the traditional accommodations has increased over the last 5 years.
Large institutions along with small and medium institutions admit the availability of assistive technology for ADD students. The availability of voice activation devices and touch control devices is comparable with medium institutions but show a wide gap with small institutions. Speech-to-text devices, however, appear less evident in large institutions when compared to both small and medium institutions. Computer generated voice devices appear to be slightly less available when compared with medium size institutions but again the gap is large when compared to small institutions. Large institutions show much more availability of the alternative mouse and keyboard.

Referring again to Table 14 which shows institutional availability of AT devices at large institutions along with use by students of a particular technology, it appears that students at large universities are using voice activated devices, speech-to-text devices, and computer generated voice devices. Whereas, in spite of the availability of an alternative mouse and keyboard, few students are using these particular devices. Large institutions also show a considerable reduction in other devices being used by ADD students when compared to small and medium institutions.

**Institutional Type**

The next cross-tabulation took a look at the type of institution, that is, private or public institutions. Table 10 should be consulted for this analysis. Fifty-six institutions responding were private and 47 were public.

**Table 10: Cross-Tabulation of Variables by Type of the Institution**

<p>| % = percentage | N = number responding |</p>
<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Private %</th>
<th>Private N</th>
<th>Public %</th>
<th>Public N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>75</td>
<td>42</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>Medium</td>
<td>13</td>
<td>7</td>
<td>51</td>
<td>24</td>
</tr>
<tr>
<td>Large</td>
<td>13</td>
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<td>12</td>
</tr>
<tr>
<td>Type of Degree Granted</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Year</td>
<td>18</td>
<td>10</td>
<td>51</td>
<td>24</td>
</tr>
<tr>
<td>4-Year</td>
<td>79</td>
<td>44</td>
<td>49</td>
<td>23</td>
</tr>
<tr>
<td>Defined Space for Disability Services</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>53</td>
<td>98</td>
<td>46</td>
</tr>
<tr>
<td>Number of People on Staff</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 person</td>
<td>33</td>
<td>18</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>2 people</td>
<td>20</td>
<td>11</td>
<td>17</td>
<td>8</td>
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<tr>
<td>3 people</td>
<td>17</td>
<td>9</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>More than 3 people</td>
<td>30</td>
<td>16</td>
<td>35</td>
<td>16</td>
</tr>
<tr>
<td>Trained Staff in Disability Service Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>83</td>
<td>45</td>
<td>89</td>
<td>41</td>
</tr>
</tbody>
</table>

Table 10: Cross-Tabulation of Variables by Type of the Institution
% = percentage  N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Private %</th>
<th>Private N</th>
<th>Public %</th>
<th>Public N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Offices for Students to Access If No Defined Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office of the Dean</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Student Services</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Witnessed An Increased Number of ADD Students Over last 5 Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>84</td>
<td>47</td>
<td>91</td>
<td>43</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>14</td>
<td>8</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>
Number has remained same | 2 1 2 1
---|---
Psychoeducation and Neuropsychological Testing Used to Make Service Delivery Decisions
Yes | 96 54 87 41
Cognitive Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions
Yes | 86 48 96 44
Academic Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions
Yes | 82 46 91 42
Test Scores Used to Make Service Delivery
Yes | 80 45 85 39
Test Behavior Used to Make Service Delivery Decisions
Yes | 60 33 65 30
Summary Reports Used to Make Service Delivery Decisions
Yes | 93 52 96 44
Recommendations from Assessors Used to Make Service Delivery Decisions
Yes | 91 50 93 43

Table 10: Cross-Tabulation of Variables by Type of the Institution

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
</tbody>
</table>

Usefulness to the Service Provider of Cognitive Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Useful</td>
<td>47 26</td>
<td>67 30</td>
</tr>
<tr>
<td>Moderately Useful</td>
<td>67 30</td>
<td>29 13</td>
</tr>
<tr>
<td>Of Little/No Use</td>
<td>4 2</td>
<td>4 2</td>
</tr>
</tbody>
</table>

Usefulness to Service Provider of Academic Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Useful</td>
<td>47 26</td>
<td>56 25</td>
</tr>
</tbody>
</table>
Usefulness to Service Provider of Test Scores In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>43</td>
<td>7</td>
</tr>
</tbody>
</table>

Usefulness to Service Provider Test Behavior In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38</td>
<td>38</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>38</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>38</td>
<td>17</td>
</tr>
</tbody>
</table>

Usefulness to Service Provider of Summary Reports In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>69</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>69</td>
<td>69</td>
<td>31</td>
</tr>
</tbody>
</table>

Usefulness to Service Provider of Recommendations from Assessor In Making Service Delivery Decisions

<table>
<thead>
<tr>
<th></th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Of Little/No Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57</td>
<td>57</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>57</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>57</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 10: Cross-Tabulation of Variables by Type of the Institution

% = percentage  N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Other Assessments in Making Service Delivery Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yes</strong></td>
</tr>
<tr>
<td>% 56 30</td>
</tr>
<tr>
<td>% 44 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students Informed of Where To Go On Campus For Disability Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yes, they are informed</strong></td>
</tr>
<tr>
<td>% 93 51</td>
</tr>
<tr>
<td>% 98 45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Testing of Suspected ADD Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
Yes 39 22 30 14
Note Taking Available from Institution for ADD Students
Yes 89 50 83 38
Extra Time on Tests Allowed for ADD Students
Yes 96 54 100 46
Quiet Room for Test Taking Allowed for ADD Students
Yes 95 53 98 45
Early Registration Allowed for ADD Students
Yes 48 27 52 24
Lighter Course Load Allowed for ADD Students
Yes 73 41 54 25
Extended Time Granted to ADD Students to Graduate
Yes 70 39 62 29
Assistive Technology Devices Available for ADD Students
Yes 88 49 91 42

Table 10: Cross-Tabulation of Variables by Type of the Institution
% = percentage  N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>ADD Students Taking Advantage of Accommodations Available from the Institutions in Last 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>89 50</td>
<td>91 42</td>
</tr>
<tr>
<td>Don’t know</td>
<td>11 6</td>
<td>9 4</td>
</tr>
<tr>
<td>Survey ADD Satisfaction</td>
<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td>48 27</td>
<td>39 18</td>
</tr>
<tr>
<td>Variable</td>
<td>Yes</td>
<td>%</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----</td>
<td>---</td>
</tr>
<tr>
<td>Faculty Provided With Training Relative to Dealing with ADD Students in Class</td>
<td>80</td>
<td>45</td>
</tr>
<tr>
<td>Voice Activation Devices Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>43</td>
<td>24</td>
</tr>
<tr>
<td>Touch Control Devices Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Speech-To-Text Devices Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Computer Generated Voice Devices Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>46</td>
<td>26</td>
</tr>
<tr>
<td>Alternative Mouse Device Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Alternative Keyboard Device Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>ADD Students Using Voice Activated Devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 10: Cross-Tabulation of Variables by Type of the Institution

% = percentage  N = number responding

<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Private</th>
<th></th>
<th>Public</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>ADD Students Using Touch Control Devices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>ADD Students Using Speech-To-Text Devices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>34</td>
<td>19</td>
<td>58</td>
<td>26</td>
</tr>
<tr>
<td>ADD Students Using Computer Generated Voice Devices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32</td>
<td>18</td>
<td>60</td>
<td>27</td>
</tr>
</tbody>
</table>
ADD Students Using Alternative Mouse
Yes 7 4 13 6

ADD Students Using Alternative Keyboard
Yes 7 4 18 8

Other Devices ADD Students Are Using
Yes 64 36 70 33

Private institutions accounted for more offices with only 1 staff member when compared to public institutions. They also accounted for more offices that were not specifically designed to handle students with disabilities and also witnessed less of an increase in the number of ADD students over the last 5 years. There was no appreciable difference between private and public institutions in their use of psychoeducation and neuropsychological evaluations but private institutions relied on cognitive strengths and weaknesses and academic strengths and weaknesses less than public institutions. Regarding the use of the other evaluation components there was seen no real differences between the two types of institutions.

Regarding the usefulness of the different components of the evaluations, private institutions consistently found these components to be moderately more useful rather than very useful except concerning the usefulness of the recommendation of the assessors. Private institutions also used other assessments more so than public institutions. Private institutions also indicated that more testing is done on students suspected of having ADD.

As seen in Table 13B, there was no appreciable difference in the availability of traditional accommodations compared to public institutions except regarding early
registration which seems somewhat less prevalent in private institutions and lighter
course load and extended time for graduation which seemed to be allowed more in the
private institutions. Both private and public institutions believe they have seen an
increase in the number of ADD students taking advantage of traditional accommodations
during the last five years. Private institutions appear to survey their students regarding
satisfaction more than public institutions.

Table 13B: A Comparison of Standard Accommodations with Type of Institution
Number presented are in percentages (%)

Private institutions reported less availability of all assistive technology devices
when compared to public institutions as well as less use of what they did have by ADD
students. When compared to public institutions, private institutions indicated that their students were not using other assistive technology devices.

Public institutions accounted for the most responses relative to medium size institutions. Public institutions also accounted for more 2-year degrees being granted and less 4-year degrees. Public institutions indicated that they had more than 3 people staffing disability services offices and that they had witnessed more of an increase in the number of ADD student over the last 5 years than private institutions. Public institutions were shown to rely slightly less than private schools in using psychoeducation and neuropsychological evaluations when making service delivery decisions. However, overall seemed to use all of the components of the evaluations slightly more than private institutions. They also indicated that they found each of the components more useful than private institutions except regarding the usefulness of recommendations from assessors in making service delivery decision. This component of the evaluations they only found moderately useful. Public institutions did not rely on other assessments in making delivery decisions as much as private institutions. Public institutions also did not test students suspected of having ADD as much as private institutions.

Public institutions seemed to provide the same traditional accommodations as private institutions except in the area of early registration, lighter course load and extended time to graduate where they appeared to do less. However regarding assistive technology devices, public institutions provided more of all of the devices including
voice activation devices, touch control devices, speech-to-text devices, computer
generated devices, alternative mouse and keyboard when compared to private institutions.
Relative to usage by ADD students, again public institutions, as seen in Table 14, showed
more students using the devices than students in private schools, especially in relation to
the use of speech-to-text devices. Public institutions also indicated a slightly higher
degree of usage by their students of other assistive technology devices when compared to
private institutions.

Degree Granted

Table 11 capture the cross-tabulations using the degree granted whether it be 2-
year or 4-year. Thirty-four 2-year institutions responded as well as 67, 4-year
institutions.

Table 11: Cross-Tabulation of Variables by Degree Granted

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>2-Year</th>
<th>4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>% =percent</td>
<td>N = Number</td>
<td></td>
</tr>
</tbody>
</table>
### Table 11: Cross-Tabulation of Variables by Degree Granted

<table>
<thead>
<tr>
<th>Variables</th>
<th>2-Year</th>
<th>4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Witnessed An Increased Number of ADD Students Over last 5 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>94</td>
<td>85</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Number has remained same</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>50</td>
<td>17</td>
<td>52</td>
<td>35</td>
</tr>
<tr>
<td>Medium</td>
<td>41</td>
<td>14</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Large</td>
<td>9</td>
<td>3</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Type of Institution</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
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<td>10</td>
<td>66</td>
<td>44</td>
</tr>
<tr>
<td>Public</td>
<td>71</td>
<td>24</td>
<td>34</td>
<td>23</td>
</tr>
<tr>
<td>Defined Space for Disability Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>34</td>
<td>94</td>
<td>63</td>
</tr>
<tr>
<td>Number of People on Staff</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1 person</td>
<td>26</td>
<td>9</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>2 people</td>
<td>15</td>
<td>5</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>3 people</td>
<td>21</td>
<td>7</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>More than 3 people</td>
<td>38</td>
<td>13</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Trained Staff in Disability Service Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>94</td>
<td>32</td>
<td>83</td>
<td>53</td>
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<tr>
<td>Other Offices for Students to Access If No Defined Space</td>
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<tr>
<td>Office of the Dean</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Student Services</td>
<td>0</td>
<td>0</td>
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<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Psychoeducation and Neuropsychological Testing Used to Make Service Delivery Decisions
Yes 94 32 91 61

Cognitive Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions
Yes 91 30 90 60

Academic Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions
Yes 82 27 88 59

Test Scores Used to Make Service Delivery
Yes 79 26 84 56

Test Behavior Used to Make Service Delivery Decisions
Yes 48 16 68 45

Summary Reports Used to Make Service Delivery Decisions
Yes 94 31 94 63

Recommendations from Assessors Used to Make Service Delivery Decisions
Yes 97 32 89 59

Usefulness to the Service Provider of Cognitive Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions
Very Useful 66 21 52 34
Moderately Useful 28 9 45 30
Of Little/No Use 6 2 3 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>2-Year</th>
<th>4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Usefulness to Service Provider of Academic Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Useful</td>
<td>63</td>
<td>20</td>
</tr>
<tr>
<td>Moderately Useful</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>Of Little/No Use</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
Usefulness to Service Provider of Test Scores In Making Service Delivery Decisions
- Very Useful: 41, 13, 44, 29
- Moderately Useful: 50, 16, 44, 29
- Of Little/No Use: 9, 3, 12, 8

Usefulness to Service Provider Test Behavior In Making Service Delivery Decisions
- Very Useful: 19, 6, 37, 25
- Moderately Useful: 63, 20, 30, 20
- Of Little/No Use: 19, 6, 33, 22

Usefulness to Service Provider of Summary Reports In Making Service Delivery Decisions
- Very Useful: 66, 21, 66, 44
- Moderately Useful: 22, 7, 30, 20
- Of Little/No Use: 13, 4, 4, 3

Usefulness to Service Provider of Recommendations from Assessor In Making Service Delivery Decisions
- Very Useful: 66, 21, 58, 38
- Moderately Useful: 31, 10, 35, 23
- Of Little/No Use: 3, 1, 6, 4

Use of Other Assessments in Making Service Delivery Decisions
- Yes: 47, 15, 54, 35

Table 11: Cross-Tabulation of Variables by Degree Granted
\[ \text{% = percent, } \text{N = Number} \]

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>2-Year</th>
<th>4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Students Informed of Where To Go On Campus For Disability Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, they are informed</td>
<td>88 30</td>
<td>96 64</td>
</tr>
<tr>
<td>Testing of Suspected ADD Students</td>
<td>Yes 21 7</td>
<td>42 28</td>
</tr>
</tbody>
</table>
Note Taking Available from Institution for ADD Students
   Yes   82 27   88 59

Extra Time on Tests Allowed for ADD Students
   Yes   100 33   97 65

Quiet Room for Test Taking Allowed for ADD Students
   Yes   100 33   95 63

Early Registration Allowed for ADD Students
   Yes   55 18   48 32

Lighter Course Load Allowed for ADD Students
   Yes   76 25   58 39

Extended Time Granted to ADD Students to Graduate
   Yes   76 25   61 41

Assistive Technology Devices Available for ADD Students
   Yes   85 25   91 61

ADD Students Taking Advantage of Accommodations Available from the
Institutions in Last 5 years
   Increased 88 29   91 61
   Don’t know 12 4   9 6

Survey ADD Satisfaction
   Yes   36 12   48 32

Table 11: Cross-Tabulation of Variables by Degree Granted
   % =percent  N = Number

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Variables</th>
<th>2-Year</th>
<th>4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>N</td>
</tr>
</tbody>
</table>
| Information Shared With Faculty Relative to Having ADD Student(s) in Class
   Yes | 71 24 | 85 56 |

| Faculty Provided With Training Relative to Dealing with ADD Students in Class
   Yes | 100 32 | 100 66 |
Voice Activation Devices Available from Institution for ADD Students
Yes  66  21  43  29

Touch Control Devices Available from Institution for ADD Students
Yes  31  10  27  18

Speech-To-Text Devices Available from Institution for ADD Students
Yes  34  11  24  16

Computer Generated Voice Devices Available from Institution for ADD Students
Yes  66  21  57  38

Alternative Mouse Device Available from Institution for ADD Students
Yes  41  13  37  25

Alternative Keyboard Device Available from Institution for ADD Students
Yes  47  15  33  22

ADD Students Using Voice Activated Devices
Yes  31  10  30  20

ADD Students Using Touch Control Devices
Yes  3  1  4  3

ADD Students Using Speech-To-Text Devices
Yes  41  13  45  30

Table 11: Cross-Tabulation of Variables by Degree Granted

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>2-Year</th>
<th>4-Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>ADD Students Using Computer Generated Voice Devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>ADD Students Using Alternative Mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>
### ADD Students Using Alternative Keyboard

| Yes | 6 | 2 | 15 | 10 |

### Other Devices ADD Students Are Using

| Yes | 71 | 24 | 64 | 43 |

2-year degree granting medium sized public institutions accounted for the majority of the respondents. These institutions indicated a slightly higher availability of defined office space for disability services when compared to 4-year institutions. They also had offices with three or more people and indicated that their staff was better trained in disability services when compared to 4-year institutions. 2-year institutions believed more than 4-year institutions that they have seen an increase in the number of ADD students at their institutions over the last 5 years.

Both 2-year and 4-year institutions appear to use psychoeducation and neuropsychological evaluations as well as all of the components of the evaluations, however, 2-year institutions appear to use the test behavior component less than 4-year institutions and rely on the recommendations from the assessors in making service delivery decisions a bit more heavily than 4-year institutions. 2-year institutions found cognitive strengths and weaknesses, academic strengths and weaknesses and recommendations from assessors to be more useful than 4-year institutions and test scores and test behavior only to be moderately useful. 2-year institutions also relied less on other assessments in making service delivery as compared to 4-year institutions. 2-year
institutions also indicated that they do considerably less testing of students suspected of having ADD.

Relative to providing traditional accommodations Table 13C shows that 2-year institutions provide early registration, lighter course loads and extended graduation times more than 4-year institutions. There was no appreciable differences between 2-year and 4-year institutions regarding availability of note takers, extra time on tests or quiet rooms for taking tests. 2-year institutions also do not survey their students as much as 4-year institution and do not share as much information with faculty relative to dealing with ADD students that may be in their class rooms.

Table 13C: A Comparison of Standard Accommodations with Degree Granted Institutions
Number presented are in percentages (%)
2-year institutions appear to have more of the assistive technology devices available for ADD students including voice activation devices, touch control devices, speech-to-text devices, computer generated voice devices, alternative mouse and keyboards. Usage wise, as noted in Table 14, more students are using speech-to-text devices more than the other devices. More students at 2-year institutions also seem to be using other devices when compared to 4-year institutions.

The 4-year institutions who responded were primarily small private institutions. They reported 3 or more people on staff in disability offices but also reported slightly less defined disability office space when compared to 2-year institutions. They also indicated that their staff is less trained in disability services issues than those in 2-year institutions. These 4-year institutions say that they have not observed as much of an increase in ADD students over the last 5 years when compared to 2-year institutions and also indicated that some simply do not know if the number of ADD students has increased or decreased. Like 2-year institutions, they make use of psychoeducation and neuropsychological evaluations and rely a bit more heavily on academic strengths and weaknesses, test scores, and test behavior than 2-year institutions and slightly less on
recommendations from assessors. Subsequently they are not finding cognitive strengths
and weaknesses, academic strengths and weaknesses or recommendations from assessors
very useful but rather moderately useful except for summary reports which along with 2-
year institutions, they find very useful. 4-year institutions indicated that students are
better informed of where to go on campus for disability services when compared to 2-
year institutions. These institutions also survey their students for satisfaction more than 2-
year institutions.

Referring back to Table 13C relative to providing traditional accommodations, 4-
year institutions fall slightly short when compared to 2-year institutions especially
regarding early registration, lighter course loads, and extended time for graduation. They,
however, seem to offer note takers to a greater degree than 2-year institutions and also
share more information with their faculty regarding ADD students in their classrooms.
While initially appearing to provide more assistive technology devices as compared to 2-
year institutions, in actuality, when individual devices are compared, 4-year institutions
fall vastly short in providing these devices. However, as noted in Table 14, and similar to
2-year institutions, students at 4-year institutions are making more use of speech-to-text
devices than another other device available but are not using as many other devices as
students in 2-year institutions.

Two Sample Types
Table 12 addresses the results of comparing the purposeful sample and the random sample. Thirty-eight responses came from the purposeful sample and 65 from the random sample.

### Table 12: Cross-Tabulation of Purposeful Sample and Random Sample

<table>
<thead>
<tr>
<th>Institution Type Variables</th>
<th>Purposeful Sample</th>
<th>Random Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Size of Institution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>50 19</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>26 10</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>24 9</td>
<td></td>
</tr>
<tr>
<td>Type of Institution</td>
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<tr>
<td>Private</td>
<td>66 25</td>
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<td>Public</td>
<td>34 13</td>
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</tr>
<tr>
<td>Degree Granted</td>
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<tr>
<td>2-Year</td>
<td>16 6</td>
<td></td>
</tr>
<tr>
<td>4-Year</td>
<td>82 31</td>
<td></td>
</tr>
<tr>
<td>Defined Space for Disability Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95 36</td>
<td></td>
</tr>
<tr>
<td>Number of People on Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 person</td>
<td>19 7</td>
<td></td>
</tr>
<tr>
<td>2 people</td>
<td>22 8</td>
<td></td>
</tr>
<tr>
<td>3 people</td>
<td>19 7</td>
<td></td>
</tr>
<tr>
<td>More than 3 people</td>
<td>41 15</td>
<td></td>
</tr>
<tr>
<td>Trained Staff in Disability Service Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>84 31</td>
<td></td>
</tr>
<tr>
<td>Other Offices for Students to Access If No Defined Space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have a Defined Space</td>
<td>97 36</td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Cross-Tabulation of Purposeful Sample and Random Sample

% = percent    N = number
<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Purposeful Sample</th>
<th>Random Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Office of the Dean</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Student Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Witnessed An Increased Number of ADD Students Over last 5 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89</td>
<td>33</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Number has remained same</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Psychoeducation and Neuropsychological Testing Used to Make Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>38</td>
</tr>
<tr>
<td>Cognitive Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89</td>
<td>34</td>
</tr>
<tr>
<td>Academic Strengths and Weaknesses Component of Tests Used to Make Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89</td>
<td>34</td>
</tr>
<tr>
<td>Test Scores Used to Make Service Delivery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89</td>
<td>34</td>
</tr>
<tr>
<td>Test Behavior Used to Make Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>76</td>
<td>29</td>
</tr>
<tr>
<td>Summary Reports Used to Make Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>36</td>
</tr>
<tr>
<td>Recommendations from Assessors Used to Make Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>97</td>
<td>36</td>
</tr>
</tbody>
</table>

Table 12: Cross-Tabulation of Purposeful Sample and Random Sample

% = percent    N = number
<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Purposeful Sample</th>
<th>Random Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Usefulness to the Service Provider of Cognitive Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions</td>
<td>Very Useful</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Moderately Useful</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Of Little/No Use</td>
<td>0</td>
</tr>
<tr>
<td>Usefulness to Service Provider of Academic Strengths and Weaknesses Component of Tests In Making Service Delivery Decisions</td>
<td>Very Useful</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Moderately Useful</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Of Little/No Use</td>
<td>8</td>
</tr>
<tr>
<td>Usefulness to Service Provider of Test Scores In Making Service Delivery Decisions</td>
<td>Very Useful</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Moderately Useful</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Of Little/No Use</td>
<td>8</td>
</tr>
<tr>
<td>Usefulness to Service Provider Test Behavior In Making Service Delivery Decisions</td>
<td>Very Useful</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Moderately Useful</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Of Little/No Use</td>
<td>32</td>
</tr>
<tr>
<td>Usefulness to Service Provider of Summary Reports In Making Service Delivery Decisions</td>
<td>Very Useful</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Moderately Useful</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Of Little/No Use</td>
<td>3</td>
</tr>
<tr>
<td>Usefulness to Service Provider of Recommendations from Assessor In Making Service Delivery Decisions</td>
<td>Very Useful</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Moderately Useful</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Of Little/No Use</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 12: Cross-Tabulation of Purposeful Sample and Random Sample
<table>
<thead>
<tr>
<th>Institution Size</th>
<th>Purposeful Sample</th>
<th>Random Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Use of Other Assessments in Making Service Delivery Decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>58</td>
<td>21</td>
</tr>
<tr>
<td>Students Informed of Where To Go On Campus For Disability Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, they are informed</td>
<td>89</td>
<td>33</td>
</tr>
<tr>
<td>Testing of Suspected ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>14</td>
</tr>
<tr>
<td>Note Taking Available from Institution for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>97</td>
<td>37</td>
</tr>
<tr>
<td>Extra Time on Tests Allowed for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>38</td>
</tr>
<tr>
<td>Quiet Room for Test Taking Allowed for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>36</td>
</tr>
<tr>
<td>Early Registration Allowed for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
<td>19</td>
</tr>
<tr>
<td>Lighter Course Load Allowed for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>79</td>
<td>30</td>
</tr>
<tr>
<td>Extended Time Granted to ADD Students to Graduate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>80</td>
<td>30</td>
</tr>
<tr>
<td>Assistive Technology Devices Available for ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>92</td>
<td>35</td>
</tr>
<tr>
<td>ADD Students Taking Advantage of Accommodations Available from the Institutions in Last 5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>89</td>
<td>34</td>
</tr>
<tr>
<td>Don’t know</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Cross-Tabulation of Purposeful Sample and Random Sample
<table>
<thead>
<tr>
<th>Institution Size Variables</th>
<th>Purposeful Sample</th>
<th>Random Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey ADD Satisfaction</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>53% 20%</td>
<td>39% 25%</td>
</tr>
<tr>
<td>Information Shared With Faculty Relative to Having ADD Student (s) in Class</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>78% 29%</td>
<td>80% 52%</td>
</tr>
<tr>
<td>Faculty Provided With Training Relative to Dealing with ADD Students in Class</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100% 37%</td>
<td>100% 63%</td>
</tr>
<tr>
<td>Voice Activation Devices Available from Institution for ADD Students</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>49% 18%</td>
<td>52% 33%</td>
</tr>
<tr>
<td>Touch Control Devices Available from Institution for ADD Students</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32% 12%</td>
<td>27% 17%</td>
</tr>
<tr>
<td>Speech-To-Text Devices Available from Institution for ADD Students</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32% 12%</td>
<td>25% 16%</td>
</tr>
<tr>
<td>Computer Generated Voice Devices Available from Institution for ADD Students</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65% 24%</td>
<td>57% 37%</td>
</tr>
<tr>
<td>Alternative Mouse Device Available from Institution for ADD Students</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43% 16%</td>
<td>33% 24%</td>
</tr>
<tr>
<td>Alternative Keyboard Device Available from Institution for ADD Students</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43% 16%</td>
<td>36% 23%</td>
</tr>
<tr>
<td>ADD Students Using Voice Activated Devices</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35% 13%</td>
<td>28% 18%</td>
</tr>
<tr>
<td>ADD Students Using Touch Control Devices</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8% 3%</td>
<td>3% 2%</td>
</tr>
</tbody>
</table>

Table 12: Cross-Tabulation of Purposeful Sample and Random Sample
<table>
<thead>
<tr>
<th>Institution Size Variables</th>
<th>Purposeful Sample</th>
<th>Random Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD Students Using Speech-To-Text Devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>54 20</td>
<td>39 25</td>
</tr>
<tr>
<td>ADD Students Using Computer Generated Voice Devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>46 17</td>
<td>44 28</td>
</tr>
<tr>
<td>ADD Students Using Alternative Mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8 3</td>
<td>11 7</td>
</tr>
<tr>
<td>ADD Students Using Alternative Keyboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8 3</td>
<td>14 9</td>
</tr>
<tr>
<td>Other Devices Used by ADD Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>74 28</td>
<td>63 69</td>
</tr>
</tbody>
</table>

Both samples indicated that they had defined disability space. The purposeful sample respondents had far more staff members, that is, more than 3 people staffing their offices as compared to the random sample. Both indicated that their staff was trained. Both claim to witness an increase in the number of ADD students over the past 5 years. Respondents from the purposeful sample indicated a greater use of the psychoeducation and neuropsychological evaluations than those that responded from the random sample. However, use of the various components of these evaluations was fairly equal among the two samples with the exception of test scores and test behavior that were used more by the purposeful sample than the random sample. The purposeful sample group found the evaluation components mostly moderately useful except for the use of summary reports, and recommendations from assessors which they found to be very useful. Purposeful
sample respondents also make more use of other assessments in making service delivery decisions when compared to the random sample. When it came to informing students of where to go on campus for disability services, the purposeful sample fell short of the random sample. Both samples seem to test suspected ADD students.

Table 13D: A Comparison of Standard Accommodations with Purposeful and Random Samples. Number presented are in percentages (%)

<table>
<thead>
<tr>
<th>Samples</th>
<th>Note Taking</th>
<th>Extra Time for Tests</th>
<th>Quiet Room</th>
<th>Early Registration</th>
<th>Lighter Course Load</th>
<th>Extended Time to Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purposeful</td>
<td>97</td>
<td>100</td>
<td>95</td>
<td>50</td>
<td>79</td>
<td>80</td>
</tr>
<tr>
<td>Random</td>
<td>80</td>
<td>97</td>
<td>97</td>
<td>50</td>
<td>56</td>
<td>59</td>
</tr>
</tbody>
</table>

Purposeful sample respondents indicated they provide more opportunities for note taking, lighter course load, extended time for graduation and more assistive technology devices. In addition, purposeful sample respondents indicated that they survey ADD students more than random sample respondents. Each, however, equally share information with faculty relative to dealing with ADD students in their classrooms.

Shown in Table 14, purposeful sample institutions provide more touch control devices, speech-to-text devices, computer generated voice devices, alternative mouse and keyboards than random sample respondents. More students at the purposefully selected institutions use speech-to-text devices than other devices these institutions have available.
for them, and more students at the purposefully selected institutions use other devices than students at the randomly selected institutions.

The responses from the random sample came from small sized, 4-year, public institutions. The random sample respondents indicated that they had more offices staffed by 1 person, or 3 people than the purposeful sample respondents but less offices staffed with 2 people or more than 3 people. Random sample respondents seem to equally provide disability services offices when compared to the purposeful sample, also registered the same knowledge concerning the increase of ADD students over the last 5 years. Both agreed that they had.

Random sample respondents seem to rely on the psychoeducation and neuropsychological evaluations less than the purposeful sample respondents and did not appear to utilize the components of the evaluations to the extent that the purposeful sample used them, most noted in the use or less reliance on test behavior and recommendations of assessors in making service delivery decisions. However, they did indicate that they found cognitive strengths and weaknesses, academic strengths and weaknesses, test scores, test behavior and summary reports to be very useful as compared to the purposeful sample respondents. They also indicated that they inform students of where to go on campus for disability services more than the purposeful sample respondents. There was no appreciable difference between these two samples relative to testing suspected ADD students.
Random sample respondents indicated that they did not provide opportunities for note takers to the degree that purposeful sample respondents said. Nor did they provide lighter course loads or extended time to graduate when compared to the responses from the purposeful sample. There was no appreciable difference between the samples relative to the number of students taking advantage of the traditional accommodations offered by the institutions over the last 5 years as both indicated an increase. Random sample respondents did, however, indicate that they did not survey their ADD students as much as the purposeful sample institutions.

As shown in Table 14, random sample institutions did not provide as much assistive technology devices as the purposeful sample institutions; notably in regards to all of the devices except for voice activation devices which showed slightly more availability. Usage by ADD students, however, of speech-to-text devices was high as was also shown with the purposeful sample. But in general, most of the devices do not seem to used a lot. ADD students attending institutions that were part of the random sample also are not using other devices as much as those attending the purposeful sample institutions.
Student Participant Information

Eighteen college students responded to questionnaires that were distributed by their respective institutions. In addition, four college students responded from a group of 35 who graduated from a high school that focused specifically on students with learning disabilities. The responses generated from these questionnaires were meant to be totally exploratory and due to the relatively low response, responses should not be taken as conclusive or generalizable but do lend more insight into the world of the ADD college student. 16 of the students came from the randomly selected institutions, 6 from the purposefully selected sample. Nine of the students were sophomores, 12 were juniors. One student was finishing up a doctoral program. Fourteen students were female and 8 were males. All 22 responses came from 22 different institutions. When asked at what age they were diagnosed with ADD, ages ranged from 6 to 18. One student was 34 years old. When asked what was the biggest problem they had with their disability prior to going to college, trouble focusing and staying on task were the most noted ones experienced by these students. Additionally, hyperactivity was stated as a problem.

The responses by the 4 students from the special high school compared to the other 18 college students began to differ when asked about accommodations provided to them prior to attending college. The students from the special high school were all provided with accommodations that included such items as the use of a metronome to help them remain focused. Prior to going to college, students from the special high school were not only afforded note takers, and extended time to graduate, but were also
exposed to a variety of assistive technology devices such as voice activation devices, touch control devices, speech-to-text devices, computer generated voice devices, or alternative mouse or keyboard. None of the other 18 students said that they had had any exposure to this technology. All 4 students from the special school had an Individual Evaluation Plan (IEP) along with an Individual Transition Plan (ITP) created for them. Only 1 out of the other 18 students had an IEP created that provided some additional information that helped them transition to college.

When asked what reasons factored into their selection of colleges, multiple answers from all 22 students emerged including the price, location, program, and size. Not one answer stood out as dominant. However, all of the students responded that their parents played the most pivotal role in encouraging them to go to college. Only 1 student out of 22 said the main reason they chose the college they are now attending was because of the disability office/services. This student was the one pursing a doctoral degree. This same student went on to say that not only did the institution have an individual counselor who assisted with education planning, provided special sessions to explore career options, but gave this student full access to a high tech center where they could use programs including the Kurzweil reading program and other equipment to assist in their homework.

Aside from the one student, accommodations the students were using as provided by the college or university consisted solely of note-takers, and extra time on exams in a quiet room and nothing else. Most of the 18 students indicated that they were simply put
on medication and that few if any accommodations were made available to them. However, although noted as being used, note-takers were identified by several students as being the least helpful. When asked about level of satisfaction, most were dissatisfied with the accommodations they receive at college, and one student wrote, “who cares if we are satisfied or not.”

Only two students out of 22 were able to provide a definition for assistive technology. The others simply stated that they did not know what it meant. All but one of the 18 students indicated that they were not using any assistive technology devices provided by the college.

A few of the students responded when asked what they believed has been their biggest challenge at college. Test taking seemed to be the biggest challenge followed by short term memory loss. Several of the students mentioned difficulty with faculty not really understanding their disorder and sometimes humiliating them in front of the class. Adjusting to individual professors was an issue as well as identifying someone to go to for help posed another. One student wrote “Teachers sometimes can be difficult with us in terms of treating us like we have done something wrong”. Another student wrote

“ I study all the time, and I still struggle to get decent test grades most of the time. It would be nice if classes offered a variety of different ways to obtain grades (papers, projects, etc.) so that if someone like me has trouble in one area they can make it up in a different area.”
One student said “trying to forget that I have ADD” was their biggest challenge. Still another wrote, “I have felt so lost in choosing my major. In some ways it is like being thrown into a lake and trying to swim for the first time.” And finally another wrote that their biggest challenge was, “…not giving up when things are too difficult for me”.

CONCLUSION

This section addresses the 4 main research questions relative to the findings and explores the implications for practice, policy and further research that continues to be needed regarding college students with ADD. It is again important to note several issues before reading this section of the study. First, it is important to remember that the information generated from the questionnaires is exploratory in nature even though some quantitative analysis was conducted on the administrator data. Second, the group of college students responding was very small and can only lend a small amount of credibility to the overall findings and subsequent discussion of the findings. Finally, in addressing ADD as a learning disability, it is important to recognize that focusing on this disorder with adults and playing out the consequences in higher education is still very much in the infancy stage.

Research Questions

Research Question #1— How do the colleges and universities fit into Categories #1-4 of disability services?

The researcher attempted to place the responding institutions into 4 different categories. No underlying assumptions were made going into the study as to which category would be most represented. Nor was it assumed that each institution would necessarily fit nicely and cleanly into a particular category. Placing the colleges and universities into a category proved to be a challenge. If the number of people on staff in a disability office had been a key determinant, the research showed that the majority of
those responding, although not a large number, had more than 3 people. If the training of
the staff was deemed more important than some of the other characteristics, a large
number of respondents replied that their staff was trained in disability issues. If the
availability of accommodations played a primary role, nearly all of the respondents
indicated they provided most of the traditional accommodations. A couple of key
determinants were therefore used to separate the institutions. These included the presence
or absence of a defined disability space or office for students, the education credentials of
the person in charge of the disability office, the degree to which the assistive technology
were specified as being provided and the type of comments that appeared in the open-
ended questions. Based on this evaluation made by both qualitative and quantitative
review by the researcher, the research showed that most colleges and universities fell into
Category #3. Category 3 points to more of a commitment on the part of colleges and
universities to address students with learning disabilities and specifically ADD. Directors
of these disability offices hold advanced degrees, more of their staff is trained in
disability issues, all promote their services and provide what they can beyond traditional
accommodations for these special students.

While it is encouraging to see a possible trend of so many of these institutions
being able to be placed into the third category, there is always room for improvement and
movement into Category #4. Unfortunately, colleges and universities placed in Category
#4 were almost the same number that fit into Category #1. With an ever-increasing
number of ADD students going on to higher education, having disability offices that are
considered superlative and exemplary in their endeavors to address these students is growing both in need and importance. These are the offices from which rich research can be generated providing mounting evidence as to needs and successes with various assistive technology. These are the folks who have front row seats in conducting action research and reporting their scholarly findings to the field.

What is clear from this attempt at creating a framework of analysis is that it is difficult to do as there is much overlap in the category characteristics identified. Some may argue that more institutions should be considered in Category #2 rather than Category #3. Also, some of the institutions identified in the purposeful sample suspected as being models for serving ADD college students did not respond to the survey despite several attempts to solicit feedback. If these institutions had responded, possibly more of the institutions would have fallen into Category #4.

Others have attempted to create guides for students and parents in identifying institutions that tend to support students with learning disabilities. Peterson’s guide entitled *Colleges for Students with Learning Disabilities or ADD* identifies colleges and universities that are either Self-Directed/Decentralized programs or Structured/Proactive programs. Structured/Proactive programs go well beyond those services that are legally mandated. The student is provided with a more structured environment which includes a low staff/student ratio. Extra program fees, separate applications and a limit to the number of students accepted into the program allow the Structured/Proactive programs to maintain a larger staff to better meet the needs of these students. These programs would
necessarily compare to categories 3 and 4 as outlined by the researcher. After receiving
and reviewing the administrator responses, 10 percent or about 11 institutions could be
further classified by Peterson’s guidebook as Structured/Proactive.

Sixty percent or 62 institutions responding to the survey could be identified as
Self-Directed/Decentralized according to Peterson’s guide. These programs require
eligibility for services through the provision of disability documentation that meets
institutional standards. There is no guidance under IDEA, Section 504 or the ADA that
requires colleges to accept documentation that does not meet their guidelines. Each
college has the right to develop its own guidelines and adhere to them. Schools within the
same state may have different criteria for determining eligibility for learning disability
services. Comments provided by study respondents often cited use of their own standards
of documentation and assessment when making service delivery decisions. Peterson also
points out that these programs are often coordinated through the Disability Services
Office, and are based on need as specified by the student’s documentation. Services may
also be offered through other offices throughout the campus and some services provided
that are not mandated by laws. Student progress is usually not monitored.

Many parents, students and high school counselors count on the information
provided in the Peterson guide. However, with criteria for assessment and provision of
services appearing to cost families more money on top of ever increasing tuition rates or
on the other hand rather random and at times sketchy, and with student progress and most
likely, satisfaction with services not tracked, a reassessment on the part of these institutions in how they are addressing students with ADD is more than necessary.

In addition to the categorization that was examined as well as the separation of institutions and programs by structured and decentralized as presented in the Peterson guide, a series of cross-tabulations was conducted and included an examination of the size of the institution, that is, small, medium and large, the type of institution, private or public, and two types of degrees granted, a 2-year degree or a 4-year degree. No preconceived formation of size, type or degree granted was constructed prior to going into this study. Obviously more research can be conducted based on these exploratory findings and initial findings. More discussion regarding the cross-tabulation findings will be discussed later on in this section. In addition, a cross-tabulation of the two types of samples studied, purposeful and random was also conducted. A discussion of these findings are addressed under research question #3.

Question #2—Do colleges and universities provide ADD students with accommodations and what type of accommodations are they providing.

Two sections of the administrator questionnaire addressed the question of accommodations. One section addressed traditional accommodations and the other assistive technology. Taken as a whole, a very high percentage of the responding institutions appear to provide the traditional accommodations that basically meet the standards of federal legislation. Better than 50 percent of these institutions provide such accommodations as note taking, quiet rooms for test taking and extra time on tests. A
lesser percentage provide early registration, lighter course loads or extended time for graduation. The data also showed that these institutions, whatever size, type or degree granted, mostly believe that more students are using accommodations with a good number of administrators stating that the number of students taking advantage of traditional accommodations have increased over the last five years.

It is heartening to see that for the most part, colleges and universities are providing traditional accommodations. But what is somewhat disheartening is that not a lot of the institutions survey their students to determine their level of satisfaction with the accommodations. Institution may be providing what they think students need or want, but appear not to have taken the necessary steps to determine this. The majority of the respondents indicated that they believed that the number of ADD students taking advantage of traditional accommodations had increased over the last 5 years. With less than 50 percent of those responding saying that they actually survey their students to determine satisfaction with accommodations, the question arises as to whether or not institutions actually track how many students are taking advantage of these accommodations or are making too many assumptions and not necessarily providing what students need. And students themselves, although based only on a very small number of respondents, say that their needs are not being met even with the seemingly simple task of an institution providing note takers. However, while administrators admit that they are making the necessary traditional accommodations available for use by students, they add that students are the ones that have the responsibility of stepping up
and making known what their needs are. So essentially, what they appear to be saying is that their role is more reactive than proactive, and it is not really their fault if needs are not being met. Obviously with only 43 percent of the respondents actually surveying students, there appears a great deal of room for becoming more proactive and for improvement when it comes to identifying not only how satisfied students are with the accommodations available from the colleges and universities they attend but what their needs really are remain unmet. This study did not fully pursue the issue of student satisfaction and should have asked administrators what they did with the results of the satisfaction surveys as well as if they actually asked students what they needed.

The issue of providing assistive technologies is another concern. Here the data becomes a bit muddy as most of the institutions indicate that they have assistive technology available. One might then assume that it really didn’t matter what size institution a student with ADD attended, what type of institution or what degree they wanted to pursue, assistive technology was available. However, when it came to examining the extent of this availability as well as the usage of the technology by ADD students, other findings surfaced. For example, small sized institutions conveyed less availability when compared to medium and large, private institutions showed slightly less availability than public institutions and 2-year degree granting institutions showed less availability as well.

In many cases, the findings examining the use of assistive technology by ADD students showed quite a gap between the fact that a particular device was available and its
use. This gap may prompt several questions, did the students not know what was available, did the students not care that a particular device was available, or did the student not need that particular device in the first place? These question can only be answered by the students, and getting to them for answers as indicative of this study is hard to do.

Question #3—Are the purposeful institutions that are known to have LD and ADD students apply and be accepted providing these students with more accommodations than the randomly selected institutions?

Some might assume that those institutions that draw special students with learning disabilities and specifically attention-deficit-disorder would be more accommodating than those that are not as well known for doing so. However, in speaking with several administrators, there are a number of factors involved even with those institutions to which ADD students are particularly drawn.

Some believe that the services and programs provided are only as good as the leadership of the disability office. Strong leaders have been lured away from strong programs to help strengthen lesser known or to develop new programs. Sometimes in leaving a strong program, the strong program suffers and though still expected to be strong, has lost some if not most of its strength in loosing its leader. Other institutions have been known to have great programs but do not go out of their way to necessarily advertise it.
Another issue regards the type of accommodations that a high school student wishes to have. Administrators agree that many ADD students do not self-identify once they come to college. Some actually choose not to attend an institution that might single them out with this disorder. As seen in the responses from the small number of college students for this study, only one student actually choose the college they are attending because of the services offered. Obviously the sample responding relative to this particular issue is much to small to draw any conclusions and much more research would have to be conducted to determine the percentage of ADD students who actually seek out institutions that provide specific services.

Having brought to mind a possible assumption that institutions that draw special students to them actually provide more support, it was also important to examine some other issues prior to addressing the data generated. The purposeful sample did show what might be considered a greater focus on ADD students than the random sample. Differences existed between the two samples in several ways. More of these institutions had larger staff, made greater use of psychoeducation and neuropsychological evaluations, used other assessments in making service delivery decisions, surveyed students for satisfaction. More of them shared information about ADD students with faculty. More of them used and found useful every component of psychoeducational and neuropsychological tests. More of them felt the need to also use additional assessments in making service delivery decisions. Regarding accommodations, purposeful institutions provided more traditional accommodations including more opportunity for note taking,
lighter course loads, extended time to graduate and early registration. They also provided more assistive technology devices.

Equally important is to address the areas where there was virtually no difference between the two samples. Both had office space designed for disability services; both claimed that their staff was trained in disability issues; both noted an increase in the number of ADD students attending their respective institutions over the last 5 years. Both tested students suspected of having ADD; both trained their faculty relative to ADD students; both informed faculty of these students in their classes and both indicated that the number of their ADD students taking advantage of accommodations had increased over the last 5 years.

What all this might mean is that specific institutions to which ADD students and other LD students are drawn, do provide more support in various areas but that other institutions provide support as well. To a larger degree, it comes down to what is important to a particular student relative to such things as very specific accommodations that would be available or whether the use of additional assessments in evaluating their need for accommodations plays a major role. For parents, students and school counselors trying to identify institutions that might be a good fit may not be determined as easily as one might think but require the evaluation of a number of factors including the size of the institution, type and degree sought.
Question #4—Is there a perceived gap between student need and actual provision?

To answer this question first requires a brief review of the law which points out an initial area where a gap might exist. As mentioned earlier, a person with a disability is defined by the Rehabilitation Act of 1973 and by the Americans with Disabilities Act of 1990 as an individual who has a mental or physical impairment that substantially limits one or more major life activities (28 CFR Part 36, Sec.104), has a record of such an impairment, or is regarded as having such an impairment. Section 504 of the Vocational Rehabilitation Act of 1973, Public Law 93-112 ensures the right of all qualified individuals with disabilities to equal post secondary educational opportunities and requires educational institutions to accept students with disabilities.

The enactment of PL 94-142 in 1975, provided for free and appropriate public education of all children with disabilities or handicaps. What was once referred to as the Education for All Handicapped Children Act later became know as the Individuals with Disabilities Education Act or IDEA. IDEA was created to protect the learning disabled student in the K-12 years. This act required the school to take responsibility for the identification of these special students and subsequent accommodations needed to enable them to participate in a school environment that is the least restrictive environment possible. An IEP (Individual Education Plan) with an ITP (Individual Transition Plan) is supposed to be written for the student and adhered to by the school during these years. IDEA also dictates that all children with disabilities or handicaps between birth and 21 years of age should be served.
Administrators may say there isn’t a gap because they are providing the traditional accommodations according to the letter of the law and are thus providing what the students need. Yet most of the small group of students who shared information with the researcher indicated that they did not have an ITP as part of any plan to move on to higher education. While this group is hardly representative of all students who should, in theory, have an IEP along with an ITP, it gives pause to wonder how wide spread this lack of practice is. In addition, though small in number, the information supports a study by Shearin, et. al. (1999) which also found an absence of this provision and discovered that a vast majority of the IEP plans that they reviewed contained little if any information about this transition. There appears, therefore, a gap between what high schools are suppose to do to prepare students for college, and what they actually do.

The Rehabilitation Act of 1973, Section 504 also mandated that all colleges and universities in the United States receiving federal aid allows students with documented disabilities to request modifications, academic support, or auxiliary aids that allow them to participate and benefit from all the activities and programs that the colleges offer. Mandated services include the following: extra time on tests, permitting tests to be individually proctored, read orally, dictated or typed; the use of note-takers; the provision of adaptive technology; the provision of materials in alternate media. Adaptive technology includes computer hardware and software that allows students to access materials. This technology may enlarge print, actually read material out loud, type for students as they speak, highlight material, and organize writing material. By law,
colleges are not required to provide any diagnostic services, and the general understanding is that most do not have trained learning disability specialists. However, the results of this researcher’s exploration into these issues point possibly to a new and better direction on the part of colleges and universities in doing testing and having a staff that is trained in disability issues.

In an article by Lydia Block that appears in Peterson’s *Colleges for Students with Learning Disabilities or ADD*, she points out that under law, colleges are required to offer services, that most colleges do not offer remediation (special course work) and that students going on to college are expected to be prepared for the rigors of the course work. Institutions are only required to provide what is called *reasonable* accommodations.

Keim, McWhirter, and Berstein, (1996) suggest that postsecondary institutions struggle to determine what is meant by reasonable accommodations and what is actually required to meet legislated standards for supporting individuals with LD. They may also have difficulty determining which services are most beneficial and how limited funds should be divided among the different types of support.

It should be clear at this point that a gap does exist and that it should be more than just a perception. Where the gap exists and responsibility for its existence can now be addressed. The first place the gap may exist is in the interpretation of the law and the need to recognize that students with attention-deficit disorder are, indeed, people who have a mental or physical impairment that substantially limits one or more major life activities has a record of such an impairment, or is regarded as having such an
impairment as stipulated in the Rehabilitation Act of 1973 and by the Americans with Disabilities Act of 1990. These students need to be recognized as having a learning disability under the federal laws and regulations and eligible to take full advantage of anything any other learning disabled student can.

Peterson’s guide entitled *Colleges for Students with Learning Disabilities or ADD*, separates ADD from the title of learning disabilities and makes the type face the same small size as the word *with*. This separation from the term *Learning Disabilities* speaks volumes in how this disability is perceived. One administrator responding to the survey wrote on the survey that ADD is not considered a disability in her State. So ADD as a learning disability still remains in question, and any laws that might help these students also lie in murky waters.

Few researchers, as evidenced in the literature, have evaluated the impact of learning disabilities relative to college student, let alone students with ADD. Cordoni (1980) suggest this lack of research can be attributed to a lack of research in general on college students with learning disabilities. ADD college students seem to have suffered the most and as a consequence, many services directed toward them lack empirical support, or are presumed effective without a formal evaluation, or in worst cases are discontinued due to lack of evidence.

In addition to the lack of recognition of this disability as a learning disability, the gap between what is provided and what may be needed is again evidenced in the relatively small number of institutions that survey their students for satisfaction. If
nothing is collected, no knowledge is gained and no changes can be made. However, since there was no information collected for this study specifically seeking input on the questions that institutions ask on surveys except whether surveys are administered, there is no way of knowing whether these institutions ask what other accommodations and devices students would like to have and where exactly gaps may exist relative to what is provided and what might instead be needed. Further research in this area may yield results to the contrary and indicate few of any gaps exist but until more institutions engage in survey administration or other measures such as focus groups, meta-analysis and the like, the question of whether students are getting what they need will remain open. While some administrators may still believe there is no need to survey students in order to better address their needs, issues of cost and funding surfaced as barriers to purchase of devices for ADD students and these issues would certainly qualify as contributing to the gap between what is provided and what may be needed.

Another gap may not be so easy to bridge. Once a student enters college, the Rehabilitation Act of 1973 Section 504 and the Americans with Disabilities Act (ADA) take over. When a learning disabled student with attention deficit disorder arrives at college, it is their responsibility, and not the institutions responsibility to identify themselves to the appropriate office in order to access special accommodations. While administrators admit that they have seen an increase in the number of students with ADD over the last 5 years, the question remains, how many more have not self-identified. And how many more need help and are not getting it. Simpson as cited in Vogel and
Adelman, 1993 contends that the majority of young adults with learning problems have failed academically in college because of weaknesses in reading comprehension, reading rate, written language, or mathematics. Ineffectual study habits and lack of organizational and time management skills compound their problems. All of which would be improved if accommodations were more forth coming.

In addition, students by their own admission, are not making their needs known by stepping forward and asking for help especially when it comes to asking for assistive technology. Also under consideration are students’ inability to define and understand what the term assistive technology means when asked, as well as their lack of use or exposure in pre-college education, both of which might contribute to their inability to ask for this type of technology once they get to college.

A recent survey compiled for the Maryland State Board of Education in 2004 by Maryland Business Roundtable for Education, a group that has been tracking technology use in Maryland classrooms since 1996 found that both students and teachers are not doing a lot with technology in the classroom. The report found that 40 percent of the students use word processing, and about half use the Web for research.

These statistics are still troubling given that the report shows a dramatic increase in the ratio of student to computer when comparing 1997 to 2004. The report found a 12 to 1 ratio of student to computer in 1997 compared to a 5 to 1 ratio in 2004. Okpala and Okala (1997) suggest that E-Mail and word processes are the two teaching tools that most faculties are familiar with and have a wide degree of experience with but that fewer
faculty members have knowledge of and experience in software presentation, multimedia, and distance learning. Ely (1989) also noted that computers could be found in almost every public school in the United States. In a 2001 study by Zhao and Czuko, these researchers point out that

“There is an ironic and costly contradiction in the attempt to integrate technology into education. While evidence of the educational benefits of technology abounds and investment in hardware and software has dramatically increased, relatively few teachers use technology regularly in their teaching and the impact of computers on existing curricula is still very limited.” (p.5).

Yet use of technology to assist ADD students, at least according to the ADD students who responded to the study, suggest little if any exposure to use of assistive technology devices prior to going to college. Granted these studies speak more to computer use by pre-college students and teachers, however, given the increased exposure to computers, at least on the part of students in Maryland, one might think that students in need of additional accommodations such as speech-to-text or voice activated devices connected to computers would be seeking these accommodations when they moved on to higher education, or that faculty would be making far more use of technology in college classrooms than they do.

Having addressed all 4 research questions, more questions seem to have surfaced in trying to understand the topic of this study; questions that may cause some to become defensive or even dismissive. However, this researcher hopes to bring hope and closure
to this study leaving the reader better knowledgeable about the challenges facing both institutions and ADD students, with a hope for the future in regards to providing what is needed for ADD college students.

The Future is Now

When one stops to think how relatively recent DSM-IV is, it is easy to understand that the learning curve needed to fully embrace all of the implications relative to diagnosis and treatment of adults with ADD have not been realized. It is also evident that a thorough understanding and application of the expectations and implications of federal legislation regarding individuals with special needs as well as the utilization of technology is still not where it should be.

There is little argument surrounding the provision of accommodations for individuals with a visible disability or those that are hard of hearing or deaf, and those that have an orthopedic handicap. With students who are deaf or blind, in wheelchairs or on crutches, visibly seeing the disability inspires those around to provide the necessary help that these students might need to succeed in postsecondary schools.

However, ADD is a hidden disability, and a great deal of controversy still seems to surround this group of students (Thurlow, Elliott, & Ysseldyke, 1998). Critics of the condition question whether or not a real condition actually exists let alone acknowledging it as a disability. Part of the controversy surrounding ADD is the comorbility of this disorder. Comorbility means there are other issues impacting the clear and true identify of a particular disorder. Often students with ADD suffer from hyperactivity, mood disorders
including schizophrenia, or depression. Often students are placed on a variety of medications, each aimed at targeting one or more of these ailments. Thus knowledge that ADD is most likely an inheritable neurological syndrome that causes many different symptoms such as distractibility, low tolerance for frustration and boredom, and a tendency to say or do whatever come to mind is still not widely accepted. It is small wonder that attention to this disorder is still, in 2005, not meriting the same type of attention and concern as some other disabilities labeled as learning disabilities.

While it is true that all students could benefit from having additional accommodations provided to them, the primary purpose of providing accommodations such as assistive technology is to level the playing field and without these accommodations, any work that these students do may not accurately measure what these students know and are able to do. Computer technology has the potential to help learners gather, manipulate, understand and use information more efficiently and effectively.

It was clear in this study that traditional accommodations are both being provided by colleges and university and used by ADD students. Utilization of assistive technology is another matter. Disappointingly, not as many institutions have these devices available to students. As mentioned earlier, cost and funding seem to set up barriers in the purchase of these products. However, do administrators know the cost of some of these products like Dragon Naturally Speaking or some of the Kurweil products? Are they truly not in a position to fight for a larger budget, or to seek grants or other outside, possibly corporate underwriting of some of these products? Are they not in a position to set up some type of
arrangement with the manufacturers of these products to provide them with a better cost (better than retail) for acquiring or leasing them? Is cost an excuse or really a barrier?

Are administrators even aware of these devices? Some question could be raised as to whether they are, in fact, knowledgeable regarding the array of devices on the market today. Several comments written in by administrators on the survey suggest that maybe they are not. Manufacturer representatives could be invited to postsecondary institutions to share their products. Some may even provide new products as pilot tests.

Also disappointing, even in comparison to the availability or lack thereof, of assistive devices, was the number of students who are actually using assistive technology devices to enhance their learning capabilities. Students also need to be made aware of these devices. But as noted earlier, some students who could definitely benefit from the devices, are not known to disability offices so getting material into their hands would be hard to do. It would be interesting to see how much material and what type of material institutions provide prospective students or high school counselors. Clearly the utilization of assistive technology in support of college students with attention-deficit-disorder has a long way to go.

There is knowledge needed elsewhere too. Why did so many of the administrator responses use the term *optional* when it came to training faculty in matters pertaining to ADD students? In addition, almost all of the administrators admitted to having information out there to make students aware of services available but apparently the word is not getting out to all those who need to hear it, leaving open the question of how
can accommodations and devices that are available to students who need them be communicated more powerfully? Not unlike the Lazurus and Davison (1996) study which surveyed faculty members at four year and community colleges in Michigan, Georgia, Wisconsin, Arizona, and New York about accommodating students with learning disabilities and found concerns about proper accommodations for LD students, lack of training or knowledge in dealing with LD students, issues surrounding the fairness of accommodations in terms of non-disabled students, as well as the future success of students with learning disabilities, the administrators who responded to this survey are still pretty much concerned with the same issues and continue to want these areas addressed nation-wide.

Closing Remarks

This study took a look at a number of variables in hope that a clearer picture of where a student with ADD should go to college. Results have not enabled a truly clear picture to emerge. Should a student with ADD go to a small, private, 2 year institution, a medium size public 2-year institution, a large size, private, 4-year institution, a college or university that only appears on a high school college guidance list for special students, some place close to home and family support mechanisms, an institution that offers the specific type of accommodations they want, one that offers more assistive technology devices than others or some place they have had their hopes and dreams on attending since early on in their life? Seemingly large, public institutions may have more funding available for the provision of a larger staff and smaller staff to
student ratio. They may also have more money or a larger budget to purchase devices that not only can be used by ADD students but also other students with disabilities. Additionally, they may also have more avenues available to them to communicate their services. Small colleges seem to have the challenge of having more assistive technology devices but may be in a better position to know more about their student body than a larger institution. Because of their size, they may be better able to track special students than a larger institution. Private institutions may be able to get more support from their alumni than public institutions.

Colleges and universities, both large and small, 2-year and 4-year, public and private, are claim to be witnessing an increase in the number of students with ADD attending college and are realizing, at least to some degree, their role in providing both traditional and assistive technology accommodations for these students. Also, nearly all have stand-alone, defined space set aside for disability services with trained staff. In a study conducted by Nolander, Shaw and McGuire (1990) and which should hold true now 15 years later, the authors pointed out the necessity for the people who staff these offices to be in consensus regarding a clear, functional, and operational definition of learning disabilities. In a 1989 study, Vogel found colleges and universities overwhelmed by requests for support services and found themselves unable to provide special programs and services to every student claiming to be learning disabled. With well over 1,000 colleges and universities cited in Peterson’s guide, it would appear that since 1989, more
postsecondary institutions are better equipped to deal both with learning disabled students and ADD students.

One-hundred and three administrators and 18 college student respondents hardly represent either all administrators directing offices of disability services or all college students with ADD. Though the study provided for an exploration into areas not often studied, the information still points to movement in higher education towards a better understanding and availability of provisions including assistive technology to ADD students.

Early and clearer diagnosis of students in elementary, middle and high school has done much to improve the situation. More of an emphasis of diagnosis in higher education is called for. By law, colleges are not required to provide any diagnostic services, and not surprisingly, only about a third of the institutions that responded test students that might be suspected of suffering from ADD. But responses also included referring them off campus for testing. However, testing is expensive and time consuming, and students may not have the resources to go through what is necessary for them to receive accommodations. Having more resources available on campus might do much to turn disastrous school experiences into wonderful experiences once these adults are adequately treated.

While it may appear that few students in higher education actually come forward and make themselves known to an disability coordinator, nonetheless, when a faculty stops to think about the make-up of the students in their classes, they will most likely
concur that many more ADD students are actually present in their classrooms and would warrant help if approached and pointed in the right direction. For students with ADD, most experts on the disorder say, it is crucial to "self advocate", that is to tell faculty of their condition and ask for the type of help they need. "The ability of the student to self-advocate, to be articulate about the modifications they need, is more important in determining their success than their IQ," says Sheldon H. Horowitz, director of professional services at the National Center for Learning Disabilities, a nonprofit advocacy group. "But they aren't accustomed to doing that, because it was the school's responsibility [to provide them with services] in high school."

Disability offices can advise students on how to approach professors, but actually doing so is up to the students and with little experience speaking up for themselves and a tendency toward poor time-management skills, they might not ask for help until it is too late for the professors to help them without giving them what might appear to others as an unfair benefit. Weyandt, a psychology professor, who has conducted one of the few surveys of existing research on college students with the disorder, says colleges might need to take some of the first steps. "Maybe we need to develop better interventions to help students move forward…One of the hallmark traits [of the ADD student] is an inability to follow through on things."

Both quantitative and qualitative information from this study reflect effort on the part of these institutions to provide some of the necessities to these students. The
apparent gaps that exist can be closed and warrant further consideration, research and creative problem solving.

The objective of this study was to explore areas that impact the young adult college student with ADD, specifically in relation to the availability and utilization of assistive technology in support of these students. Many of the areas examined had not been previously explored, and much still remains to be learned. On the other hand, this study has at least provided information upon which more studies can be conducted. For example, student needs must be better identified. Such analysis will help ensure that their needs are more appropriately and adequately addressed, and reduce confusion as to how administrators and faculty deal with these students. Parette and Scherer (1990) further suggest that when working with students with unique disabilities, it is important to explore their expectations and readiness to use certain accommodations.

Another pressing issue may be to better determine how to get students to self-identify, and be self-advocates once they get to college. The issues discussed in this study have relevant theoretical and practical implications for understanding and improving the experiences of college students with ADD. Exploratory research is not meant to be conclusive or highly generalizable, but rather prompt additional quantitative research to be considered. The apparent gaps that exist in this study can be closed through additional research and creative problem solving. With that end in mind, a set of research questions within 4 possible research categories appear in Table 28.
Table 28: Proposed Research Related to College Students with ADD

<table>
<thead>
<tr>
<th>Regarding Postsecondary Disability Service Providers</th>
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<tbody>
<tr>
<td>How can college administrators become better aware of what ADD students need?</td>
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<tr>
<td>What type of tracking are administrators doing to determine how satisfied students are with the accommodations they are receiving?</td>
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<tr>
<td>Are disability office budgets large enough to meet the accommodation needs of ADD students?</td>
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<tr>
<td>Do administrators know what technology is out on the market that would be appropriate for ADD college students?</td>
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<tr>
<td>What materials are provided to perspective high school students regarding accommodations, and what additional strategies can service providers use to better communicate and promote their services to ADD students?</td>
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<tr>
<td>Are there better strategies that can be used to get information out to students with ADD?</td>
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<table>
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<tr>
<th>Regarding ADD Students</th>
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<tbody>
<tr>
<td>What is preventing ADD students from self-identifying once they get to college?</td>
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<tr>
<td>What do ADD college students need in the way of accommodations that they are not presently receiving?</td>
</tr>
<tr>
<td>Regarding Faculty Roles</td>
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<tr>
<td>------------------------</td>
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<tr>
<td>How do faculty interactions with ADD students differ?</td>
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<tr>
<td>How can faculty be better trained to accept and work with ADD students in their classrooms?</td>
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<tr>
<td>What specifically is being done in colleges and universities to train faculty regarding legislation, disability characteristics and accommodations?</td>
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<tr>
<td>What should be done in pre-service training to better equip up and coming faculty to deal with ADD students in their classrooms?</td>
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<tr>
<td>What incentives or motivation are needed to entice faculty to work more cooperatively with ADD students?</td>
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<table>
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<tr>
<th>Regarding Assistive Technology</th>
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<tbody>
<tr>
<td>What is the cost associated with purchasing AT devices?</td>
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<tr>
<td>Why are more traditional accommodations being made available to ADD students when compared to the availability of AT devices?</td>
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</tbody>
</table>
What are the possibilities for postsecondary institutions to partner with manufactures of AT in order to pilot devices or receive a cost savings on devices?

One hundred three administrators and 22 college student respondents hardly represent all administrators directing offices of disability services, or all college students with ADD. Although this study explored areas not often studied, both quantitative and qualitative information from this study reflect compliance on the part of institutions relative to dealing with ADD students, and a positive movement in higher education towards a better understanding of college students with ADD, and their obligation to provide these students with accommodations, including assistive technology. This study only serves to start the process of understanding ADD college students, yet encourages all those involved with students with ADD to do what is needed to provide the type of learning environment that will help these students succeed.
References


Barkley, R, & Grodsinsky, G. (1994). Are tests of frontal lobe function useful in the
diagnosis of attention deficit disorders? Clinical Neuropsychologist, 8, 121-139.


Bottom Line. (April 15, 2002). Interview with Dr. Edward Hallowell, MD., 23 (8), 11-12.


CHADD. Children and Adults with Attention Deficit Disorder. Washington, DC


HEATH. The Higher Education and Adult Training for People with Handicaps Resource Center of the American Council on Education. Georgetown University, Washington, D.C.


Inspiration. Inspiration Software, Inc. Portland, OR.


providers for students with disabilities. *Journal of College Student Development*, 37, 279-288.


Research Diagnosis and Treatment. New York: Brunner/Mazel.

National Institute of Mental Health

National Postsecondary Student Aid Survey 2000

National Resource Center on AD/HD. Landover, Maryland


November 3rd Interview with Ross Pollack, director of the student-resource center at Manhattan College: Riverdale, N.Y


Schweitzer, J., Faber, T., Grafton, S., Tune, L., Hoffman, J. & Kilts, C.  
(2000). Alternations in the functional anatomy of working memory in adult  
attention deficit hyperactivity disorder. American Journal of Psychiatry, 157 (2),  
278-280.

Scott, S. & Gregg, N. (2000). Meeting the evolving needs of faculty in  
providing access for college students with LD. Journal of Learning Disabilities,  
33(2), 158-167.


Shearin, A., Roessler, R., & Schriner, K., (1999). Evaluating the transition component of  
IEPs of secondary students with disabilities. Rural Special Education Quarterly,  
18 (2), 22-27.

Steinberg, H. (1998). Moving along the programming continuum: From LD to AD/HD.  
In P. Quinn, A. McCormick (Eds.) Rethinking Ad/HD: A guide for fostering  
success in students with ADHD at the college level (pp. 8-13). Bethesda, MD:  
Advantage Books.

Leadership, 59 (3), 20-25.

Technology Related Assistance for Individuals with Disabilities Act of 1988, Public Law  


1. **Title of Submission**: The Honeycomb Model: Developing, and Maintaining Collaborative Interactions between General and Special Education Faculty in Postsecondary Settings

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6. The paper follows this page.
The Honeycomb Model: Developing, and Maintaining Collaborative Interactions between General and Special Education Faculty in Postsecondary Settings

by: Kathryn A. Newman, Ph.D., Loretta W. Jaggers, Ph.D., Elaine S. Foster, Ph.D., Nanthalia W. McJamerson, Ph.D., Felicie M. Barnes, Ed.D., A.K. Nur-Hussen, Ph.D., & Doris Williams-Smith, Ph.D.

A Paper proposed at the 9th Annual Hawaii International Conference on Education Honolulu, HI
The Honeycomb Model: Developing, and Maintaining Collaborative Interactions between General and Special Education Faculty in Postsecondary Settings

Paper Presentation Objectives

It is hoped that the learners will leave with the following outcomes:

1. Outline future efforts, and how the collaborative efforts can ameliorate budget challenges
2. Outline possible opportunities for “outside” collaboration on various campuses as viable contexts for developing collaborative bridges
3. Recognize and list neutral outside opportunities to build collaborative bridges (e.g. poetry, author seminars, garden centers, etc.)
4. Brainstorm similar activities for their campuses

Literature Review

While special education is continually evolving to meet the needs of students, there is still much work to be done. Manning and Gaudelli (2006) outline how special education programs continue to passively promote stereotypical and destructive myths about the academic abilities of diverse and low-income students through not teaching, demonstrating and modeling that the education of all students is everyone’s business. The authors reiterate that teaching methods need to be multidimensional, and multifaceted in order to meet student needs. An equal and equally involved team of general and special teachers could create and use these multiple methods, yet research by Harbort, Gunter, Hull, Brown, Venn & Wiley et.al. (2007) demonstrated that too often, general and special education teachers do not co-teach, or collaborate in meaningful ways in the classroom. That is, while there were two teachers in the classroom, instructional methods and responses to students were not significantly changed to meet the needs of students, thus potentially preserving the stereotypical notions about students. However, there is positive news. Silverman (2007) reported findings on the beliefs of both general and special preservice
teachers which indicated that both groups had positive beliefs about inclusion. This would suggest that these newest teachers would be the most likely to engage in equal and beneficial collaborations with each other. However, Silverman (2007) proposed that teacher preparation programs monitor beliefs, bolster training, and provide for more learning opportunities where both groups can learn to rely upon each other for support. In short, the program has to do more for the candidates.

Teacher education programs must therefore redesign themselves to demonstrate what this new model will look like. The new model must demonstrate collaboration and inclusiveness from its philosophy to its personnel, to its practices. Anderson, Spooner, Calhoun & Spooner (2007) explored this shift in form as their program was redesigned in preparation for reaccreditation by NCATE. The authors outlined that steps that many accredited college and university teacher education programs followed, including developing an identity, translating their vision into words, getting input from all stakeholders, aligning with best practices, and reevaluating the outcome. One of their findings was that the programs engaged in more dialogue with their partners. Visually, they (and other effective programs) became like skaters who pulled in their arms to spin faster.

It is this process that we seek to convey to our general and special education teacher candidates. We feel that it is our responsibility to demonstrate that inclusive collaborative processes are mutually beneficial, to move one step beyond Anderson et.al. (2007) and put the words into actions. There are many programs that are promoting collaboration among the candidates, such as the study of practice reported by Arthaud, Aram, Breck, Doelling, & Bushrow (2007) as well as Ross, Stafford, Church-Pupke & Bondy (2006). These programs set up collaborative activities within the preservice program that allow candidates to work together in field or clinical settings. The problem is that most of these programs do not allow the candidates to see their general and special education faculty collaborating. It is through the modeling process that candidates see that it is a strength, skill and attitude, and not just a grade (Stang & Lyons, 2008). It is critical that candidates have opportunities to see successful collaborations, not just in classes, but across the educational spectrum. These successful collaborations have similar features to the elements of success described by Ross et.al. (2006) including keeping the focus, doing the work, concern
about the community, flexibility and inclusiveness. The results are collaborations that are more than than simple co-teaching, but are interdisciplinary and transdisciplinary in their outcomes. Interestingly, one electronic literature search for models and research on postsecondary collaborations between general and special education faculty modeling the expected teacher behaviors yielded no results.

Our university has a long history of collaborations between general and special education teacher educators. Out of this history came a model which we named the “Honeycomb Model” to demonstrate the interconnectedness of the model and the components that led to this strong collaborative model. The intent of the seminar is to present how interdisciplinary teaming has strengthened the teacher preparation program of a smaller state university, even as the university is facing budget challenges. These collaborations have been multifaceted, multidimensional and have resulted in program viability and growth as described by Miller & Stayton (2006). We will also outline how we will be using these collaborative models to solve new problems, and rethink solutions to ongoing challenges.

Our unit has a rich and largely informal network of collaborative activities that have strengthened not only the unit, but assisted in recruitment and retention efforts for the university. All aspects of our teacher preparation program, from teaching and supervising candidates to reports, national reaccreditation, redesign to co-teaching and guest teaching have mixed special and general teacher preparation personnel. National reaccreditation teams have general and special education faculty as co-chairs. Special education faculty are certified as both general and special education teachers, and supervise both general and special education student teachers. Special education faculty teach several of the core classes, and work with the general education faculty to infuse special education concerns and perspectives into all core classes. Grant activities have often included both general and special education teacher preparation personnel as participants, co-principal investigators, and facilitators. Professional presentations regularly include and utilize both general and special education faculty as co-presenters. Special education faculty were contributing members of all teams charged with meeting the state mandated redesign of all general teacher preparation programs, as well as meeting the state’s new guidelines on literacy and numeracy. Additionally, the general education faculty assisted the special
education faculty in developing a new Master’s Program in Special Education in 2007 and in redesigning
the undergraduate Special Education/General Education Merged to Integrated program 2007-2010. For
example, general education faculty willingly added special education objectives and activities from the
Council for Exception Children benchmarks to the core classes such as Research Methods and School
Improvement--courses that would be taken by all Master’s candidates. We have redesigned the
undergraduate special education/elementary dual certification program in response to state mandates, and
again, the general education faculty were intricately involved to ensure that not only were the core classes
infused with a focus upon the special needs learner, but all special education classes maintained a focus
on Universal Design for Learning through not only methods, but also through multiculturalism, building
literacy and numeracy skills, and utilization of technologies. All of these efforts are the result of our
model of collaboration.

The **Honeycomb Model of Collaboration**, has worked for us for over twelve years. This model is
based upon a shared philosophy and vision of education as a renewable and renewing resource, creating a
network of collective strength and support with a minimum of waste. The model has six strands (of
course!) that are: mutual support, recognition of strengths, recognition of common and unique interests,
work ethics, collegiality, and humor. **Mutual support** builds collaboration in that one crisis will beget
support from colleagues that lends itself into positive support when the crisis or deadline falls on another
colleague. The second and third facets of the model are **recognition of strengths**, and **recognition of
common and unique interests**. Some of us are idea people, some are organizers, some are analytical
thinkers, some are global, and some are methodical to ensure that all aspects of a project are addressed.
While we have detailed the strengths in the unit, the abilities outside of the unit are also telling. Outside of
work, we recognize that we have published poets and writers, wedding planners, flower arrangers,
counselors, artists, former airport managers and furniture refinishers--just as a beginning. The fourth
element of the model is **work ethic**. Support is mutual, and whether our best work times are mornings,
afternoons, nights or weekends, we will supply the necessary support. The last two elements of the model
are **collegiality** and **humor**. We recognize that we have a lot of strong personalities. Humor, especially in
the throes of a full-blown crisis or deadline, helps to reduce the stress. Collegiality means that if one needs us, we try to be there if we can. This model evolved through work, probably cannot be mandated, but can be encouraged. For those seeking to replicate the model, it must be understood from years of experience and observation that team building activities are a start, but actions will either strengthen or destroy the model.

The papers will outline how the model has affected and enhanced the delivery of teaching through the six strands. The papers will outline the effects in the areas of teacher education in general, special education, multicultural awareness, technology, literacy and securing multiple accreditations. There are three major positive outcomes. The first outcome is that our teacher education program, while smaller than many, has a solid interdisciplinary focus that verges on becoming transdisciplinary. All teacher candidates are able to observe models of collaboration, which they carry into their student teaching and teaching experiences. We have noticed that general education candidates especially in the areas of early childhood education and elementary education are beginning to pick up additional special education coursework in preparation for adding on special education as an endorsement to their regular education certifications. The second outcome is that faculty regularly incorporate and demonstrate the concepts of diversity, multiple learning styles, differentiated instruction and universal design for learning into their courses, and more are tying instruction about reteaching to Response to Intervention (RtI). The third outcome is that we observe general and special education candidates who enter the field with dispositions that welcome the benefits of collaboration for the sake of PK-12 students.

References
Arthaud, T.J., Aram, R.J., Breck, S.E., Doelling, J.E., & Bushrow, K.M. (2007). Developing collaboration skills in pre-service teachers: A partnership between general and special
education. *Teacher Education and Special Education, 30*(1),1-12.


Increasing Access to Oral Healthcare through Head Start Enrollment

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Abstract:

Headstart (HS) is a federally funded program in the United States designed to assist low income children in achieving academic and personal growth and success. It is one of few programs that maintain a comprehensive oral health record for each student, requiring dental exams for enrollment and offering preventive services while in the program. Because access to oral healthcare is especially difficult for low income populations, Head Start enrollment can be a means for increasing access, ultimately improving oral health of children in these populations.

This session will examine results of a small study conducted by the presenter revealing a statistically significant difference in annual dental visits between HS enrolled and non-HS enrolled children of migrant and seasonal farmworkers. The presenter’s implementation of a fluoride varnish program utilizing dental hygiene students at various sites of a regional HS program will also be outlined and discussed. A discussion of past and future implications for education/oral health access among disadvantaged groups will follow.
Title:
A Report on the Development of Instruments Used to Measure Fidelity of Implementation of School Mathematics Curriculum

Subject Area: Mathematics Education

Topic Areas: Curriculum, Research and Development, Instrument Development
Key Words: Elementary and Secondary Mathematics Curriculum and Research, Fidelity of Implementation

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Abstract
This report summarizes a line of work pursued by faculty as part of the Center for the Study of Mathematics Curriculum (CSMC) to create tools for studying the enacted curriculum in K-12 mathematics classrooms. The work focuses specifically on issues related to fidelity of implementation (FOI), the extent to which a program (i.e., a set of curriculum materials) is implemented consistent with the intentions of its developers. Work on FOI is of particular interest to educators (e.g., teachers, supervisors), curriculum developers, researchers, and evaluators as accountability questions increasingly focus on which programs “work” relative to increased student achievement. The report begins with a brief background of the work of both the CSMC and specifically the Tools subgroup, followed by a brief description of our own work at developing tools to measure FOI. The report concludes with a summary of FOI tools developed by other researchers that will be fully developed in a book to be published by Information Age Publishing in 2011. A consistent theme throughout is the notion that the study of mathematics curriculum materials as enacted can lead to better use of existing materials, better development of materials in the future, and ultimately gains in student achievement when materials are used as intended. Some of the resources associated with this work are available online at the CSMC website (http://mathcurriculumcenter.org).

A Report on the Development of Instruments Used to Measure Fidelity of Implementation of School Mathematics Curriculum
Introduction: The Center for the Study of Mathematics Curriculum

The Center for the Study of Mathematics Curriculum (CSMC) is a collaboration of three universities: Michigan State University, the University of Missouri, and Western Michigan University, with additional partners at the University of Chicago and Horizon Research, Inc., which received initial funding from the National Science Foundation (ESI-0333879) in January 2004. CSMC is a Center for Learning and Teaching committed to advancing the research base and leadership capacity supporting K-12 mathematics curriculum design, analysis, implementation, and evaluation. The work of CSMC is guided by four underlying principles:

- A well-articulated, coherent, and comprehensive set of K-12 mathematics learning goals/standards is necessary for large-scale improvement of school mathematics.
- Mathematics curriculum materials play a central role in any effort to improve school mathematics and their development should be a scholarly process involving a continual cycle of research-based design, field-testing, evidence gathering, and revision.
- Teaching and curriculum materials are highly interdependent and increasing opportunities for student learning rests on better understanding the relationship between curriculum and instruction.
- Research addressing mathematics curriculum can inform policy and practice and in so doing narrow the gap between the ideal and the achieved curriculum.

In addition to the three collaborating CSMC universities, each university developed a partnership with a local school district to identify and address curriculum-related research problems that may be helpful to the partner schools and the field of mathematics education. Over the past six years these educational institutions have accomplished a number of tasks across a wide range of curriculum-related activities designed to achieve the following stated goals of the Center:

- Support leadership development related to K-12 mathematics curriculum design, analysis, implementation, and evaluation;
- Enhance teachers’ mathematical and pedagogical knowledge through curriculum investigation and implementation;
- Investigate the role and impact of curriculum materials on student learning;
- Stimulate communication and productive collaboration and disseminate information related to curriculum design, analysis, implementation, and evaluation.

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1 This report is based on the work of the Center for the Study of Mathematics Curriculum, supported by the National Science Foundation under Grant No. ESI-0333879. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation or other researchers associated with the Center.
When translated into researchable questions and initiatives to be carried out by CSMC, the work encompasses a wide range of tasks that have encouraged and supported CSMC faculty and associates to investigate specific questions that advance the field of mathematics education in many diverse areas related to curriculum. These include: developing curriculum tools useful for school districts as they deal with curriculum-related issues, making sense of current curriculum-related policy issues (such as those related to the impact of State and National Mathematics Standards), and developing an infrastructure for the development of doctoral studies/programs that will continue to insure that future mathematics curriculum related work is carried out by well qualified graduates from the CSMC partner institutions. The scope of the work is evident in its involvement in the publishing of more than a half dozen books, numerous research articles in educational journals, and hosting a number of special conferences dealing with current curriculum issues.

Many of the research tasks carried out by CSMC faculty have been the result of forming subgroups of like-minded researchers who have tackled interesting research questions that will move the field of mathematics education forward in a direction of mutual interest. The focus of this report is on work conducted by the CSMC “Tools Group”谁 have been interested in examining aspects of the enacted curriculum and developing tools to measure that enactment.

**Work of the CSMC “Tools Group”**

The Tools Group was formed shortly after NSF awarded funding to the CSMC in January 2004. It was formed as part of the process of developing a broad research agenda that would guide the work of the Center. Its primary interest is in developing tools for researchers to use when studying curriculum, which may have as its focus teachers using curriculum materials, students using textbooks, or the materials themselves as objects of study. An important first contribution to this line of research was the development of a Curriculum Tools Database that serves to identify instruments that researchers have used in curriculum studies. In development for approximately three years at Western Michigan University, the database is now active on the CSMC website and allows researchers to search for instruments by purpose, age/grade level, cost of use, and target users (e.g., teachers, supervisors, researchers, etc.). The database does not

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2 The Tools Group consists of Dr. Kathryn Chval, University of Missouri, Columbia, Dr. Iris Weiss and Dr. Daniel Heck of Horizon Research, Inc., and Dr. Steven Ziebarth, Western Michigan University. CSMC research fellows have also actively contributed to the work of the group.
house the actual instruments, but rather provides an annotated description of the instrument, studies that used the instrument, and information regarding how to obtain them. The database is regularly updated by CSMC fellows so that information remains current.

One of Tools Group’s first major tasks as a group was to involve the CSMC partner districts in a Cross-Site Study of curriculum used by the mathematics teachers in their schools. To accomplish this required the development of two survey instruments, one targeted at each of the grade levels K-8 and 9-12. The two instruments were developed during the 2005-06 academic year with administration at the end of that school year. The focus of the instruments ranged from teacher beliefs and practices to use of textbooks and other resources in mathematics classes. Several of the survey sections across grade levels gathered information related to specific content areas or subject matter taught at those grade levels. Our main findings showed differential use of textbooks across the three partner schools, with different attitudes regarding teachers “liking” and following the chosen texts in their schools. Some findings showed pronounced differences in use and attitudes between traditional and “reform” textbooks used in the participating schools. A full report of the study, the instruments used, and the findings is available at the CSMC website under the header: Cross-Site Report.

**Measuring Fidelity of Implementation**

A major interest of the Tools Group has been the development of a suite of instruments that would be useful to school districts for measuring *fidelity of implementation* of curriculum materials in use in their mathematics classrooms. As an area of research interest, fidelity of implementation may be broadly housed under program evaluation or public policy studies where it has historically been the focus of academic interest for much of the past 50 years. For example, among the many standard models used in program/product evaluation is the CIPP (Context, Input, Process, Product) model developed by Stufflebeam (1983) in the 1980s. Focused mainly on understanding and improving the decision-making process inherent in program implementation, the “Process” component of the model attempts to answer questions such as: How well is the plan being implemented? What barriers threaten its success? And, What revisions are needed? (Worthen & Sanders, 1987, p. 78). When data related to such questions are collected, the program/product can be altered as needed to be successful. Similarly, in public policy studies, implementation of public programs has long been of interest to legislators who would like to know the extent to which policies and programs they have funded are enacted as
intended. Questions of importance in this arena are: Is the policy/program being implemented the way it was intended? And, What are the results of implementation when those policies/programs are or are not implemented as intended? (cf. Odden, 1991; Nakamura & Smallwood, 1980; Pressman & Wildavsky, 1984).

Much of the policy research is devoted to the general concern over implementation of government programs ranging from health to human services, yet there is a distinct thread that has historically examined educational policy dating from the 1960s and 1970s (cf. Berman & McLaughlin, 1976; McLaughlin, 1976; Fullan & Pomfret, 1977; Hall & Loucks, 1976). A new resurgence of interest in educational implementation in the last two decades, particularly in mathematics education, stems from the many new mathematics curriculum materials (i.e., textbooks, teacher guides, etc.) created to reflect the NCTM Standards documents (1989, 2000) from which many of the current state standards are derived.\(^3\) At play in this renewed interest is an increased focus on accountability for school achievement performance and perceived shortcomings of American schools in international comparisons. Politicians want to know: What works in achieving better mathematics scores for students? Recent work by mathematics education researchers on evaluating the effectiveness of these standards-based curricula has been positive (Senk & Thompson, 2003) and mixed (National Research Council, 2004), with few studies meeting the “gold” standard (What Works Clearinghouse, 2002) wished for by government policy makers that is distinguished by randomized control trials as seen predominantly in health-related fields of research.

A number of recent research summaries have helped to refocus attention on the importance of fidelity of implementation of mathematics curricula, two of which are particularly illustrative of current thinking regarding instrument development. Remillard (2005) completed an extensive review of teachers’ use of curriculum materials over the past 25 years. She notes specifically two trends that are driving the interest of mathematics educators and researchers; (1) the wide availability of the many newly designed curriculum materials (noted above), and (2) “the tendency of school districts to regulate mathematics teaching practices by mandating the use of a single curriculum” (p. 211). The convergence of these two trends is an emphasis on improvement in K-12 mathematics education; however, “improvement” implies that we know how teachers use the chosen curriculum materials from which they teach. This, of course,

\(^3\) For a summary of curricula developed at the elementary, middle and high school levels consult the websites for the ARC Center, Show-Me Center, and COMPASS noted in the references.
assumes that the materials are in part responsible for gains in student achievement when they are used as intended in classrooms. Remillard’s review is useful for identifying a research framework for studying teachers’ use of curriculum materials and distinguishing differences between the intended (what authors write into textbooks and ancillary materials) and the enacted (what gets taught to students) curriculum. A more recent review of research by O’Donnell (2008) examined links between measuring fidelity of implementation and outcomes of K-12 curriculum interventions. She comments that much of the terminology and methodological groundwork used in educational implementation studies have their roots in research on program implementation in “the public and mental health fields” (p. 37). The purpose of her review was to document which studies, that met her five sorting criteria, could be linked to educational outcomes. Her five criteria were: (1) adherence (whether the program was delivered as designed), (2) duration, (3) quality of delivery, (4) participant responsiveness, and (5) program differentiation. Of more than 100 studies that qualified for inclusion in her study, only 23 qualified as empirical studies and only 5 of these met all of her five criteria. Such numbers give some sense of the paucity of research available when various limitation standards are applied to specific research questions of interest, yet also suggest that there is much room to advance our knowledge base further in understanding fidelity of implementation.

Of particular relevance for this report is the connection of research reviews of the sort described above to include instruments used to study or measure fidelity of implementation. Fullan and Pomfret (1977) produced a classic review of curriculum and implementation research more than three decades ago that included only 13 pre-K-12 studies across multiple disciplines (science, social studies, language arts, and only 2 in mathematics) in the U.K., Canada, and the U.S. Further, only 9 of these studies qualified as involving curriculum changes (the others were labeled as organizational changes). In the presentation of theses studies, Fullan and Pomfret organized the results according to methods/instruments used to “assess degree of implementation of specific curricula” (p. 346). Typical methods employed were direct classroom observations, observations combined with questionnaires, analysis of key curriculum documents and questionnaires, and questionnaires only. Perhaps the most notable difference between the early work by Fullan and Pomfret and the more recent research review of Remillard is the complexity and richness of the phenomena surrounding mathematics teachers as they use curriculum materials. A teacher’s background, environment, resources, belief systems, knowledge of teaching and learning, and experience are only a few of the many factors affecting how they use
their chosen or required curriculum materials. Thus, measuring fidelity of implementation in mathematics classrooms can take on many different forms and employ a variety of instruments. While Remillard’s review does not specifically categorize or list the instruments used, they are embedded within the annotated descriptions of the studies she uses to highlight the different research areas of interest. Classroom observations and multiple questionnaires continue to be standard techniques for data collection, but are routinely supplemented with teacher and student interviews, interviews with curriculum developers, analysis of classroom audio and videotapes, textual and content analyses, case studies of individual teachers that triangulate multiple data sources, and teacher logs that document coverage and opportunity to learn. O’Donnell (2008) included “instruments” as a review criterion in her search of studies focused on fidelity of implementation that sought to find links to K-12 achievement outcomes. Her search included examining the Mental Measurements Yearbooks and UMI Dissertations Abstracts in addition to making personal contacts when instruments were not included in published works. However, despite her exhaustive search, only 5 of 23 studies met her stringent criteria for inclusion in her focused analysis related to student outcomes. She reports that the “methods used to collect fidelity data varied from self-report surveys and interviews to analysis of student artifacts” (p. 49), but that two of the studies also focused on measuring students’ completion of worksheets. Other studies, that did not meet her full criteria, showed “researchers used multimethod, multisource methodologies that included use of video and audiotapes, classroom observations, questionnaires, teacher interviews, and teacher self reports” (p. 50).

In the final two sections of this report attention is focused on the work of the CSMC Tools Group to measure fidelity of implementation in mathematics classrooms, followed by a brief summary of additional tools created by other mathematics education researchers to study the same construct.

The CSMC Tools Group’s Suite of Instruments for Measuring Fidelity of Implementation

The CSMC Tools Group brings expertise from both the curriculum development and the evaluation fields to its approach to measuring fidelity of implementation of K-12 mathematics curricula. As is typical in evaluation work related to curriculum development, instrument development is an important, essential, and expected task to be conducted if research questions are to be answered in a convincing manner. In addition, a primary goal of evaluation work is to make outcomes of that work (e.g., these could be findings or instruments) useful to practitioners
whether they are researchers or other educators working directly in school districts. It was with these goals in mind that the Tools Group envisioned creating a suite of tools for measuring fidelity of implementation in K-12 mathematics classrooms. The suite of tools would be a mix of instruments (drawn from amongst the numerous types described above, but developed from our own interpretations of FOI) from which researchers could choose or adapt to suit their own needs or interests. The group agreed that there were three main purposes for our tools: 1) to identify professional development needs in a school district, 2) to assess outcomes of professional development directed at implementing curriculum materials, and 3) to evaluate or compare the effectiveness of competing sets of curriculum materials. Such comparisons are important for determining which curricula have the potential for improving student achievement outcomes (NRC, 2004).

After much consideration of how other researchers perceived fidelity of implementation, together with our experience with the strengths and weaknesses of the various instruments we had developed or used in other projects, we determined that three important constructs needed to be measured by our instruments. First we considered that extent of use was an important construct that would give us some implementation information at a larger grain size (i.e., at the course level). At issue here is the notion of coverage, or how many units a teacher teaches in a typical school year. If a teacher only “covers” a single unit or two from a given textbook or set of materials, to what extent can one argue that that curriculum was taught with fidelity? Most school districts would expect much more from their curriculum of choice. Our primary instrument for measuring this construct is a survey teachers complete that documents their coverage of materials over two- to four-week periods for lessons, investigations, units, or chapters depending on the format of the curriculum. Figure 1 shows a sample item from our Extent of Use Survey instrument.
The second major construct we attempt to measure is adherence to the mathematical storyline. We argue that each mathematics lesson has a key piece of content that it is designed to have students learn. This is usually stated at the beginning of a textbook lesson in the form of “objectives” that should be achieved by students at the end of a designated time period (often a day or two). A teacher who teaches a different lesson (e.g., from some other source or textbook) or allows their lesson to drift off to a different mathematical topic would likely not be seen as implementing the particular/chosen curriculum with fidelity.4 Our third construct to be measured is referred to as adherence to the pedagogical storyline. Many of the newly developed mathematics curricula have a well-defined pedagogical model that is infused into the materials; usually encouraging students to investigate or experiment with mathematical objects of study. More traditionally formatted textbooks have fewer restrictions on the required pedagogy and typically follow the definition-example-practice-homework model of instruction that has been well documented in classrooms for the past century (cf. Goodlad, 1984). A teacher who foregoes

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4 The reader should note here that a teacher who does not follow the curriculum may indeed provide a very good teaching and learning experience for students. However, the research question of importance in FOI is the extent to which the chosen curriculum is implemented for a given lesson.
having students work together to come to mathematical understandings inherent in numerous current textbooks, but instead tells students the important or key point of a lesson, again, would likely not be seen as implementing the particular/chosen curriculum with fidelity.

The primary tool for measuring adherence to both the mathematical and pedagogical storylines is a teacher Lesson Log that they are asked to complete over various time periods (or several lessons). Figures 2 and 3 show two sample pages from one of the Lesson Logs written for one of the high school curricula we selected. In developing the Lesson Logs our group made a decision early in our work that we would follow as closely as possible only the materials that were at the disposal of the teachers (e.g., student text, teacher guide, supplemental resources provided as part of the curriculum). Thus, the Lesson Log format parallels material in the student text using the actual verbiage in the published materials. As foils to the items that teachers would record, we looked for plausible alternatives that seem like natural actions that teachers would use in a typical lesson on related content. (cf. Item 5 in Fig. 2 and Item 20 in Fig. 3 as examples.) These alternatives would then allow us to differentiate when teachers were following the curriculum and when they were not. For a district supervisor using the tool, the information would help to identify parts of the curriculum where resources (i.e., professional development) might be directed to help teachers make better use of their materials, especially if the district had recently invested heavily in the purchase of new mathematics curricula. It is important to note, however, that we did not develop the materials as a means to evaluate teachers.

The scope of work of the Tools Group has been to develop a suite of tools for sample lessons from three current curricula at each of the elementary, middle, and high school levels. For each of these levels, we chose to examine two of the recently developed standards-based sets of curriculum materials and one of the more popular traditionally formatted textbooks. For example, at the high school level, we developed a suite of tools for Core-Plus Mathematics: Contemporary Mathematics in Context (CPMP) (Hirsch, Fey, Hart, Schoen, & Watkins, 2008), Interactive Mathematics Program (IMP) (Fendel, Resek, Alper, & Fraser, 2009), and the

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Lesson Log

Core-Plus Mathematics 2nd Edition Course 2
Unit 3 Lesson 2 Investigation 1: Modeling Rigid Transformations

The purpose of this teacher log is to gather information about your use of the Core-Plus Mathematics 2nd Edition program for Investigation 1: Modeling Rigid Transformations. Parts of the teachers’ plans and expectations for lessons often play out as anticipated, but lessons sometimes change during instruction for a variety of reasons. Please answer the following questions about what took place during your mathematics instruction in the designated class.
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1. How long is a typical mathematics period for this course? _______ minutes

2. About how many class periods did it take to complete Investigation 1? 1 2 3 4 5 6 7 8 9 10 or more class periods

**Lesson Launch**

3. Approximately how many minutes did the **Think About This Situation** and **Launch** for Investigation 1 take? _______ minutes

4. During the **Think About This Situation** and **Launch**, approximately how many minutes did students work:
   a. individually? 0 5 10 15 20 25 30 35 40 45 50
   b. in pairs/small groups? 0 5 10 15 20 25 30 35 40 45 50
   c. as a whole class? 0 5 10 15 20 25 30 35 40 45 50

5. How did you introduce the **Think About This Situation** (TATS)?
   - I read the scenario describing coordinate representations to the class from the student text (p. 195).
   - I described the coordinate representations scenario to students in my own words.
   - I allowed students to read the scenario silently.
   - I had students read the scenario in pairs or small groups.
   - I elaborated on the context of computer graphics and asked students to give examples of key aspects of video games or animated films.
   - I introduced the definition of rigid transformations.
   - I outlined the lesson objectives for students.
   - I skipped introducing the TATS.
   - None of these describe how the TATS was introduced.

6. Did you address the questions of the TATS on p.196?
   - Yes □ No □
   If yes, Which TATS questions were addressed?
   - Part a □ Part b □ Part c □


**Figure 2:** Sample Lesson Log Structure for High School

---

**Share and Summarize (continued…)**

18. During the **Summarize the Mathematics (STM)**, how did students share their ideas and reasoning? (Select all that apply.)
   - In pairs/small-group discussion.
   - In whole-group discussion.
   - Students did not share their ideas and reasoning.

If students shared their ideas and reasoning:

19. How many students shared their work during the **Summarize the Mathematics (STM)**? (Circle one. If pairs/groups shared work, please count all students in those pairs/groups.)
<table>
<thead>
<tr>
<th><strong>STM?</strong></th>
<th>0</th>
<th>1-2</th>
<th>3-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16 or more</th>
</tr>
</thead>
</table>
| If any students presented their work during the STM, which of the following did you have them explain in their presentations, or did you question them about? | | | | | | | *(Select all that apply.)*
| ☐ How to write symbolic rules for translations. | ☐ How to write coordinate rules for 90°, 180°, and 270° counterclockwise rotations and 270° clockwise rotations about the origin. | ☐ How to write coordinate rules for line reflections across the x-axis, y-axis, the line y=x, and the line y=-x. | ☐ Which strategies students used to derive the coordinate rules for rigid transformations. | ☐ To explain in their own words the meaning of the word “transformations.” | ☐ What the adjective “rigid” means and why it is used to describe the transformations studied in Investigation 1. | ☐ The relationship between image and pre-image objects. |
| ☐ None of these statements describe what I had students explain in their presentations during the STM. | | | | | | |

If none of these statements describe what you had students explain during their presentations of STM, please describe what you had them explain.

| 21. During the STM how did students record their work? | (Select all that apply.) Students recorded STM work, …

☐ In individual notebooks, journals, or paper.  
☐ In a group notebook, journal, or paper.  
☐ On poster paper or overhead transparencies.  
☐ In their Math Toolkits.  
☐ Students did not record their work for the STM.  
☐ I recorded student responses for the class.  
☐ None of these describe how students recorded their work. |

| 22. If students did record their STM work, Did students write coordinate symbolic rules for rigid transformations including translations, rotations, and reflections? | ☐ Yes  ☐ No |

---


**Figure 3:** Sample Lesson Log Structure for High School

Glencoe Traditional Algebra, Geometry, Algebra II set of textbooks using the most recent editions available. For each set of materials we developed tools for two units of interest with the intent that school districts or researchers could use them as models to construct similar tools for units or lessons that were of particular interest to their needs. Our own testing of developing new instruments from the existing models showed that the work could be completed within a few hours, well within a timeframe typical of teacher professional development days.
As noted throughout this report, the goal of the Tools Group was to develop a *suite* of instruments from which researchers and other educators could pick and mix to suit their research or district needs. In addition to the Extent of Use Surveys and the many Lesson Logs for each of the targeted curricula, we have developed Annotated Unit Guides for each set of materials along with End-of-Year and End-of-Unit Surveys. The Annotated Unit Guides consist of several pages that would help a general (educated) user become familiar with the curriculum if they had not taught from it before. The Lesson Logs together with the Unit Guides could easily serve as observation protocols in settings where observations *were* deemed economically feasible, although our goal in developing the Logs was to find a way to collect valid and reliable data from teachers about their curriculum use *without* the need for observations. As part of the development process, we completed extensive validation of the Lesson Logs by having observers and teachers complete them independently and then making appropriate adjustments to the final versions we now have available. Figure 4 provides a list of our suite of Tools developed thus far for each of the nine curricula (three at each grade level) we considered. The two right-hand columns show specific units and their location within each set of curriculum materials.

The CSMC Tools Group is currently moving forward with its research on three fronts. With respect to the work on the suite of tools, we are examining ways in which the tools, or portions of the tools, can be combined into meaningful “scores” that would allow school districts to use the implementation data better for identifying professional development needs. Other projects (see below) are attempting to do similar summaries with their own suites of tools. On a second front, the Tools Group is in the final stages of work on writing and editing a book that contains detailed summaries of tools that research groups have developed to study fidelity of implementation in K-12 mathematics classrooms. The book is scheduled for publication with Information Age Publishing in 2011. Finally, the Tools Group, together with several CSMC associate researchers, initiated and submitted an NSF proposal to host a conference of researchers that would begin to develop well-defined frameworks for studying the enacted curriculum. The conference proposal was awarded in spring of 2010 and the conference will be held in November 2010.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Curriculum Program</th>
<th>Year</th>
<th>Focus Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of Use survey</td>
<td><em>Core-Plus Mathematics Project</em> (2nd Edition)</td>
<td>Course 1</td>
<td>Linear Functions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Course 2</td>
<td>Coordinate Methods</td>
</tr>
<tr>
<td>Annotative Unit Guide</td>
<td><em>Interactive Mathematics Program</em> (1st Edition)</td>
<td>Year 2</td>
<td>Solve It!</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Year 3</td>
<td>Orchard Hideout</td>
</tr>
</tbody>
</table>
### Figure 4: Instrument Focus by Grade, Curriculum Program, Year, and Focus Unit

#### A Summary of Other Instruments for Measuring Fidelity of Implementation

As part of the conceptualization and preparation for the forthcoming book, *Tools for Studying the Enacted Curriculum* (IAP, 2011), the CSMC Tools Group invited mathematics education researchers to contribute chapters that summarized their work on various projects designed to measure fidelity of implementation in K-12 mathematics classrooms. This section provides a brief summary of those projects and tools. Interested educators and researchers should contact the project PIs for more detailed information regarding the availability of the tools for their own purposes.

**Project 2061** (Linda Dager Wilson and Jo Ellen Roseman: American Association for the Advancement of Science, AAAS)

The AAAS has been known for creating evaluation instruments and protocols associated with mathematics education for at least two decades. This group’s contribution to FOI related research has been to create an instrument, independent of a specific set of curriculum materials,
to systematically study the mathematics of teaching and learning, using a lesson or class period as the unit of analysis. The research question of focus was: What are the most effective instructional strategies for addressing certain mathematical learning goals? The instrument consists of a web-based version of the developed instrument where the analyst marks precisely the start and end times for each indicated criterion. The five instructional criteria were selected out of a set of 24 research-based criteria originally used in the AAAS middle grades textbook analysis (AAAS, 2000). They include: finding out students’ ideas (pre-assessment), representing ideas effectively, encouraging student explanations, asking guiding questions, and assessment. Video clips are analyzed by the user ratings of: *met,* *partially met,* *not met,* or *not applicable* for various indicators with accompanying comments for each. A list of guiding questions and indicators for how each criterion is met is also provided. Researchers can view the instruments at the AAAS website.

**Surveys of Enacted Curriculum (SEC)** (Andrew Porter and Jennifer McMaken: University of Pennsylvania)

The SEC instruments originated from research on factors influencing teachers’ decisions about what to emphasize when teaching elementary school mathematics. Topics and categories were developed from analyzing K-12 textbooks, standardized tests, state and district standards, national professional standards, and by interviewing teachers about the content of their instruction. Teachers report their instructional content on a 4-point scale based on the time spent covering a topic (in general areas such as number, operation, geometry, etc. with specific mathematics topics within each area) and the relative emphasis given to each category of cognitive demand (based on five levels: memorize; perform procedures; demonstrate understanding; conjecture/generalize/prove; and solve non-routine problems/make connections). The result is a topographical map that shows the intersection of the content and cognitive demand, where the user can compare classroom instruction to content standards, curriculum materials, or assessment maps. The instruments can be used by researchers and school district personnel to measure alignment of instructional content in relation to intended content. In conjunction with other instruments, the SEC can be used to deconstruct patterns of implementation to better understand components of program implementation. There are numerous SECs available across many disciplines.
The COSMIC Project (James E. Tarr and Douglas A. Grouws: University of Missouri, Columbia; Melissa D. McNaught, University of Iowa)

The goal of the NSF-funded Comparing Options in Secondary Mathematics: Investigating Curriculum (COSMIC) Project is to examine student mathematical learning associated with secondary mathematics in integrated and subject-specific curriculum programs. It is currently in the final stages of data collection and analysis in secondary schools where both types of curricula are offered as an option to students. The COSMIC project developed instruments using different lenses and various grain sizes to examine fidelity of implementation focusing on how teachers use textbooks with different approaches to content organization in the ongoing process of mathematics teaching, and the relationship between curriculum implementation and student learning by focusing on content and presentation. The research instruments include classroom observation protocols, which document classroom activities and identify materials used during instruction, a lesson summary form, and a classroom learning environment scale. Teachers also complete surveys that gather background data and information regarding their use of the curriculum materials and a table of contents record that captures content coverage and extent of use of the curriculum materials. A textbook-use diary is also used to provide a daily record of teacher’s use of curriculum materials before and during instruction. The researchers have used various combinations of data collected from these instruments to calculate indices that summarize Content and Presentation Fidelity. A complete presentation of findings from the COSMIC Project is expected in the near future.

Center for Elementary Mathematics and Science Education (CEMSE) (Jeannie Century, University of Chicago)

CEMSE created a suite of instruments to measure fidelity of implementation to draw conclusions about the district’s math and science programs and to measure the extent to which critical components of a program are present when that program is enacted. The suite of instruments was developed to examine FOI of six science programs and one elementary mathematics program, Everyday Mathematics. The suite includes three questionnaires, three protocols, and two logs. One dimension of the developed framework contains the aspects of “structure” and “process” (Mowbray, Holter, Teague, & Bybee, 2003) by including procedural, educative, pedagogical, and student engagement subcomponents, called “critical components” by
the authors. For each instrument, from two-to-nine items may contribute input regarding how well these components were attended to in a given lesson. The other dimension contains categories of differentiation (Dane & Schneider, 1998) that attend to components common to mathematics and science programs. The suite of instruments was developed to be flexible, easy to use, and cost effective for school- and district-based personnel and researchers. The CEMSE Group, through the Researchers Without Borders initiative, has begun hosting a series of Webinars to help promote and examine research on fidelity of implementation.

► Evaluation of University of Chicago Mathematics Project (UCSMP) (Denisse R. Thompson; University of South Florida; Sharon L. Senk: Michigan State University)

UCSMP has a long history of curriculum development and associated evaluation work that dates back to the mid-1980s. It has recently completed revisions on the third edition of its six secondary textbooks that includes pre-algebra through pre-calculus texts. The Project’s fidelity of implementation instruments were developed for research purposes to be used in field-test studies, serving as formative evaluations for revisions of the curriculum materials. Instruments document “how the materials were used and how they worked in the classroom” (author’s communication). As the UCSMP curriculum materials evolved with later editions, the project expanded the number and scope of the instruments used to study implementation. Data are mostly self-reported with built-in checks designed into multiple instruments for reliability purposes. Eight instruments have been used to study the enacted UCSMP curriculum. These instruments include questionnaires, interview protocols, supplements, and guidelines grouped into three categories: documenting content coverage and opportunities for practice, instructional practice from teacher, student, and observer perspectives, and the intersection of the taught and assessed curriculum. The researchers indicate that other researchers and curriculum developers could easily adapt their instruments to use with other curriculum development projects and school and district supervisors could use them to gather information about content coverage and to identify professional development needs.

► Using Innovation Configuration Maps to Study Middle School Curriculum Implementation (Mary Ann Huntley; Cornell University)

This instrument draws upon the Concerns-Based Adoption Model (CBAM) Theory (Hall & Hord, 2006; Hall & Loucks, 1976) and takes the form of Innovation Configuration (IC) Maps (Hord, Stiegelbauer, Hall, & George, 2006). The instrument is a set of five-level rubrics for
assessing implementation of an innovation along a continuum that takes into account the “ideal way” of implementation defined by the developers and variations and deviations from that way. Seven IC Maps have been developed for the Connected Mathematics Project (CMP) and Math Thematics curriculum materials. Two IC Maps measure both teachers’ use of the textbook and their use of Standards-based instructional practices. The other five IC Maps are curriculum specific, corresponding to each phase of the instructional model – three for CMP (Launch, Explore, Summarize) and two for Math Thematics (Setting the Stage, Exploration). The author suggests that researchers and other educators can use the tool to examine relationships between FOI and student achievement and to identify professional development needs. Teachers can use the tool for self-analysis, reflection, peer observation, and coaching.

Endnote: This report has described efforts by various researchers to develop instruments used to measure the enacted curriculum with a focus on fidelity of implementation. Such work has employed many methodologies that are standard practice when doing quantitative and qualitative research. Yet, within these broad categories, mathematics education researchers have developed some unique instruments and approaches to try to answer questions of how faithfully mathematics teachers enact the “intentions” of the curriculum materials as envisioned by the authors who developed them. Attempts to find good ways to measure how, and how faithfully, teachers use the materials they are asked to teach from has the strong potential for helping those same teachers improve their teaching practices and ultimately student learning. Without such instruments and ways to measure curriculum use we have little hope of getting a firm hand on which curriculum materials “work” to enhance student achievement in today’s mathematics classrooms.

References


ARC Center, The. National Implementation Center for Elementary Implementation (website: arccenter@mail.comap.com).


COMPASS. National Implementation Center for Secondary Implementation (website: compass@ithaca.edu).


Hall, G., & Loucks, S.A. (1976). A development model for determining whether or not the treatment really is implemented. Research and Development Center for Teacher Education, University of Texas at Austin.


Show-Me Center, The. National Implementation Center for Middle School Implementation (website: center@showme.missouri.edu).


Recommendations for Teaching Physical Education to Students with Emotional and Behavioral Disorders

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Abstract
An action research study was conducted during the first year of a pilot physical education program at a nonpublic, special education school predominantly serving students with emotional and behavioral disorders, and who are wards of the state living in group homes and foster care homes. In the role of teacher and principal investigator, the researcher conducted a year-long action research study of this pilot program. The overarching objective of this study was reflected in the initial research question: What is the most effective approach for teaching this group of students with emotional and behavioral disorders? This initial overarching research question evolved into three sub-questions: 1) What is the most effective way to maintain engagement of the students such that they are active for 80% of physical education class time?, 2) What is the most effective way to minimize opt-out during physical education class time?, and 3) What is the most effective way to minimize off-task, unsafe, violent behaviors during physical education class time? Delivery of this pilot program occurred over the course of an entire school year, teaching physical education 2 days per week for 45 minutes to a group of 57 students with emotional and behavioral disorders. Four data sources were utilized to identify emerging themes throughout the duration of the year-long study and to inform decisions related to improving teaching. The data sources included: 1) a teaching journal, 2) incident reports, 3) predetermined random participation observations (tallying the participation ratio and noting the corresponding lesson context), and 4) reflection notes recorded in lesson plans. Following qualitative analyses of the written notes in journals, incident reports, participation observations, and lesson plans, as well as statistical analysis to identify the relationship between antecedents and violent behaviors logged in the incident reports, recommendations are shared for teaching physical education to students who are emotionally and behaviorally disturbed.
Pre-Service Teachers’ Exposure to Using the History of Mathematics to Enhance Their Teaching of High School Mathematics

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Abstract
The history of mathematics is an important component in the learning of mathematics. This study examines how pre-service teachers view the role of history of mathematics in the high school curriculum. Quantitative and qualitative methods were used. Results showed significant changes in beliefs about how the history of mathematics should be integrated as well as preparedness to incorporate the history of mathematics in teaching.

The complete article is available at:
http://www.k-12prep.math.ttu.edu/journal/curriculum/burns01/article.pdf
An Investigation into the Role of Latina Administrators in Public School Settings: What Can We Learn From Their Experiences?
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Texas Wesleyan University
1201 Wesleyan Street, Fort Worth, TX 76105-1536
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The objectives of this investigation were to: capture the unique challenges, successes, and decisions Latinas have experienced in being an administrator in public schools. It is hoped that the results of this study will be used in a variety of ways, especially in aiding aspiring Latina administrators and current school administrators to learn from the experiences of the participants of the study, in light of the rapid growth rates of Hispanic students in public school districts in the U.S.

This quasi-qualitative research examined the leadership experiences of Latina (female) school leaders such as district curriculum coordinators, directors, principals, and even school administrators. Specifically, the focus was an in-depth analysis of their experiences and challenges of being a leader in the public schools when so much change is occurring in terms of immigration issues, rising numbers of English language learners, effective parental involvement, cultural understanding of being able to interact effectively with parents from diverse backgrounds, differentiated curriculum development and implementation, appropriate assessments, and being a school leader during these immense times of transformation. This research highlighted the experiences Latina female administrators have gone through while in a leadership role. Much is known about the art of administration; however, educational administration is changing because “new” administrators from Hispanic roots are now taking on more leadership roles in urban school districts, as well as suburban and rural ones. This research also highlighted the challenges and successes female Latina leaders go through while in
leadership roles. This research attempted to add to the current literature on how best to meet the needs of our diverse schools, especially with high numbers of English Language Learners (ELLS). This research had much relevance for current and future leaders, including administrators and teachers.

The findings of this study suggest the need for review and potential revisions to the training of future school administrators, especially school systems with large Latino populations. Major considerations appear to be the impact of cultural educational understandings in being able to communicate effectively with parents both culturally and linguistically.
Abstract

Population and demographic studies show that the percent of minorities in the United States, particularly Latinos, will continue to increase when compared to the population at large. In order to meet their educational needs, additional training needs to be provided such that more minorities can fill teaching positions in the future. This will provide an opportunity for minorities to serve as role models and provide encouragement for additional minorities to prepare and work in various professional positions that have not always been available.

The Latino Educators of Tomorrow (LET) Program (Farnsworth, B.J. & Pierce, L.E. 2009) is interested in finding minority students who are juniors and seniors in high school that have a desire to be prepared as educators. The aim is to mentor these students as they prepare to begin university work and eventually graduate with a teaching degree from the university. The LET program originated with the Provo School District and has now expanded to the Alpine, Nebo, and Wasatch School Districts.

During the summer of 2010, 95 Latino students from Provo, Alpine, Nebo, and Wasatch high schools participated in the third year of the LET program. As the data was reviewed for the 2010 group of students, it became evident that many Latino students who had indicated an interest in becoming teachers had changed their focus. There were still Latino students interested in becoming educators, but the percentage of those students in the LET program had dropped because of other areas of interest. On a positive note, there appears to be a higher number of Latino students interested in attending the university.
Introduction

Both national and Utah demographic populations continue to change. A recent report that focuses on *Utah’s Demographic Transformation* indicates that from the year 2000 through 2007 the population growth has been 67% white non-Hispanic and 33% minority. While the K-12 school growth for the same period has been just the opposite, 65% minority and 35% white non-Hispanic (Perlich, 2009). The minority population in the U.S. is reported to be 35% in 2010 but is expected to grow to 54% in 2050. In Utah, the percent of minorities is lower but follows the same trend as the nation at large. For example, the minority population is reported to be 19% in 2010 and anticipated to grow to 30% in 2050. In Salt Lake City, Utah, the minority population is higher with a reported 27% minority in 2010 with an expected growth in 2050 reaching 41% (Perlich, 2009). Figure 1 illustrates this minority population growth trend.
It is demographic information such as that mentioned above that has generated an interest in working with minority students; the goal being to help students gain knowledge and skills that would enable them to acquire more productive positions in the job market. In our particular case, we are also very concerned that minority teachers become prepared to serve as role models for Latino and other minority students. We feel that the Latino Educators of Tomorrow (LET) program can offer the impetus for many minority students to become educators and role models for the many students in the university service area. Table 1 shows the number and percent of Latino students in each of our four service area school districts that are currently attending.

Table 1:  
*Number and Percent of Latino Students in UVU School of Education Service Area Districts*

<table>
<thead>
<tr>
<th>District</th>
<th>Number of all Students</th>
<th>Number of Latinos</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpine</td>
<td>65,059</td>
<td>5,282</td>
<td>8.12%</td>
</tr>
<tr>
<td>Nebo</td>
<td>27,093</td>
<td>2,548</td>
<td>9.4%</td>
</tr>
<tr>
<td>Provo</td>
<td>13,245</td>
<td>3,518</td>
<td>26.56%</td>
</tr>
<tr>
<td>Wasatch</td>
<td>4,998</td>
<td>797</td>
<td>15.95%</td>
</tr>
</tbody>
</table>

In the summer of 2008 the LET program was started at Utah Valley University. The program was initially funded by Brent Brown, the owner of several local auto dealerships. His main interest was to serve Latino students in the Provo, Utah area, the vicinity of a number of his auto dealerships. The initial goal of the program was to identify junior and senior high school students who wanted to become teachers. They would be invited to participate in the summer program. Details of the program were reported at Hawaii International Conference on Education (HICE) in January 2009 (Farnsworth and Pierce, 2009).

The main purpose of the LET program was to help to prepare Latino student to become teachers. Latino teachers could provide not only excellent instruction but role models for an increasing population of Latino students. Many educators feel that there is a need to support Latino students in the schools at a higher level that could be particularly accomplished by having more Latino teachers.
During summer 2008, 36 students participated in the program. In summer 2009, the program grew to 95 Latino students from the four school districts, Provo, Nebo, Alpine, and Wasatch. In summer 2010 there were again, 95 Latino students who participated from the four school districts.

One reason for inviting the nearly 100 students for the summer program was to have a better chance at being able to retain at least 30 students who would graduate from the teacher education program. As program participants, students begin during the junior and/or senior years of high school, then continue the freshmen and sophomore years at the university, and finally are accepted into the teacher education program for their junior and senior years. The culmination of which is graduation with a baccalaureate degree and a professional educator license.

The program numbers have been near 100 students during the second two years of the program, but we have noticed that a good share of the students who have participated have been high school juniors. Many of the students with more experience in the program have decided to move to other bridge programs in fields where they have more interest. The majority of the LET students have indicated that they participated not because they really wanted to be teachers, but because the program provided a great summer experience. They participated academically at little or no cost, experientially through field trips and events, and socially through interaction activities with other Latino students.

Since the beginning the program in the summer of 2008, other content programs have begun at the university. For example, science programs are now underway and a number of students have moved in that direction. We feel that involving Latino students in any of the university programs is a success, but our interest is to build a strong cadre of Latino teachers who will be able to act as role models throughout the school system.

Problem

As we have worked with Latino students during summer 2010 we have identified a new challenge not apparent in the two previous years. Nearly half of the students that initially indicated a desire to be teachers have changed their minds. It appears that some have recently become interested in other disciplines. Likewise we are finding that many students initially indicated that they wanted to be teachers
and now we find that they enjoyed participating in the programs for the opportunities and social activities that were associated with the program but had little to no interest in following through to become a teacher.

We feel that the program has been a success if we can entice Latino students to stay in school and attend the university. However, the goal of the School of Education was to involve students, who had a sincere interest in education, to work through the program, qualify for graduation, and obtain a teaching license. We still believe that having Latino teachers who can serve as role models and act as mentors for young students will be positive. As we look at the data, it appears that approximately half of the students who participate in the LET program actually have little if any interest at all in becoming teachers. Table 2 provides the description of the number of students interested in becoming teachers.

Table 2
*Latino Students participating in the LET program who are Interested in Education as a Career*

<table>
<thead>
<tr>
<th>District</th>
<th>Students in LET Program</th>
<th>Students Interested in Education</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provo Cohort 1</td>
<td>37</td>
<td>18</td>
<td>48.65%</td>
</tr>
<tr>
<td>Provo Cohort 2</td>
<td>20</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Alpine Cohort 2</td>
<td>22</td>
<td>10</td>
<td>45.45%</td>
</tr>
<tr>
<td>Nebo Cohort 2</td>
<td>19</td>
<td>9</td>
<td>47.37%</td>
</tr>
<tr>
<td>Wasatch Cohort 2</td>
<td>15</td>
<td>7</td>
<td>46.67%</td>
</tr>
</tbody>
</table>

The major objective for the LET program is to increase the number of bilingual Latino students who graduate from the UVU School of Education and become licensed educators who will teach in local school districts. To organize the program in the beginning, a Latino Educators of Tomorrow Planning Team was established involving a high level of collaboration among faculty and administrators at Utah Valley University and Provo School District (Provo, UT). For the second and third year of implementation, Alpine, Nebo, and Wasatch School Districts were
included. There is also ongoing work to involve Latino parents so that they can help to support the efforts of their students.

The program focuses on four main areas:

1. Identification of Latino students who show interest in becoming teachers,
2. Participation in concurrent enrollment pre-program education courses,
3. Experiential learning through school visits where students learn about the role of the teacher,
4. Participation in intensive summer courses, workshops, and social activities. (Farnsworth, B.J. & Pierce, L.E. 2009)

Results and Discussion

Taking into account the students who have returned to other countries and those who are still in high school, there are 68 out of 93 (73%) who are attending the university full time. Of the 68 students who have participated in the bridge program and are attending UVU, 31 (45%) have stated they will continue into either the elementary or secondary education programs at UVU. Currently, there are 55 freshman and sophomores at UVU who plan to major in education. Thirty-one of these students are from the bridge program and 24 are “other” Latinos who have stated they are interested in careers in education. It is expected that these students will take longer than the average UVU student to matriculate into the professional program due to financial and language issues. Of the approximately 55 students who are interested in education, roughly 42 are freshman and 13 are sophomores. Of the 13 sophomores, six plan on becoming elementary majors and seven, secondary majors. During the next two years, we will be able to
report exact numbers of Latino students who actually apply for acceptance into the teacher education program.

Conclusion

Our current information would suggest that fewer students than we had anticipated will actually work toward a career in education. However, it appears that more Latino students will attend the university as a result of the experience with the education LET program. This alone is a very positive note. After several attempts by the university to attract and retain Latino students to the field of education, the LET program appears to be the most successful. Rather than expecting 30 students yearly to graduate, it appears that a more realistic number will be between 10 and 15.

References


Education for the 21st Century: A Transformational Model

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6. Paper Abstract – Submitted to HICE 2011 Conference (Sattler & Johnson)

Education for the 21st Century: A Transformational Model

President Obama and U.S. Secretary of Education Arne Duncan are calling for “revolutionary change” in our educational system with incentive grants such as Race to the Top funding opportunities for states to facilitate change. Preparing our young people is a moral and economic imperative.

What we have learned “nationally” in transforming educational systems

Students today must compete in a global economy; a strong educational system is the foundation and prerequisite to their success. Accessible education is a civil rights issue for all
children to be able to enter the world of work and become educated citizens to support our democracy.

In March of 2010, the U.S. Department of Education published, *A Blueprint for Reform*, outlining five areas of focus. Through the mid 20th Century, the United States was considered a global leader in education. By the end of the 20th Century and into the 21st Century, the United States progressively lost ground in the areas of math, reading, science, and problem solving. This trend prompted The Partnership for 21st Century Skills to develop a vision to strengthen American education focused on changes needed for success in a global society:

Challenging this vision are major issues related to our teaching force in the U.S. These issues will be shared with participants.

**What we have learned “internationally” that will help us transform education**

Hargreaves and Shirley (2009) in *The Fourth Way: The Inspiring Future for Educational Change* provide insightful information about top performing students and their educational communities around the world. They analyzed the performance of elementary and secondary students in academics based on national and international tests, particularly in reading, language arts and literacy, mathematics, and the sciences.

The top performing nation and educational networks and “turn-around districts” around the world will be shared with conference participants. Commonalities will be cited among these high-performing educational systems.
What we have learned about “community collaboration” that will impact local schools

Research supports the need for highly qualified teachers, but explicitly indicates that teachers cannot do it alone. Key to systemic change is collaboration between all stakeholders; legislators, universities, schools, and communities working toward a common goal of preparing teachers who will be highly qualified to practice in comprehensive 21st Century learning environments. Such collaboration supports the model for Full Service Community Schools first conceived by Jane Adams in the late 1800s and promoted by educational leaders such as Dewey throughout the 20th Century. Full Service Community Schools have the flexibility to comprehensively address the needs of children and families. Extensive research supports educating the whole child; physically, socially, and emotionally; as well as providing support for family well-being to strengthen and maintain children’s academic progress.

Additionally, research on Professional Development Schools (PDSs) supports such a collaborative model. The National Council for the Accreditation of Teacher Education defines PDSs as “innovative institutions formed through partnerships between professional education programs and P-12 schools.” The focus is on preparing highly qualified teachers, educational leaders, and health care professionals through professional development directed at improving practice to enhance student achievement. Research on PDSs indicates there is improved teaching quality and student achievement.

Full Service Community Schools actively teaming with PDSs provide opportunity for the entrepreneurial vision of stakeholders. Stakeholders focused on a common vision to bring American education into the 21st Century by implementing 21st Century skills.

Communities around the world are paying attention and are actively engaged in transformational change in education. These collaborations unify the community to provide
school-based services in health care, agency support, technical training, and education to children and families in addition to creating innovative, real world 21st century learning environments.

A transformational model, designed by the authors, will be shared with session participants. We hope to gain feedback and ideas to further refine the model.

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GRADUATE STUDENTS—AN UNTAPPED TEACHING RESOURCE FOR AN UNDERGRADUATE HORTICULTURE PRODUCTION SYSTEMS COURSE

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ABSTRACT

Teaching experience is important for a graduate student's professional development. However, opportunities are often limited. Our Tropical Plant & Soil Sciences (TPSS) Department has only three graduate teaching assistants per semester, and students can be a teaching assistant for up to two years. Thus, other graduate students lack the opportunity to gain much needed teaching experience. We describe how graduate students were integrated into an undergraduate horticulture production systems course as guest speakers. Certain graduate students were selected to make a presentation in a lecture or laboratory section of TPSS 300 *Tropical Production Systems* based on their firsthand knowledge and experience in topics relevant to TPSS 300. Graduate students spoke on diverse topics including innovative horticultural enterprises in China, American Samoa agriculture, green roofs, orchid nurseries, tissue culture, vermicomposting, aquaponics, hydroponics, campus landscape facilities, Varroa mite problem on honeybees, and beehives and pollination. Speakers used PowerPoint® presentations, tours of laboratories and greenhouses, campus tours, and laboratory exercises. The integration of graduate guest speakers into our undergraduate course worked well, providing benefits to both the speakers and the students. TPSS 300 students learned firsthand from knowledgeable speakers. Graduate students gained some valuable teaching experience. Lastly, this experience helped bridge the social gap between our graduate and undergraduate students.

INTRODUCTION

TPSS 300 *Tropical Production Systems* was designed to serve as a bridge between the introductory course TPSS 200 *Tropical Crop Science* and the upper division crop
productions courses in vegetables, fruits, flowers, and foliage (Kobayashi and Perez, 2009). It is a four-credit course with two 75-minute lectures and one three-hour laboratory a week. It is a required for all TPSS undergraduate students and helps fulfill the credit requirement for a B.S. degree (Tropical Plant and Soil Sciences Department, 2004).

Teaching experience is important for a graduate student's professional development. Teaching skills and knowledge help enhance students' potential performance whether they go into academics, private sector, or government work (McGoldrick et al., 2010). Teaching opportunities are sometimes limited, however. Our department has an average of 20 graduate students each semester (Susan Takahashi, personal communication). We have only three graduate teaching assistants per semester, each assisting in three or four courses. Students can be a graduate teaching assistant for up to two years. Thus, there is a lack of opportunity for the other graduate students to gain some teaching experience.

The objective of this paper is to describe how graduate students were integrated into an undergraduate horticulture production systems course as guest speakers.

METHODS

Certain graduate students, who were in the TPSS 654 Communications in the Sciences course, were asked to make a presentation in a lecture or laboratory section of TPSS 300. Students were selected based on their firsthand knowledge and experience in topics relevant to TPSS 300. If a student agreed to guest lecture, we discussed in person or via e-mail the specific topic they were to speak on (Evans and Marsden, 2009; Nourse, 1995). We also discussed what kind of laboratory experience they could provide such as a tour of their laboratory, observing their experiments in the greenhouse, or going on a campus tour.

In addition, two Plant and Environmental Protection Sciences (PEPS) Department graduate students were asked to speak about their research on the Varroa mite problem in honeybee hives and on pollination.

RESULTS AND DISCUSSION

Topics of the guest speakers

Graduate students spoke on diverse topics including innovative horticultural enterprises in China, American Samoa agriculture, green roofs, vermicomposting, vermicompost tea (Fig. 1), aquaponics using lettuce and tilapia fish, setting up a non-circulating hydroponic system for vegetables (Fig. 2), tissue culture and the operation of a tissue culture laboratory (Fig. 3), orchid production and nurseries (Fig. 4), campus landscape facilities and operations (Fig. 5), Varroa mite problem on honeybees (Fig. 6), and beehives and pollination (Fig. 7). Speakers used a range of presentation formats in which they chose
including PowerPoint® presentations, tours of laboratories and greenhouses, campus tours, and laboratory exercises.

**Figure 1.** Archana Pant, a TPSS graduate student (shown on the left), gave a greenhouse tour of her research on vegetable production using vermicompost tea, a nutrient solution made from earthworm compost.

![Image of Archana Pant giving a greenhouse tour](image1)

**Figure 2.** Jensen Uyeda, a TPSS graduate student (shown on the right), explained his work on vegetable production using non-circulating hydroponics.

![Image of Jensen Uyeda explaining his research](image2)
**Figure 3.** Lee Chaille, a TPSS graduate student (shown on the right), provided a tour of a tissue culture research laboratory, discussing the techniques he is using in the micropropagation of ornamental plants. Lee has extensive experience working in commercial tissue culture laboratories.

**Figure 4.** Peter Wiggin, a TPSS graduate student (shown on the right), explained the details of orchid production. Peter owns a commercial orchid nursery on the Big Island.
Figure 5. Roxanne Adams, Landscape Manager for the UHM and a TPSS graduate student (shown on the left), gave a tour of the campus landscape plant nurseries. Roxanne has extensive experience working in commercial landscape businesses, plant nurseries, and was an owner of a landscape maintenance business.

Figure 6. Tyler Ito, a graduate student in the Plant and Environmental Protection Sciences (PEPS) Department (shown in the middle), discussed his research on the Varroa mite problem in honeybee hives.
Figure 7. Jane Tavares, a graduate student in the PEPS Department (shown in the middle), described pollination of horticultural crops by honeybees and discussed her research on pollination of macadamia nut trees.

Effectiveness of the guest speakers

Course objectives. Integrating the guest speakers into the course helped to achieve certain course objectives (Lang, 2008), namely, that students should be 1) familiar with different crop production systems and crop management systems and 2) be aware how environmental factors and crop manipulations influence crop growth and development in different production systems. As noted by Lang (2008), we were not just looking at using guest speakers as an add-on. Rather, we chose guest speakers whose expertise and experience were relevant to the topics that were covered in TPSS 300 and whose presentations would meet the course objectives.

Classroom ambiance. The guest speakers provided an interactive atmosphere in which students and the speakers asked questions and shared information with each other, as opposed to the traditional one-way flow of information. The guest speakers, being graduate students, often served as peers, unlike professors who are often viewed as field experts by undergraduates. The lectures by the guest speakers may not have seemed as intimidating as compared to lectures given by professors (atmosphere is a little more relaxed/calm).

“Variety is the spice of life” was applicable in the class (Nourse, 1995) with the guest speakers adding “spice” to the class and supporting and enhancing the lecture material presented in class (Evans and Marsden, 2009). Guest speakers added enthusiasm and interest to the class. It appeared the guest speakers helped to improve class attendance and raise the level of interest as demonstrated by increased attendance, interest, and the asking of questions by the students. This may have been due to the students recognizing
that the guest speakers possessed firsthand experience and research knowledge about the topics they presented.

*Teaching opportunity.* It should be noted that the graduate students were given opportunities to teach and that this was not an exercise in teaching the graduate students how to teach. That is beyond the scope of the instructors. Our department has no course in teaching methodology. There is a three-day Teaching Assistant Training program prior to the start of each semester, which is mandatory for new teaching assistants. Continuing or potential teaching assistants are welcome to attend.

*Selection of guest speakers.* Selection of graduate students was based primarily on their firsthand experience and knowledge or research in a particular topic rather than their speaking skills. Although Boyd (2008) mentioned when inviting guest speakers to talk to your class, one should choose those that speak well, this is not always possible even with inviting other faculty to guest lecture in your course.

Typically, in TPSS courses, guest speakers are other faculty, extension specialists or agents, or people from the agricultural industry. In an attempt to try a different approach, we asked graduate students with relevant expertise or practical experience. Experts from the campus community can be tapped to lend expertise and insights on many topics (Nourse, 1995).

**Benefits for the TPSS 300 students**

*Relevant expertise and practical experience.* Guest speakers provided insights into other aspects of agriculture, aside from cultivation, such as insect pollination of crops, vermicomposting, and agroecology. In addition, they provided insights into the agricultural business and possible future career choices such as orchid production, organic farming, operating a tissue culture laboratory, and beekeeping. They supplied up-to-date information and knowledge of local enterprises. Guest speakers provided a sense of the “real world” and practitioner experience (Evans and Marsden, 2009).

The guest speakers’ lectures also provided examples (or blueprints) of how undergraduate students can conduct experiments similar to those of graduate students. As the graduate students discussed how they went about conducting their experiments, the undergraduates were provided with examples of how they can conduct their own experiments.

*Active learning.* When students sit passively as their instructor delivers information by lecturing, they often do not become engaged in their learning. To demonstrate multiple ways of seeing and knowing, Robinson and Kakela (2006) often invited guests from related fields to visit their class. In a similar manner, we invited guest speakers to help provide an interactive atmosphere, in which the students and guest speakers shared information and engaged in lively discussions.
The TPSS 300 students were not like the students in an argument and persuasion course (Lang, 2008) in which the students were extremely reluctant to ask questions and the conversation between the guest speaker and the students was stilted. Our students showed extreme interest in the topics of the guest speakers as seen by their attentiveness and questioning. It should be noted that it is the responsibility of the instructor to guide the guest speaker and the students into a meaningful dialogue by asking questions and providing comments.

*Career opportunities.* Presentations by the guest speakers offered the students a brief survey of other fields related to their major that they could specialize in upon graduation. Through the use of graduate student speakers, we exposed the students to experienced horticulturists and to the types of job opportunities available. Guest speakers were career-information providers in a classroom environment (Metrejean et al., 2002).

*Use of PEPS Dept. students.* At first, only graduate students in the TPSS Department were asked to make a presentation in TPSS 300. We later asked two graduate students from another department in our college—Plant and Environmental Protection Sciences Department. Although these students are not directly involved in crop production research, their studies on honeybees, Varroa mites, and pollination provided valuable information to the students. Honeybees are vitally needed for the pollination of fruit and vegetable crops in Hawaii, honey production, and queen bee exports. The students’ exposure to graduate students outside our department emphasized to the students the interrelationships among the various agricultural disciplines needed in crop production.

*Benefits for the guest speakers*

Benefits to the guest speakers included increased technical knowledge, new perspectives on teaching methodologies, practiced leadership skills, and acquiring a critically needed item for their resumes (Sánchez and Craig, 2007). Giving the graduate students the opportunity to speak to a class—whether it be a lecture, giving a laboratory or greenhouse tour, explaining their research experiments, or conducting a laboratory exercise—helped them to gain experience in public speaking, an important career skill (Boyd, 2008).

The graduate students received no credit for guest speaking. It is not clear why the graduate students participated in TPSS 300. Perhaps, they perceived teaching as having value beyond earning an academic credit or grade (Sánchez and Craig, 2007).

**CONCLUSIONS**

- Undergraduate students learned from knowledgeable graduate students.
- Graduate students gained valuable teaching experience.
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LITERATURE CITED


Qualitative research is prevalent within educational and management research, yet the methodology remains varied across disciplines. The purpose of this poster presentation is to review qualitative research design, specifically the descriptive case study, as used in sport management research. This presentation will address study design, data collection procedures, research quality, data analysis and the presentation of findings. The presentation will describe the data collection methods of document mining, interviews and participant observation, within an athletic context. Qualitative research refers to validity and reliability as the quality or trustworthiness of the data. A detailed table presents the key considerations of qualitative data quality. However, at no point in case study research are qualitative and quantitative methods less alike than during analysis (Stake, 1995). The presentation describes data triangulation and the inductive approach to data analysis required for qualitative research. Such in-depth case studies of athletic programs can prove difficult but provide a unique insight into the world of sport.
STUDENTS’ CONSTRUCTION OF A VIRTUAL MUSEUM FOR MULTIMODAL MEANING-MAKING: THE CASE OF A PILOT INTERVENTION

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STUDENTS’ CONSTRUCTION OF A VIRTUAL MUSEUM FOR MULTIMODAL MEANING-MAKING: THE CASE OF A PILOT INTERVENTION

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Abstract

This paper evaluates a pilot design research intervention of 12-13 year old Secondary (Middle) students in Singapore constructing a virtual museum within an English Language (EL) curriculum which seeks to engage students through the infusion of authentic, rich multimodal stimuli. 78 students from two classes designed the layout of museum galleries based on their chosen themes, sourced and created multimodal artifacts, and presented their proposals and galleries to an imagined external audience and their peers. The research design and methodology, processes and factors driving the design and implementation of the project are described. Feedback from teachers and students on the benefits and limitations of the study are elicited through semi-structured interviews, survey and questionnaire forms. Recommendations to overcome problems identified are proposed.

1. Introduction

Interest in learning in museums, art galleries and science centres has gained over the years (Jackson & Adamson, 2009; Hawkey, 2004; Prosser & Eddisford, 2004) with advanced creative and meaningful developments in digital and interactive technologies (Sherman, 2009; Song et al., 2005). This has drawn attention to the role of such institutions in supporting and enhancing learning in informal learning environments with formal classroom learning and in promoting lifelong learning (Chung, 2010; Albany Institute of History & Art, 2008-2010). The provision of authentic learning opportunities mediated through various forms of technological platforms offers a challenge to educators, researchers and designers in the design and construct of such dynamic learning environments, particularly in this 21st century of learning.

In this age of rapidly increasing change and development in a globally digitized economy, 21st century skills are acknowledged as critical for individuals to thrive in the workforce (Metiri Group, n.d.). These skills of critical thinking and problem solving, communication, collaboration, and creativity and innovation have been identified to become even more important to organizations in the future (Lang, 2010). In line with the New Literacies movement that extends beyond traditional, print-based notions of literacy to the ‘design’ of meaning-making in multimodal ways, museum-based learning can be seen to offer informal, experiential learning through media rich experiences facilitated by authentic objects and structured into inquiry-led learning (Vavoula et al., 2009). Essentially, these work towards ‘new forms of literacies that emphasize the various modes of meaning-making’ (Tan, Bopry & Guo, 2010, p.15) through a range of semiotic resources (Kress, 2000). Multidimensional learning is encouraged within a dynamic and engaging learning environment (Johnsson, 2003) where learning is activated through engagement with various stimuli (audio, visual, spatial) through specially created museum platforms.
Our study drawn from a larger investigation (Ho, Nelson & Mueller-Wittig, 2008) involves Singapore teenage students in conceptualizing, designing and constructing museum galleries including the design layout and artifacts for a virtual museum which best expresses their self, culture and interests as a community of young people. This involves exploration in the creative, adaptive use of audio, visual, video input, three dimensional virtual and/or augmented interactive, digital resources in the process of multimodal composing of their virtual museum constructs. The student-generated, self-directed virtual museum construction based on students’ choice of themes, use of a mix of semiotic resources with opportunities for ‘hands-on’ exploration, discovery and display of rich, authentic objects, support a learning approach of active inquiry and engagement.

This paper describes our research study and evaluates the pilot intervention carried out with two EL classes. We begin with a literature review of museum-based studies in technologically-mediated contexts before presenting the theoretical underpinnings of the study and the pedagogical principles informing the design. Information on the research design and methodology then follows. The strengths and drawbacks arising from the intervention are discussed with feedback from teacher and student participants. We conclude with the implications and recommendations to overcome problems identified.

2. Literature review

Studies of virtual museums in various contexts have encompassed a range of technologically-mediated interventions with the development of various tools and resources to support learning. Barak et al.’s (2009) MOSAICA web 2.0 based technologies aimed at the preservation and presentation of cultural heritage resources (photos, documents, video, sound, etc.) from Israel, France, and Poland through an interactive, educational experience. Findings indicated benefits in terms of knowledge and positive attitudinal gains towards diverse cultures, ease of use, and attractiveness through hypertext narratives. Vavoula et al.’s (2009) Myartspace mobile phone service for web-based, inquiry-led museum-based learning supported pre-, during- and post-visit learning activities in the museum and the classroom. The potential and effectiveness of the service for enhancing learning between classrooms and museums were examined on a micro level concerned with issues of usability, meso level which examined educational effectiveness in terms of learning breakthroughs and breakdowns, and a macro level which evaluated the impact of the new technology on school museums visit practice. The service proved effective for students’ museum information gathering for subsequent classroom construction and reflection. Concerns included structuring museum visits, issues of viability and costs on a regular service and on a wider level. De Almeida & Yokoi’s (2003) development of interactive, virtual tour guides to online exhibitions establishes a customized, person-to-person dialogue while guiding users through virtual exhibitions. Attention was focused on design of motivational structures, emotional and personality traits and behavior control systems for characters to perform in context-specific environments, with well-defined goals and social tasks. Preliminary results with university students yielded positive gains in general, motivating students to explore the exhibition through the audio and gestural responses of the tour guide, providing adaptive guidance for engaging storytelling and promoting users’ participation throughout the virtual tour.

While these studies on museum-based learning mediated through technological platforms and specially created tools and resources have shown potential for yielding positive
benefits on participant learning and involvement, there remains a dearth of investigations into documented research in educational contexts which involves student-generated design and content for virtual museums constructed primarily by, for and with young people themselves as a multimodal representation of youth culture with the attendant ideals, beliefs, values and perspectives. This study fills a gap in current educational research in the local context and region.

3. Theoretical underpinnings

The study is anchored within the multiliteracies perspective of the New London Group (1996) in extending beyond the constraints of conventional written and spoken language to tie in with the culturally and linguistically diverse landscapes and the multimodal texts traversing these landscapes. As a multiliteracies-oriented project, it seeks to draw on students’ prior knowledge, background life experiences, lived memories and cultural forms of representation in order to project student voice and identity. Meaning-making is thus seen against specific cultural, social or domain-specific contexts. Further, given the characteristic nature of new information and communications media, meaning is created and conveyed through increasingly multimodal representations—written modes of meaning interfacing with oral, visual, audio, tactile and spatial patterns of meaning, and particularly those typical of the new digital media (Kalantzis & Cope, 2008). Virtual museums as learning environments can serve to unlock the semiotic potential of multimodality in promoting students’ attention to meaning through sounds, music, image, movement and text with a focus on writing as a multisemiotic resource to construct meaning and project identities.

The study in facilitating a constructivist (Bruner, 1993; Von Glasersfeld, 1987,1995; Jonassen et al., 1999) learning environment through the use of different modes of knowledge representation and interactive digital media, engages students in an active exploration and co-construction of participants’ own knowledge, beliefs, interest and perspectives. At the same time, as an inquiry-driven (Kuhn, Black, Keselman & Kaplan, 2000; Dewey, 1938,1991) form of learning, students direct their own investigatory activity as they formulate questions, plan their activity, and draw and justify conclusions about what they have learned’ (Kuhn, Black, Keselman, & Kaplan, 2000, pp. 496–497).

4. Research design and context

This study adopted a design research (Cobb, 2001; Collins, 1992; Collins, Joseph & Bielaczyc, 2004) approach with researchers working closely throughout the study with project officers from a specialist computing background and classroom practitioners in designing and implementing the project within a school language curriculum over a specified period of time.

The study is timely in supporting the Singapore Ministry of Education (MOE) 2010 English Language (EL) syllabus, specifically with regard to a focus on its multiltieracies component. It reinforces the EL syllabus philosophy ‘A strong foundation and rich language for all’ (MOE, 2008, p.13) as it works towards ‘enriching the EL curriculum through infusion of authentic, rich texts at all levels’ with ‘extensive opportunities to engage in creative and sustained writing and integration of information and media literacies at all levels’ (MOE, 2008, p.9). The use of technologies developed around a virtual museum is aimed at enhancing students’ creative capacity for designing meaning in digitally-mediated contexts.
The three phases of the intervention comprised the pre-project, main intervention and the post-project phases. Prior to the main intervention, a guided one and a half hour museum visit to a local cultural museum in Singapore was specially arranged for the students. This was aimed at exposing students to a real-life physical museum, raise awareness and stimulate interest in the purpose, design and artifacts of an actual museum. This was followed by preparatory workshops comprising three three and a half hour sessions. The primary purpose of this workshop was to orient student participants to the nature and goals of the project. Discussions and activities were carried out to sensitize students to the types of multimodal literacies required for meaningful 21st century communication.

The ten-week main intervention integrated the content of the school EL curriculum in terms of the language skills required. Formal report writing skills, for instance, was taught to students in the regular EL lessons prior to the project task of writing a formal letter to the Museum Director with their proposed museum gallery proposal. Project tasks and activities were aimed at reinforcing the regular EL curriculum and not viewed merely as additional tasks with no relevance to the curriculum.

The post-project phase comprised final student and teacher interviews reinforced by survey forms and writing tasks in line with the curriculum focus. A combined sharing of presentations of the final museum galleries from both classes was scheduled.

5. Methodology

5.1 Study Site

The pilot study was conducted in the third term of the school year with the consent of the Principal, English Head of Department and 2 staff from the English Department who were teaching 2 Lower Secondary EL classes. The school was a ‘Special Assistance Plan’ (SAP) school in Singapore with a bilingual immersive environment where both English and the mother tongue were taught at first language level. It was also identified as a Lead ICT school which sought to spearhead information and communication technology (ICT)-mediated pedagogic initiatives in various subjects. The students, prior to the period of the pilot intervention, were introduced to different software such as Flash, Adobe Photoshop and ULEAD Video Studio through school-based workshops. The entire intervention for two classes of triple EL periods of one and a half hour weekly sessions over ten weeks was held in two of the school computer laboratories where each student had access to a desktop computer wired to the Internet.

5.2 Subjects

Seventy eight 12-13 year old male and female students from two classes (thirty eight and forty students in the two classes respectively) participated in the study. The majority of the students came from a predominantly middle to lower socio-economic background with an average to above average academic level. Students, parents and teachers involved were informed of the nature of the project and its objectives, and provided signed written consent prior to the implementation. Each of the two classes was divided into eight groups of four to five students each to ensure maximum participation and engagement. A total of sixteen groups of students from the two classes worked on their museum galleries based on selected themes of their own.
A pre-project survey was administered to students to determine their background and exposure to museums and various forms of technology. 84.6% of students have visited at least one museum in the real world before the onset of this study, with the main National Museum of Singapore leading the pack with 80.3%. Of these, 86.7% indicated that they enjoyed their museum visits and found them meaningful as they learned more about the local culture and history. With regard to students’ technology exposure and access, 84.6% of students owned a personal computer/laptop/notebook and Internet access at home. The top three IT-related activities for students were Web-Surfing, Internet Chat and Online Gaming.

6. Feedback from participants

The instruments used to elicit participants’ feedback comprised questionnaire and survey forms, and semi-structured, face-to-face interviews. The pre- and post-project teacher interviews focused on their initial concerns and benefits gained from both their and their students’ participation in the study.

6.1 Benefits for teachers

Multimodality and EL curriculum

Over the ten weeks of collaboration, the teachers felt they progressed from having no prior knowledge of incorporating multimodality into the language curriculum to having the opportunity to be directly involved through a personal classroom experience in using various semiotic resources with their students to enhance their level of understanding of multimodal literacy and engagement.

Interpersonal awareness of students

The teachers felt the project increased their interpersonal student awareness as they became more engaged with students and gained understanding of their students’ interests and presentation skills. During the different phases of group work, teachers also learned more of their students’ group dynamics on intra- and inter-group levels.

6.2 Concerns

Structure and organization

Tighter structure and organization with more explicit instructions and procedures, particularly in the written format for students were recommended. Graphic organizers for the design of detailed and structured plans were recommended with more guidance from teachers and facilitators, and the availability of planning folders prior to lessons conducted with more time for exploration could be built in during the conceptualization and construction phases.

Teacher preparedness

Teachers faced initial anxiety and insecurity in the early stages of the implementation, given their lack of exposure to design research of this nature and also the technical competency to work with specific design software required, particularly for the three-dimensional (3D) modeling required.
6.3 Benefits for students

Awareness of and sensitivity to multimodal expression and meaning-making

Students showed an awareness of multimodal ways of expression and meaning-making. For a group working on Japanese comics, visual and audio effects were cited as critical:

‘Like when you combine audio with a picture, it may actually tell a different story to just a picture. Maybe the audio is something about.. talking about the characters, talking about the other side of the character, like the picture don’t show the good side of the character so the audio will actually give the visitors a different idea of what the character thinks.

This was further reinforced by the role of moving visuals with audio in videos for representing the Music theme:

‘Video clips because it will be like most interesting to the target audience. They don’t have to read and they can watch the moving images, see the pictures and also hear at the same time like listen to the audio’.

There were emergent signs of students displaying sensitivity to the impact of various semiotic resources for specific purposes and contexts. For instance, text was favored for content-description of Korean dramas:

‘I think text is also easy to understand because it is the basic way where people try to communicate. Because sometimes for pictures, people might have different feelings towards the visuals’.

but when it came to the specifics of attractions from the Seven wonders of the world, visuals and color were recognized to play a significant role:

‘Because text is so boring. It is only black and white in color but then pictures have colors because different colors you can convey different emotions to our visitors; for example like white, black and grey are emotions of sadness, and red and pink of joy.. different colors convey different emotions to our visitors so this is more interesting than reading text- black and white text is so boring which cannot attract the teenagers because teenagers don’t like to read’.

For a group working to display aspects of the Youth Olympic Games hosted by Singapore:

‘A person might not be able to imagine, like let’s say for example a person scores a goal and then he is very happy but sometimes words might not…might not also describe how happy he is but a picture can show his expressions and maybe how he reacts.’

Language choice and preference

When it came to the choice and distinctions between EL and Mandarin, some students showed a preference for where their strengths were:

‘I mostly speak Mandarin to my friends so maybe I will be able to explain things better using Mandarin’ Likewise, another said that Mandarin was better to explain things and also being
closer to her heart in terms of cultural and the theme that they were working on. Perhaps familiarity with the language helps to breed the confidence in the application of the language.

This contrasted against students who showed awareness of an audience beyond themselves when they felt that museum visitors who may not be conversant in Mandarin will prefer English:

‘Not all visitors to the museum know Mandarin so English is still the best to help them understand what our gallery is all about’.

These students displayed understanding of the functional role and purpose of each language which accounted for their choice in relation to the perceived wider audience and targeted museum context.

Gains from group work

The positive benefits of group work over a sustained period ranged from teamwork and collaboration, learning more of their peers, exploring different perspectives, communication skills, time management, emotional support. With regard to teamwork and collaborating in a group, students generally felt that they benefited from working with each other:

‘Because each of us has our own ideas right, so when we combine it, it will become like one great idea. So it is like, actually like add more ideas to get a greater one. So for us to accomplish this idea right, it takes more ideas for it to work.’

and learning more about their individual classmates:

‘I got to learn more about my team mates and found out that besides being humorous and full of novelty ideas, he actually possessed the qualities of a leader from the way he moved us together to complete different objectives during this project’.

Further, it allowed them to explore different perspectives and broaden the scope of their responsibilities in mixed gender groupings:

‘Yea I think interacting with the opposite gender tend to be where some sparks will fly and there will be like quarrels and wars so yea war but not really on that scale, but in the end, it will always be back to the normal situation where we’ll work together again. And so it is like he said, we can foster good friendship yeah’.

Communication skills and time management were also cited as gains for students as they learnt to work together efficiently in various areas for their research and take responsibility for specific tasks within their individual groups:

‘One advantage is that actually can divide the work so one person can concentrate on one movie in that area so we don’t have to waste a lot of time to look for irrelevant resources or maybe we are not familiar with the movie and we have to find the pictures of the movie and we ended up finding something else.’

7. Recommendations
Recommendations for addressing problems identified focused on the technical aspects of the implementation, curricular and pedagogical issues.

7.1 Technical issues

The nature of the technology platform adopted, be it virtual or augmented, requires appropriate modeling with adequate sampling from the computing staff right from the initial stage of the intervention. Students could be encouraged to source for and identify actual realia or real-life input relevant to their group’s theme which could serve as a platform for the computing staff to develop the bridging of the real life input with the virtual and augmented reality.

Given the nature of this project with the use of specific software and technological tools and resources, student groups could be assigned to the respective computing staff right from the beginning (e.g. four groups in one class to one staff). This deliberate, strategic allocation of students to specialist staff is to ensure targeted and focused assistance over a sustained period so that students could seek advice, even during the initial stages of gallery floor plan design and multimodal resource selection for their galleries. Regular monitoring also ensures students are kept on task during the development phase of their gallery construction.

7.2 Curricular issues

Pre-project and main intervention links

The pre-project visit to the local cultural museum could be more tightly integrated with project curricular goals in the main intervention for greater reinforcement and support. Students could be briefed prior to the actual museum visit on what to look out for (e.g. museum floor plan; artifacts arrangement and display; interactive components, descriptive captions of exhibits). This extra step will be helpful to students when it comes down to the actual planning, design and construction of their museum galleries.

During the pre-project workshops, more sample galleries and artifacts could be showcased. In addition to the sample artifacts from the computing staff to show concrete realizations of the specific forms of technology adopted, display of the better quality student-generated museum galleries and artifacts from the pilot study would be invaluable input for the next round of intervention.

Multimodal skills, self and critical reflection

Building in more time and providing clearer instructions for students with samples provided through teacher modeling of what is expected would facilitate students’ writing tasks as in the descriptive captions of their museum artifacts. This would enhance their awareness and deepen their understanding of image-text relations in multimodal constructions.

Regular and periodic students’ self reflections in the form of a blog entry during the third, sixth and ninth weeks of the study are recommended. To facilitate easy access and posting to the project portal, student folders for online uploading of their work could be made available by the school technical support staff prior to the intervention. More time could also be built into the
intervention to facilitate individual students’ critical reflections and evaluations of each others’ museum galleries and artifacts towards the end of the intervention.

8. Conclusion

This paper focuses on a pilot intervention of teenage students’ engagement with multimodal meaning-making through constructing a virtual museum within a language curriculum. Museum galleries are designed based on students’ choice of themes with design layout and artifacts created in an attempt by young people to represent their selves, interests and culture. Preliminary feedback shows emergent signs of students’ awareness of multimodality, attitudinal and motivational changes towards language learning, and the development of soft skills of teamwork and collaboration. Concerns raised include the initial technical aspects of the implementation, and the need for a tighter, closer integration of curricular and pedagogical issues with the technological platforms and tools adopted. The study has demonstrated the viability within real world classroom constraints of an exploratory technologically-mediated intervention to enhance multimodal language learning and literacy skills appropriate for the 21st century.

Acknowledgements

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Notes

1 Since 1966 English has been a compulsory subject for all schools in Singapore and since 19987 it has been the medium of instruction for all subjects. English is designated the First language (L1) in the national school curriculum although the majority of Singaporean children may not have English as their first language in their home environment. In SAP schools which were well-established Chinese-medium schools in the past, the ethos and environment of SAP schools enable the pupils to be effectively bilingual in both English and Chinese, and inculcate in them traditional values in a Chinese school environment with students taking Mandarin at a Higher Chinese level (MOE, 2010) equivalent to English at First Language level.

References


De Almeida, Pilar. & Yokoi, Shigeki. (2003). Interactive character as a virtual tour guide to an online museum exhibition. (Reports – Research; Speeches/Meeting Papers).


The Life Cycle Investigation of e-Learning Technology towards Education

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The widespread availability of digital learning resources in a variety of media formats offers the possibility to make a profound difference in education. The potential of this technology has not been fully realized for a range of complex reasons. Recently, computer-mediated communication (CMC) has been adopted in most e-learning settings, which enhance the participation in online discussions through synchronous communication (1). However, in such fast changing environment, technology life cycle of e-learning has been significantly shortened that lead to the loss of investment in education institute.

Accordingly, technology valuation and forecasting of e-learning technology becomes crucial to obtain insights for educational investment. This study develops a valuation model for e-learning life span based on aging theory to assess the value and possible development so as to support decision making. There are three scenarios proposed by aging theory for technology life span valuation, which are Growth-only, Constant Decay, and Recursive Decay (2). Moreover, this study considers the impacts of two aging parameters, support transfer factor and support decay factor, and nature under different technology life stages to obtain energy function from supporting data. The three different valuation models of e-learning technology life span are constructed. Furthermore, the valuation will be utilized to compare the values of e-learning life cycle between the regular and CMC synchronous practices through simulation.

The simulation with the influences from distinct life cycle, aging parameters, and scenarios are conducted. Owing to the fact that the selection of scenarios for e-learning development depends on the trend of its adoption between current and earlier stages, it is necessary to monitor repeatedly as dynamic detection. In addition, the simulations of S-curve towards substitution of e-learning technology is, then, utilized to illustrate possible situations, which provide sensitivity analysis to review the impacts while input variables are changed. This study has shown that e-learning
with synchronous communication possesses strong potential in future education.

Reference:
(1) Stefan Hrastinski (2008), The potential of synchronous communication to enhance participation in online discussions: A case study of two e-learning courses, Information & Management 45, 499–506

Key words: e-learning, aging theory, education, simulation
Dynamic Assessment of Early Literacy Skills: Examining the reliability, validity, and feasibility of a play based progress monitoring tool

Research suggests early writing skills may best be tapped through multimodal play-based assessments that afford opportunities to write for different social purposes (Neitzel & Rowe, 2008; Neuman & Roskos, 1990). The Early Literacy Rubric (ELR) is a promising multimodal seven item teacher completed inventory that measures: oral message, reading, writing, picture, name writing, play, and sounds. The current research examined the usefulness of such a dynamic, formative assessment tool, the Early Literacy Progress Monitoring Rubric, for making instructional changes in early childhood classrooms. The rubric was utilized by Early Reading First teachers in Scaffolding Early Literacy (SEL) classrooms to track and make instructional changes that would facilitate children’s literacy skill development.

**Theoretical Context**

An expectation of teachers in SEL classrooms is to monitor children’s progress using the Early Literacy Progress Monitoring Rubric. The rubric serves as a type of dynamic assessment and is an alternative to traditional assessments in which only the child’s current competencies are
measured and the assessor is forbidden to intervene (e.g., explain the prompt in more detail, provide a strategy for solving) in order to maintain the validity of the assessment results. In contrast, dynamic assessment treats the interactions between the child and the assessor as a valuable source of information about a child’s ability. Thus unlike traditional—static—assessments, dynamic assessment takes into account the outcomes of the supports provided by the assessor during the assessment (Sternberg & Grigorenko, 2002) and helps to establish both the child’s current level of achievement and a child’s ability to attain higher levels (i.e., Zone of Proximal Development, or the range of performance a child can accomplish with and without support from a competent other). Through use of the rubric, teachers are able to scaffold children, as well as address particular challenges and specific IEP goals within a regular preschool classroom, including strategies to stimulate and facilitate interaction between children with special needs and their typically developing peers.

The *Early Literacy Progress Monitoring Rubric* is completed as children create daily play plans. Play Planning is a complex strategy in the *SEL* framework that simultaneously supports aspects of play, self-regulation, and early literacy and writing indicators such as phonological awareness and concepts of print. In the *SEL* approach, the Play Planning process supports children wherever their individual abilities may lie on the developmental continuum. Children may plan orally and the teacher may take dictation of what the child has said. Or, as the quality of play and experience in using written marks to communicate grows, many children start discovering the function of teacher’s writing and attempt to write on their own.

The *Early Literacy Progress Monitoring Rubric* is directly aligned with the Play Planning process. Developed by members of the Janesville, WI school district as part of an Early Reading First project using the *SEL* approach, the rubric is an efficient way for teachers to monitor
children’s progress in an ongoing manner on various domains of children’s development, including oral language, reading, writing, play, and phonological awareness and has been identified as a best practice for early childhood assessment (Doing What Works Clearinghouse).

Methodology and Analysis Procedures

Twenty-one teachers completed the ELR on 53 children (ages 3 through 5 years) from 21 Head Start classrooms located in large urban and rural locations. ELR data was collected at mid-year in all classrooms. The same children were assessed on the Peabody Picture Vocabulary Test (PPVT) and PALS PreK at the end of the school year.

The current study examined internal consistency and structure of the ELR. Additionally, correlation and simple linear regression analyses were used to examine the relationship between the ELR and the PPVT and PALS respectively. Item 7 on the ELR (sound) was excluded from analyses due to incomplete data. Finally, the rubrics were analyzed to determine the extent to which teachers’ use of the rubric led to improved scaffolding of children’s literacy skills during the play planning process. Teacher feedback on the Early Literacy Rubric was gathered using an online survey following initial implementation. Survey questions focused on the feasibility of the rubric, the nature of instructional changes that took place, and the potential sustainability of the rubric. Rubrics and corresponding play plans were analyzed using content analysis, to describe and summarize trends observed in these documents. Patterns and themes were used to establish coding schemes. Codes were related but not limited to the identification of evidence of teacher’s understanding of scaffolding and dynamic assessment strategies.

Results

The 6 item rubric was found to be reliable with a reliability estimate of $\alpha = 0.83$. Principal component analysis extracted one composite factor (eigenvalue = 3.28) from the 6
items (see Table 1). A significant positive correlation was found between both the PPVT and the ELR Reading, Writing, and composite score (see Table 2).

Table 1. Factor loadings for Early Literacy Rubric Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>0.804</td>
</tr>
<tr>
<td>Reading</td>
<td>0.764</td>
</tr>
<tr>
<td>Oral Message</td>
<td>0.733</td>
</tr>
<tr>
<td>Writing</td>
<td>0.731</td>
</tr>
<tr>
<td>Play</td>
<td>0.712</td>
</tr>
<tr>
<td>Picture</td>
<td>0.690</td>
</tr>
</tbody>
</table>

Significant positive correlations were also found between PALS Uppercase Letter Recognition and ELR Reading (0.39) and Name (0.38); PALS Name and ELR Reading (0.38).

The overall regression model for predicting PPVT scores was significant $F(1, 52) = 7.54, p < .01$. The ELR composite score accounted for 11.2% of the variance in predicting PPVT scores, but was not significantly related to the PALS summary score.

Table 2. Intercorrelations with Early Literacy Rubric components and PPVT

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Reading</td>
<td>1.00</td>
<td>.520**</td>
<td>.344*</td>
<td>.486**</td>
<td>.536**</td>
<td>.478**</td>
<td>.778**</td>
<td>.394**</td>
</tr>
<tr>
<td>2 Oral Message</td>
<td>.422**</td>
<td>1.00</td>
<td>.367**</td>
<td>.501**</td>
<td>.441**</td>
<td>.708**</td>
<td>.250</td>
<td></td>
</tr>
<tr>
<td>3 Picture</td>
<td>.484**</td>
<td>.450**</td>
<td>1.00</td>
<td>.405**</td>
<td>.670**</td>
<td>.176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Writing</td>
<td>.546**</td>
<td>.361**</td>
<td>.735**</td>
<td>1.00</td>
<td>.387**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Name</td>
<td>.491**</td>
<td>.800**</td>
<td>.315*</td>
<td>1.00</td>
<td>.355**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Play</td>
<td>.734**</td>
<td>.058</td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Rubric Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
Results from content analyses of completed rubrics suggest use of the *Early Literacy Progress Monitoring Rubric* assisted teachers’ understanding of how to scaffold children within their zone of proximal development on critical literacy skills such as direction of print and phonological awareness. Additionally, teacher survey data indicated that the rubric was feasible and informative for making instructional changes in early childhood classroom.

**Conclusions and Implications**

Results from the reliability and factor analysis suggest that the ELR reliably measures the construct of literacy readiness. Subsequent analyses will be necessary to investigate the stability of this factor. ELR items were significantly correlated with PALS subtasks and the PPVT and accounted for a significant amount of variance in the PPVT score. These relationships suggest that the ELR may be useful for informing instruction of specific skills such as name writing or writing in general in order to target specific outcomes. Feasible instruments, such as the ELR, are necessary so that teachers can easily incorporate formative assessment into authentic settings. This research will contribute to the body of literature on developing useable authentic assessments in early childhood classrooms for the purposes of informing instructional changes. The combination of dynamic assessment and scaffolding is uniquely suited for providing individualized instruction to children with varying needs in early childhood classroom. Finally, the results highlight the feasibility of using dynamic assessment with scaffolding strategies as more practical than previously thought for classroom teachers.
The Effects of Mathematics Textbooks on Learning Fraction
for the Beginners in the Elementary School

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Abstract

The concept of fraction is introduced since the second grade in Taiwan’s elementary school. This paper aims to investigate the effects of mathematics textbooks on learning fraction for the beginners in the elementary school by comparing the performance of fraction concepts between the first and second grade students in Taiwan. The former group consisted of 1252 students who did not officially learn the fraction concepts while the latter group did and had 1210 students. This study adopts a group written test format with 22 questions, each with 5 answers of multiple choices. The Cronbach $\alpha$ values for first and second graders were 0.7646 and 0.7423, respectively which demonstrated good reliability of this test. The results showed that the teaching materials of fraction for the beginners increased the performance of the second graders on continuous quantity for equal sharing problems; however, the teaching materials did not help the second graders consolidate the conceptual connections between ‘half’ and ‘1/2’. Thus, more second graders were likely to be affected by the fraction symbols or the numbers in the fraction for their answers when problem solving.

KW: fraction concepts, elementary school, mathematics education, mathematics textbook

Introduction

In the elementary mathematics curriculum, the concept of fraction is highly related to other concepts such as decimal, ratio, percentage and division (Ministry of Education, 2003) and all these concepts are important ones in the elementary school mathematics. In addition, when learning mathematics, the concept of fraction is the first time for the students to learn about comparisons between two quantities (Kieren,
Therefore, learning fraction concept is very important in mathematics; it is also critical that students can distinguish between base quantity (unit) and comparative quantity (partial quantity) through the learning of fraction.

From the learner’s perspective, the first impression is crucial, if not eternal. The initial learning of a particular mathematical concept can cause long-term effects on the subsequent learning. This is the reason why mathematics educators remind us that the early learning of mathematical concepts should not be discounted. Teachers’ instruction is one of the most important factors affecting the thinking and learning of the students (Rogoff & Chavajay, 1995). The mathematics teachers of the elementary schools in Taiwan depend highly on the textbooks and the teacher’s manuals (Chung, 1996; Gu, 2000). Therefore, this paper aims to investigate the effects of mathematics textbooks on learning fraction for the beginners in the elementary school. The teaching materials and textbooks will be used interchangeably to mean the same thing in this paper.

Literature Review

I. The Teaching Materials of Fraction for the 2nd Graders in Taiwan

Taiwanese elementary students start to learn fraction since the 2nd grade. Therefore, this literature review aims to analyze the teaching materials of the fraction for the beginners. The analysis for this literature review comes from the three most popular textbook versions in Taiwan. The results show that there are three topics commonly shared by these textbooks as follows.

1. Concept of Equal Sharing
   (1) In the mathematics textbooks for the 2nd graders, the number of equal sharing problems on continuous quantity is slightly higher than that on discrete quantity.
   (2) All textbooks introduce the concept of equal sharing from the context of discrete quantity. After the equal sharing concept is established, all textbooks then proceed to the instruction of fraction from the concept of continuous quantity.

2. Concept of Simple Fraction
   (1) The learning objective of simple fraction is to introduce the symbol of fraction. The concepts usually are presented first with the linkage to the daily languages (e.g., equal sharing, one section out of two sections, a half), then the Chinese in the mathematical term (二分之一), and finally the connections with the reading of mathematical language, the Chinese characters, and the writing of mathematical symbols (e.g., one half, 二分之一 and 1/2). Although the
symbolic language of “1/2” is linked to “a half”, the connection between these two is not emphasized.

(2) The contexts on continuous quantity are much more prevalent than those on discrete quantity.

(3) In most textbooks, the activities of simple fraction adopt single object as the content of unit fraction. There is only one textbook that includes activities in which the content of the unit fraction is multiple objects.

3. Concept of Unit

In the activities for simple fraction, it is necessary to employ the concept and identify the unit in problem solving, if the problem consists of two units. However, the design of the teaching materials does not particularly demand the students to distinguish the differences between unit and partial quantity; additionally, the teaching activities for linking the relationships between the units are not emphasized either.

Overall speaking, although the teaching materials of fraction for the beginners in Taiwan cover three major concepts (equal sharing, simple fraction, and unit), the majority of these materials focus on simple fraction, followed by equal sharing, lastly the unit.

II. Studies on Students’ Concepts of Fraction and Their Misconceptions

1. Concept of Equal Sharing

Pothier and Sawada (1983) proposed a five-stage theory to describe children’s development on dividing ability. First, they can divide a continuous quantity into pieces, regardless of their sizes. Second, they can use folding to divide, but they are unaware of the unequal size for each part. Third, they can divide the unit fractions with an even-number denominator. Fourth, they can divide the unit fractions of 1/3 and 1/5. Lastly, they can construct all the unit fractions. Lin, Huang & Leu (1996) also found that when doing problems on “a half” of a continuous quantity, second graders would divide it into two unequal parts.

2. Concept of Simple Fraction

Even though “a half” and “one half” share the same mathematical concept, “a half” is daily language while “one half” is mathematical language. (Note: In Chinese language, they have different ways of expression, e.g., 半 vs. 二分之一. Yet, in English, the terms are used interchangeably.) Thus, students display different abilities in solving problems for these two types of wordings. Some students are capable of doing problems on “a half” but not the ones on “one half” (Lin et al., 1996).

When students doing the fraction problems, they get confused between
denominator and unit fraction; they tend to use the denominator as the answer (Fig.1, Figueras, 1989). They are also vulnerable to the influence of the numerator, thus drew the number of the areas to be the same as the numerator (Fig.2, Yang, 1988).

![Fig.1 Figueras (1989)](image1)

![Fig.2 Yang (1988)](image2)

3. Concept of Unit

When students are doing problems on fraction, they encounter two types of difficulties in identifying unit:

1. Unable to identity unit

In Example One (Fig.3, Figueras, 1989), students circle the denominator number as the unit. In Example Two (Lin et al., 1996), students confuse one half of the unit with one half of an apple.

【Example One】

T: (There are four apples) Please give me one half of the apples.

S: ( ) (a half of an apple).

【Example Two】

![Fig. 3 Figueras (1989)](image3)

(2) Unable to identity the similarity/difference between units

When there are two units in a problem, students mistaken them as the same. (Lin et al., 1996)

Research Methods and Procedures
I. Research Method

This study adopted a group written test to collect data, with 22 questions, each with 5 multiple choices.

II. Research Samples

The samples were randomly selected from the first and second grade of the elementary schools in Taiwan, 42 classes in total. There were 1252 first graders and 1210 second graders participated in this study, of which total number was 2462.

III. Research Tools

The test contained three parts of fraction concept: equal sharing, simple fraction and unit. The contexts for the problems included continuous quantity and discrete quantity. The Cronbach $\alpha$ values for the first and second graders were 0.7646 and 0.7423, respectively. It demonstrated good reliability.

There were 22 questions for the test in this study. Since the first graders did not officially learn the symbol of fraction, the wordings were different for 8 questions which still share the same mathematical concepts. That is, “half” was used for the problems for the first graders, while the mathematics symbol “$1/2$” was used for the problems of the second graders. In other words, 14 questions were identical and the other 8 ones used different wordings, but still with the same options.

IV. Paper-and-Pencil Test

The test was administrated as a whole class test at the end of the 2nd semester, June of 2002, of which duration was about 40 minutes. Since the first and second graders had limited word recognition ability, homeroom teachers read each question to the class, without further explanations and any questions from the students.

V. Data Collection and Analysis

Students’ answers were keyed into the computer, with separate data bases for the first and second graders. The percentage for each option of each question for each grade was calculated. Then the differences of the correct percentage in each question between two grade levels were compared.

Research Results

There were twenty-two questions in the whole test. There were 14 questions that the 2nd graders performed better than the 1st graders, and the differences in correct percentages between these two grade levels stayed within 20%. On the other hand,
there were 8 questions that the first graders outperformed the second graders. Furthermore, the first graders scored more than 20% on 3 questions than their second grader counterparts. As a result, we chose 3 questions with the biggest discrepancy in correct percentages between the two groups in two scenarios mentioned above as examples for the discussions in this paper. If the wordings of the questions were different between the two groups, the questions for the first graders were presented first, followed by those for the second graders with the different parts in the bracket.

I. The Questions that the 2nd Graders Outperformed the 1st Graders on Fraction

1. The second graders are better at judging equal sharing than the first graders.

   Question 19: (      )
   Is the gray area 1 of the 3 pieces divided equally within the circle?
   (In the below figure, does the gray area represent 1/3 of a circle?)

   ① Yes, because there are three pieces.
   ② Yes, because it is one of the three pieces.
   ③ No, because three pieces are not equal in size.
   ④ No, because the colors are different.
   ⑤ Others

<table>
<thead>
<tr>
<th>Grade</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
<th>Option 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>9.90</td>
<td>13.98</td>
<td>*64.14</td>
<td>9.35</td>
<td>2.64</td>
</tr>
<tr>
<td>Second</td>
<td>4.38</td>
<td>9.83</td>
<td>*81.82</td>
<td>2.40</td>
<td>1.57</td>
</tr>
</tbody>
</table>

   Note: * represents the correct option.

2. If the number of the unit in the content is the same as the denominator, then the second graders are better at solving the “1/2” questions on discrete quantity than the first graders (comparing to the same “half” question for the first graders in which only the symbol “1/2” is replaced with the word “half”).

   Question 14: (      )
   There are 2 moon cakes in a box. Jane ate half box (1/2 box). Which is the correct way to color the part of the moon cakes Jane ate?
The main mistakes for the first graders in Question 14 were options ① and ③. The original meaning of option ③ was that there are \( \frac{1}{2} \) pieces of moon cakes eaten; however, some students thought that the white-colored part represented what was eaten (because if it was eaten, it was gone). Regardless of either the option ① or ③ (a total of 47.76% of students), they confused a half (of a moon cake) with a half of a box. There were some second graders shared the same misconception, although the number (30.50%) was less than that of the first graders.

3. Both the first and second graders have satisfatory performance on choosing the right figure that represents one half of a continuous quantity, but the second graders performed somewhat better than the first graders.

Question 4: (  
Jade bought a pizza. (She) gave a half to Ming. Which is the correct way to color the part of pizza Ming got?

<table>
<thead>
<tr>
<th>Option Grade</th>
<th>①</th>
<th>②</th>
<th>③</th>
<th>④</th>
<th>⑤Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>*79.39</td>
<td>14.22</td>
<td>1.28</td>
<td>3.67</td>
<td>1.44</td>
</tr>
<tr>
<td>Second</td>
<td>*94.55</td>
<td>2.98</td>
<td>0.99</td>
<td>0.50</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Note: * represents the correct option.
1. If the number of the unit in the content is the multiple of the denominator, then the first graders are better at solving the “half” questions on discrete quantity than the second graders (comparing to the same “1/2” question for the second graders in which only the word “half” is replaced with the symbol “1/2”).

Question 10: (  )
There are six apples in a plate. Divide half plate (1/2 plate) to Ted. How many apples does Ted have?
① 1  ② 2  ③ 3  ④ 6  ⑤ Others

<table>
<thead>
<tr>
<th>Option Grade</th>
<th>①</th>
<th>②</th>
<th>③</th>
<th>④</th>
<th>⑤</th>
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<tbody>
<tr>
<td>First</td>
<td>4.23</td>
<td>5.91</td>
<td>*75.00</td>
<td>12.30</td>
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<td>Second</td>
<td>17.11</td>
<td>23.22</td>
<td>*42.81</td>
<td>13.88</td>
<td>2.98</td>
</tr>
</tbody>
</table>

Note: * represents the correct option.

Question 17 (  )
Give Hua a half (1/2) of six balloons. How many balloons does Hua have?
① 1  ② 2  ③ 3  ④ 6  ⑤ Others

<table>
<thead>
<tr>
<th>Option Grade</th>
<th>①</th>
<th>②</th>
<th>③</th>
<th>④</th>
<th>⑤</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>6.71</td>
<td>3.19</td>
<td>*82.43</td>
<td>6.39</td>
<td>1.28</td>
</tr>
<tr>
<td>Second</td>
<td>17.85</td>
<td>16.28</td>
<td>*58.60</td>
<td>5.37</td>
<td>1.90</td>
</tr>
</tbody>
</table>

Note: * represents the correct option.

The error analyses of Questions 10, 17 suggested that the reasons for the poorer performance of the second graders on this type of questions were due to their vulnerability of being affected by the numerator and denominator in the fraction symbol. There were 17.11% and 17.85% of second graders who were distracted by the numerator and chose “1” as their answers in Question 10 and 17, respectively. There were 23.22% and 16.28% of the second graders who were distracted by the
denominator and chose “2” as their answers in Question 10 and 17, respectively. First
graders outperformed their second grade counterparts, of which correct percentages
were 32% and 24% higher in Question 10 and Question 17 respectively. From this set
of data we surmise that the second graders had not built up solid connections
between “half” and “1/2”.

2. Options with fraction symbol are greater distractors for the second graders than
the first graders.

Question 8 (   )

There are 3 pieces of chocolate in a box. Divide equally to Ming, Hua, and Ing. How
many pieces of chocolate did Ming get?

\[ \frac{1}{3}, 2, 1, 3, \text{ Others} \]

<table>
<thead>
<tr>
<th>Option</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>First</td>
<td>14.86</td>
</tr>
<tr>
<td>Second</td>
<td>36.78</td>
</tr>
</tbody>
</table>

Note: * represents the correct option.

There were always some “blind” problem solvers regardless of the problem types.
The students were aware that the test was on fraction. Therefore, some students fell
into the traps and chose the option ① as the answer because it was a fraction (1/3).
Surprisingly, more second graders did so than the first graders (36.78% than 14.86%).
This could be due to the fact that the second graders have officially learned the
fraction concepts, while the first graders did not. This fact surprisingly caused the first
graders less distracted by the fraction symbols and unexpectedly scored 30% higher
correct percentages than their second grader counterparts.

**Conclusion and Suggestion**

Based on the performance of solving fraction questions of the first and second
graders, we believe that in addition to the factors of maturation of the students, the
effects of mathematics textbooks on learning fraction for the beginners in the
elementary school is quite evident. The impact for the second graders on learning
fractions is summarized in three points as below.

1. The teaching materials of fraction for the beginners increased the performance of
the second graders on continuous quantity for equal dividing problems. The
correct percentage of this type of problems was 81.82% for the second graders, which was 17.7% higher than the first graders.

2. The teaching materials did not help the second graders consolidate the conceptual connections between ‘half’ and ‘1/2’. In the “half vs. 1/2” contexts for discrete quantities, if the number of unit in the content is the multiple of the denominator, then the first graders (doing the “half” questions) have higher correct percentages than the second graders (doing the “1/2” questions), ranging from 24% to 32%. Based on these findings, we can infer that the teaching materials do not emphasize the connections between “1/2” and “half”. There are some recommended ideas for teaching. After the concept “half means 1/2” has been introduced, more opportunities should be given to students to make an association between “half” and “1/2”. For instance, when students are solving “1/2” questions (e.g., “If a ribbon is cut equally into two sections, what is the fraction of each section to the whole ribbon?”), after students reply “1/2”, the teacher can ask for another way of expression to encourage students to come up with the answer of “half”. By providing students more opportunities to connect “half” and “1/2”, it should help them adopt the old concept of ‘half” from their daily life experiences to learn the new concept of “1/2”.

3. Under the current teaching materials of fraction, the solving strategies of the second graders are more likely to be distracted by the numbers in the fraction and/or the fraction symbol. As a result, they had poor performance (with correct percentages lower than 60%) on the “1/2” situation questions on discrete quantities, if the number of the unit in the content is the multiple of the denominator. We assume that this could be attributed to the fact that most current activities in simple fraction consist of a single number of unit fraction for the content. In this case, the denominator is the same as the number of the unit in the content or the parts of unit divided, while the numerator is the same as the number of partial quantity or the part divided. In other words, other than the fraction symbol, there are only two numbers (the numerator and the denominator) in the question. Consequently, students may develop the misconception that they only have to solve the questions by looking at the number of the numerator and denominator. They neglect to check whether the number of the unit is the same as the denominator. From the satisfactory performance of the first graders on the “half” context questions in which the number of the unit in the content is the multiple of the denominator (with the correct percentage between 75% to 82.43%), there is no doubt that the second graders are capable of doing the same “1/2” situation questions on discrete quantities as well as their first grade counterparts. Lastly, but not leastly, we strongly recommend that more questions in which the
content of the unit fraction with more than one object should be included in the teaching materials of fraction for the beginners.

References


Integrating Self-Directed Metacognitive Learning Strategies
Into a Learner-Centered Classroom

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Abstract

Abstract: ATLAS© (Assessing The Learning Strategies of Adults) is a self-scoring instrument developed to quickly identify the learning strategy preference group to which the respondent belongs. Navigators, Problem Solvers, and Engagers all use diverse learning strategies that are specific to their learning strategy preferences. Used as a guide by which to apply self-directed metacognitive processes in a learner-centered classroom, ATLAS© can facilitate the identification and integration of additional learning strategies into one’s individual “learning toolkit.” The corresponding ATLAS learner-centered lesson plan template provides teachers with strategies to address these diverse approaches to learning.

Introduction

Since the initial Secretary’s Commission on Achieving Necessary Skills (SCANS) report in 1991, industry executives continue to suggest that new hires graduating from a variety of university and college programs are ill-prepared for the demanding learning complexities experienced by new hires (ASTD, SHRM, 2009). The competency-based paradigm, found in technical fields and espoused over recent decades, focuses on preparing students for the work world with the skills and competencies needed as an entry-level employee (Thomson, 1991). The underlying outcome of competency-based education is to produce a society of “doers.” Graduates are showcased as competent, entry-level workers who are prepared to enter the workforce as productive employees. However, many programs lack a critical component and, as such, do not prepare students well for the one skill that will span their entire careers – that of
“learning how to learn.” The paradigm change toward an education that includes self-directed metacognitive processes is to expand upon the competency-based outcomes and to produce a society of “thinkers,” who not only possess competencies relevant to their field but who can also problem-solve in a multi-solution, real-world environment.

The Emerging Learner in Adult Education

Learner-centered teaching has been the locus of change as the field of adult education has evolved over the past decades to focus on adult learning rather than on adult education. J. Roby Kidd (1973) viewed this new emphasis on learning as the implication that adult education was finally moving from a field of practice toward a field of study.

As a field of practice, the emphasis in research and conceptual development had been on providing services, with learning viewed simply as one component of educational programs. But a shift to a field of study with the individual learner as the central concern opened whole new realms, such as self-directedness and individual development, to the field. (Fellenz & Conti, 1989, p.1)

The very term, adult education, suggests a focus on the educator; however, adult learning implies that the emphasis be directed to the learner. Jarvis (1983) recognized the beginning of this change and affirmed that "the aims of the educational process are about the learners rather than about the profession or the wider society" (p. 41).

Malcolm Knowles further developed this learner-centered concept, which has gained much acceptance in the field of adult education. He coined the term "andragogy" for this practice.

It has come to mean an educational mode in which the teacher is viewed as a facilitator of learning. Students are perceived to be self-directed. The relationship
between teacher and student is personal and trusting. The climate for learning is informal and collaborative. Teaching...can be described as dialogical. (Grubbs, 1981, pp.5-6)

A major part of the definition of andragogy stresses the growth of self-direction in learning and the use of experiences of the learner in the educational process (Knowles, 1968). Self-directed learning has been defined as the process by which adults take control of their own learning, in particular how they set their own learning goals, locate appropriate resources, decide on which learning methods to use and evaluate their progress (Brookfield, 1995).

Andragogy is based upon student-centered, self-directed methodologies. As students better understand their own learning processes (metacognition), the more empowered they are to enhance their personal learning. "Trends in adult education and cognitive psychology that advance the understanding of the individuality of learning experiences and that promote learner self-knowledge and control of personal perceptions and judgements provide for potential empowerment of the individual" (Fellenz & Conti, 1989, p. 23).

This notion requires that the learner be able to conceptualize his own learning process and be able to pay some attention to how he goes about learning and thrust himself into managing the process (p. 30). To become successful in this process, learners must also recognize distinct learning strategies, which are specific to their individual learning patterns and behaviors.

**Adult Learning Strategies**

McKeachie, 1978 defines learning strategies are those techniques or specialized skills that the learner has developed to use in both formal and informal learning situations. In any given setting, learners use various strategies to achieve their learning tasks. The strategies are external behaviors developed by an individual through experience with learning, which the
learner "elects to use in order to accomplish a learning task" (Fellenz & Conti, 1989, p. 7).

Learning strategies are "more a matter of preference; they are developed throughout life and vary by task. While the effectiveness of a particular style relates to the individual, the success of strategies depends more on the situation" (Fellenz & Conti, 1993, p. 4).

"The skills or techniques selected to accomplish the task often have a great influence on the success of that learning activity. Adeptness and insight in the use of learning strategies appears to be a significant part of one's ability to learn how to learn (Fellenz & Conti, 1993, p. 3). The learner's ability to select the appropriate learning strategies for a specific task may then well prove a fundamental educational tool to enhance mastery of material.

Fellenz and Conti have focused on the role of learning strategies used in real-life learning situations by adults. As such, they have identified five areas of learning strategies upon which to center their investigation. "The phrase real-life learning has been used to distinguish typical adult learning from the academic learning of formal situations that is usually spoken of as studying or educating (Fellenz & Conti, 1993, p. 4). This approach to learning strategies can be measured with the Self-Knowledge Inventory of Lifelong Learning Strategies (SKILLS) (Conti & Fellenz, 1991). This valid and reliable instrument consists of real-life learning scenarios with responses drawn from the areas of metacognition, metamotivation, memory, critical thinking, and resource management. Each of these five constructs consists of three learning strategies (Conti & Fellenz, 1991; Fellenz & Conti, 1989).

**The Metacognition Construct**

Metacognition is defined as the knowledge and control over one's thinking and learning (Brown, 1985). It is a conscious, reflective endeavour; it is one that requires the learner to analyze, assess, and manage learning activities. The three learning strategies involved in the area
of metacognition in the SKILLS instrument are Planning, Monitoring and Adjusting (Counter & Fellenz, 1993, p. 9).

The Metamotivation Construct

Just as metacognition addresses the concept of one's knowing and understanding one's own learning patterns, metamotivation deals with one's knowing and understanding how or why one is motivated to participate or remain in a learning activity. Metamotivation is the awareness of and control over factors that energize and direct one's learning (Fellenz & Conti, 1993, p. 12). The prefix "meta" is used to differentiate the concept from external motivation prevalent in traditional education institutions. Consistent with all metamotivational strategies, the affective domain is once again the dominant factor in learning with this component and includes the learning strategies of Attention, Reward/Enjoyment, and Confidence (Fellenz & Conti, 1989).

The Memory Construct

Memory is "the capacity of humans to retain information, to recall it when needed and recognize its familiarity when they later see it or hear it again" (Wingfield & Byrnes, 1981, p. 4). The process of learning and memory are so closely related and interdependent that it is often difficult to determine whether we are concerned with one phenomenon or two...one who does not learn has nothing to remember, and without memory there is no evidence of learning (Long, 1983, p.58).

Metamemory is practical knowledge acquired about our own memory capacities and what we must do to remember; or simply, what people know about how they remember. Learners can improve their memory performance and the efficiency of their learning by developing metamemory skills; thus, difficulties encountered in learning may not be due
to the inabilities of the learner but rather may be the result of not using the appropriate
memory strategy for the learning task (Wingfield & Byrnes, 1981).

The mental activities used to store, retain, and retrieve knowledge are called memory
processes. These processes are accomplished either through internal or external memory
strategies. Internal memory aids are strategies in which all efforts to remember are completed by
the individual within their own thought processes. External memory techniques rely on the
interaction of the mental processes of the individual and the manipulation of the environment to
insure recall (Paul & Fellenz, 1993, p. 23). The memory strategies used in the SKILLS model
include Organization, External Aids, and Memory Application.

The Critical Thinking Construct

Critical Thinking is a reflective thinking process utilizing higher order thinking skills in
order to improve learning. The SKILLS model of Critical Thinking strategies is based on
Brookfield's (1987) four components: (a) identifying and challenging assumptions, (b)
challenging the importance of concepts, (c) imagining and exploring alternatives, and (d)
reflective skepticism. The SKILLS Critical Thinking strategies, based on these components
include Testing Assumptions, Generating Alternatives, and Conditional Acceptance of general
knowledge.

The Resource Management Construct

Learning strategies that lead to effective use of resources can have a positive effect on the
learning process (Fellenz & Conti, 1993, p.37), and management of these resources is an
important aspect in finding solutions to real-life, everyday problems. The number and variety of
sources available imply a need to choose wisely so the teaching of learning strategies should
include "techniques for identifying and acquiring appropriate learning resources" (Fellenz &
Conti, 1989, pp. 4-5). The SKILLS model includes the learning strategies of Identification, Critical Use, and Use of Human Resources.

**ATLAS© (Assessing The Learning Strategies of AdultS)**

The ATLAS© Instrument arose out of a need for a tool that was easy to administer, that could be completed rapidly, and that could be used immediately by both facilitators and learners. The instrument which was created has been entitled ATLAS (Assessing The Learning Strategies of AdultS). ATLAS utilizes a flow-chart design. Items are printed on a standard-sized, 8.5" x 11" page. Sentence stems, which are in the top box on the page, lead to options in other boxes which complete the stem. Connecting arrows direct the respondent to the options. Each option leads the respondent to another box which either instructs the respondent to proceed to another box or which provides information about the respondent's correct group placement. Depending upon reading level, ATLAS can be completed in approximately one to three minutes. Although it appears to be a very simple instrument, its contents are based on powerful multivariate statistical procedures (Conti & Kolody, 1998).

**ATLAS© Groups of Learners**

The following profiles of the three groups of learners are the results of qualitative and quantitative research methods including cluster analysis, discriminant analysis, and analysis of variance conducted with each variable when the participants were grouped by clusters. Comments from learners within each cluster collected during focus groups and personal interviews are also included to enrich descriptions.

**Navigators**

Navigators are focused learners who chart a course for learning and follow it. They are conscientious, results-oriented high achievers who favor making logical connections, planning
and organizing activities, and who rely heavily on the learning strategies of Planning, Attention, Identification and Critical Use of Resources, and Testing Assumptions. Navigators prefer a structured, well-organized learning environment in which they have the opportunity to see the whole picture, complete with objectives, expectations, and deadlines prior to beginning the learning activity.

**Problem Solvers**

Unlike Navigators, Problem Solvers prefer ill-defined learning activities that promote experimentation and that allow processes to develop throughout the project. Rather than a structured plan, Problem Solvers reported a preference to “figuring it out as they go along.” Problem Solvers scored high in all three areas of Critical Thinking strategies which includes Testing Assumptions Generating Alternatives and Conditional Acceptance.

**Engagers**

Engagers seek out learning activities that provide the greatest opportunity for engaging in a meaningful connection: interaction and collaboration are major motivators for entering into the learning task. Engagers scored high in the metamotivational learning strategies of Reward/Enjoyment and Confidence. The affective domain is the dominant factor in Engagers’ learning. In their constant pursuit of learning activities that enhance understanding of themselves and their world around them, Engagers monitor the value of the learning experience and the level of motivation on an economy of scale to determine if the expected reward is worth the effort. When an Engager makes a decision to enter into a learning activity, it is usually well contemplated and a commitment is made to achieve the goal originally intended. In evaluating their learning, the Engager’s focus is on meeting their internal needs rather than meeting external standards. Because of the great emotional investment in their learning, Engagers take great pride
in their work and often their self-worth is determined or validated by their accomplishments (Conti & Kolody, 1997).

**Addressing Individual Differences in a Learner-Centered Classroom**

It is important to note that, as with any concepts that have the potential of labeling people, care must be taken not to stereotype or to make assumptions regarding learners in any one specific learning group. Certainly, individual differences will appear within the groups. The commonalities found, however, can provide useful insights to help learners better understand how they go about the learning process. For teachers, these insights can be beneficial in the selection of appropriate methods and techniques used to focus understanding, discussion, and reflective thought about the learner (Kolody & Conti, 1996).

By assessing the preferred learning strategies of an individual, it is also advantageous to determine those learning strategies not commonly used by the learner. Once these strategies have been identified, teachers can provide instruction and examples to help learners use alternate learning methods (Kolody, 2003). By providing learners with additional metacognitive learning strategies, this knowledge can be an important element in addressing individual differences throughout the learning process.

**Summary**

Effective teachers help learners build a “learning toolkit” that contains a variety of learning strategies (tools). Teachers can then coach the learners in ways to identify and select the most appropriate “tool” or learning strategy for each particular learning task. Self-directed, autonomous learners are then well-equipped with a set of learning strategies in their “learning toolkit” and possess the ability to employ appropriate learning strategies for specific learning objectives. These metacognitive processes can then extend beyond the classroom and be applied
to the multi-solutioned complexities within workplace learning opportunities found throughout one’s career.

References


Peer Assessment and Characteristic of Groups in the Case a Study Support System is Conceived of Through Group Learning

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The purpose of this practice is to contact peer assessment and remarks through group learning, and to deepen an understanding of intelligent CAI which is the last study item in the knowledge engineering which is an elective subject.

First, in order to give fair knowledge, the lecture of conventional knowledge transfer type was carried out in the first seven times. The system which assists learning a subject which students decided was conceived through group learning in the second six times.

On the first week of the group learning, contents and functions, etc. of a study support system were made to discuss by brainstorming. On the second week, students wrote the content in the tag and stuck it on simili paper. On the third week, students were made to arrange the tags on the simili paper according to items of the system and explain it to other groups. Then, the slide was created about the conceived system. Presentation was carried out about the contents of which each group conceived to share the other groups' knowledge. Lastly, a student was required to write a report.

Then, we analyzed some questionnaires which evaluate the activities. We found that understanding of the learning contents was deepened through group learning, and consciousness changed so that group activity might be performed very enthusiastically. Besides, students came to think that series of activities raised the skill needed in case of solving one problem. The activities which were useful for change of consciousness became clear. It turned out that the developed class was valid.

Moreover, principal component analysis was conducted for 17 variables related to assessment activities. The first and second principal components were named "the vigor of activity" and "the degree which is not good as for evaluation". 23 groups were classified into the following four clusters based on principal component scores: Three groups who are active with sufficient evaluation, seven groups who are active with insufficient evaluation, eight groups who are not so active with insufficient evaluation, and five groups who are not so active with sufficient evaluation.

1. Introduction

It is important not only to be taught knowledge, but also to think it with their heads, to make it by themselves, and to get to know the pleasure. They understand and search by their heads and hearts, and experience excitement of study. For deepening of thought and building of knowledge as experience, it is said that experience of movement from the heart is important [11].

It is said that experience repeating to compare with opinions of others and to analyze them by discussing among several learners is important. Adachi et al. practiced group activity in a comprehensive task and exercise according to groupware [2],[3],[5]. They reported there are two factors which are to understand opinions and grasp work, and to manifest opinions and execute work in evaluations for group activities[1]. Kaneda et al. performed group learning in robot-building, and reported that importance of cooperative work could be made to understand, and importance of communication and the difficulty of making an organization could be made to learn [4]. Nishino et al. practiced the information education by group learning, and reported that the group with higher evaluation for product had higher cooperative or exogenous attitude [8]. Nishinosono is developing guidance which makes students conceive of ideal school on the course of "instructional methods and technology" by learning in teams as a knowledge creation course, in order to train teachers who can take in solving problems, creating knowledge initiatively [9],[10]. These are not what are carried out by group learning through taking up contents which are difficult to understand among courses. These are not the practice which spares a part of course, and carries out by group learning, either. Activity which is useful for change of consciousness of the group learning has not been clarified yet.

It is thought that group learning brings contact for peers' views and remarks, multilateral standpoint, and deep understanding [12]. Furthermore, the group learning causes ideas for an intellectual functioning.
Then, we consider improving the class on knowledge engineering by the group learning [7]. The conventional knowledge transfer type lecture was carried out for the first eight weeks. Fair knowledge was taught, and the class which makes students conceive of a learning support system by group learning was designed for the second six weeks. Students were required to share investigation, to discuss a learning support system which assists learning, and to conceive of the system. Students wrote what they thought of on a sticky. The sticky may be stuck on simili paper and arranged according to items of the system. Each group explained the system conceived to other groups using simili paper. The other groups assessed it. Each group required to put together by the slide of PowerPoint through checking up the evaluation. Presentation was carried out about the contents of which each group conceived to share other groups' knowledge. After practicing such group learning, we analyzed some questionnaires which evaluate activities. We find relationship with the number of tags on simili paper and rating values. Characteristics of groups based on contents of simili paper and evaluations are checked for knowing how to lead groups. We know effects from the skill improved. The reason which brings the effects is found from activities which were useful for it.

2. Instructional Design and Method

The interest course is knowledge engineering which is an elective subject in the second term for the second grade student in department of information science in A university. It was carried out as shown in Table 1. The lesson for 90 minutes was performed 13 times at one week. However, it extended for about 30 minutes on the presentation in the 13th week. Conventional lessons with face-to-face were carried out through projecting slides on the screen until the sixth week. The midterm examination was carried out at the seventh week. At the 8th week, an outside lecturer gives an academic lecture about the current situation on the study support system processing knowledge.

Ninth to 14th weeks is a period for which the study support system by the group learning is conceived of. The theme in this paper was conducted among the period. A report was submitted at the 14th week. The final examination was carried out at the 15th week. Both lectures and group learning were performed by one teacher. However, since the presentation was made at the 13th week at the two classrooms, three students assisted as a chairman and clock charges.

The purposes of this course which was carried out at the ninth to 14th week are as follows: (1) the content of the lectures in the first half is supplemented through a class, "conceiving of a learning support system" by the group learning; (2) groupthink is fostered by causing interaction among students; (3) students who can take in solving problems, creating knowledge is fostered.

A group consists of four students. During group learning, the teacher went around a classroom appropriately. Then he asked questions and gave instructions so as not to become a bystander sometimes. Students were required to contribute some kind or another to the system conceiving by the group. Communication was taken mutually and their idea was expressed in the group. The teacher told that they could respect, compare, develop, extend, and raise each peer's opinions in order to enable them to conceive of the system.

The six weeks in the last half are called the first to sixth time in the following. Scenes of the lesson are shown in Figure 1. An idea is added and written on a sticky at the first and second times. The contents conceived in the end of the second time are summarized on the simili paper. Until the second time, divergent thinking is given priority to so that as many ideas as possible are made to propose. The contents are summarized in the end phase. The system is explained using the simili paper at the third time. Then mutual evaluation is carried out, and contents conceived are modified by referring the evaluation. It summarized through convergence thinking. Slides about the contents are created in PC room at the fourth time. Presentation is carried out in front of everybody at the fifth time, and information about a study support system is shared. Students copy report framework document file which put in explanation and the table of each item from the folder in the server. They are required to describe what were required for each item. A report is divided into items which are written in collaboration with students in the group and are written privately. It is written at the sixth time. It is submitted at the 15th week.

Twelve kinds of evaluation sheets were created and distributed suitably.Self-group evaluation and peer group evaluation were carried out. In order to know the situation of discussions of each group, a sheet of "records in group for discussions" was

<table>
<thead>
<tr>
<th>No.</th>
<th>Lesson contents</th>
<th>Activities, discussion contents and so on</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About Knowledge Engineering</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Knowledge representation</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Knowledge base</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CAI</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Intelligent CAI</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Case of intelligent CAI</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Midterm examination</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Academic lecture about the current situation on the study support system</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1. Discussion</td>
<td>Describing title and discussing contents for study support system</td>
</tr>
<tr>
<td>10</td>
<td>2. Discussion</td>
<td>Discussing contents for study support system</td>
</tr>
<tr>
<td>11</td>
<td>3. Explanation by simili paper</td>
<td>Explaining by simili paper and discussing the contents</td>
</tr>
<tr>
<td>12</td>
<td>Creation of slides</td>
<td>Creating and correcting slides</td>
</tr>
<tr>
<td>13</td>
<td>Presentation</td>
<td>Preparing by slides</td>
</tr>
<tr>
<td>14</td>
<td>Writing of report</td>
<td>Writing report</td>
</tr>
<tr>
<td>15</td>
<td>Final examination</td>
<td></td>
</tr>
</tbody>
</table>
Discussions in each group

Explanation by simili paper  Presentation by slides

Figure 1. Scenes of the lesson

distributed each time. In order to know change of consciousness by group learning and discussion, a sheet of "personal record for discussions" was distributed each student. These were submitted in the end of each class.

3. Analysis of Findings and Discussion

Five kinds of results investigated were analyzed in order to know the learning effects gained by the group learning described in Chapter 2. Changes of "personal record for discussions" in five times will be analyzed. We know the grade which worked at group learning and the good quality of how to advance talks in order that a student may conceive of a study support system from the result. The change of the consciousness is found by analyzing investigation for the degree of the consciousness related to skills of 29 items at the first, third and fifth times. We know activities which are useful for change of consciousness from relationship between consciousness and activity.

The significant difference will be judged at the 5% significance level.

3.1. Relationship with the number of tags on simili paper and rating value

The left side in Table 2 shows how simili paper was arranged. The group is arranged in the descending order of the first principal component every four clusters based on principal components analysis. The column of "rating value by other groups" means the value of the peer assessment about explanation using simili paper, content of a study support system, and presentation using PowerPoint, respectively.

While every group discussed, the tag whose size is 75mm in width by 50mm in height was put on simili paper in order to summarize the contents. The number of tags in a group was in the range of ten to 75 sheets, and the average was 34.0 sheets. 90 students attended any class of the groups study. 75 students stuck the tags on simili paper in discussions. The average number of tags for every group was 8.8. The maximum and minimum numbers of tags were 25 and zero, respectively. 15 students did not offer an opinion at all. It is suggested that these students will not much contribute to conceive the system for the group which they belong to.

Drawing figures is helpful to develop an idea, because students clarify overall outlook, or can think concretely. The number of the tags with which the figure was drawn is shown on the column of "number of figures". Here, figures mean what draws window configuration, learning process, and student models in charts. The average number of tags describing a figure was 4.5. The number of figures for the group No.16 is 36 and stands out among them. 13 groups which use the figure are 56.5% of the whole.

Since the number of tags stuck on simili paper represents the number of opinions in discussions, a group with many tags is considered that the group activity succeeded. The correlation coefficients r of the number of tags with the average number of figures, explanation, and evaluation for a system by other groups are $r=0.77^{***}$, 0.44*, and 0.43*, respectively. They have correlation significantly at significant levels of 0.1% and 5%. The correlation coefficients between the number of figures and an average evaluation for the explanation by simili paper are $r=0.43*$. The correlation is significant at 5% of a significance level. These facts show that the explanation of the group which drew many figures on tags is more intelligible. It is shown that the group which uses figures explains concretely and acquires higher evaluation by the other groups.

The teacher evaluated the part of a report written together, and the part written in an individual in five rating values. The correlation coefficients of the number of tags with the rating value of cooperation part of a report, the rating value of an individual part, and the number of characters in consideration ($1/1000$) are $r=0.76^{***}$, 0.59**, and 0.46*, respectively. They had correlation significantly at 0.1%, 1%, and 5% of significant levels. It is shown that the group which had stuck more tags on simili paper had higher evaluations of a cooperation part and an individual part in a report and more characters of consideration in the report. This showed that more ideas were proposed by the group with more tags. It is suggested that multilateral standpoint and deep understanding can be caused by expressing, comparing, agreeing, denying, and analyzing others' opinions, and by repeating discussions. Moreover, it is suggested that the group with smooth group activities at the beginning stage could also make role-sharing of report smoothly, could finish the part...
3.2 Characteristics of Groups based on Contents of Simili Paper and Evaluations

A variable which has almost no amount of information of the principal component and has no effect in characterization of a group was removed from variables of the object to conduct the analysis. In order to know characteristic of the group, principal component analysis was performed for 17 items shown in Table 3 using the correlation matrix. The 17 items are the number of tags on simili paper, the number of figures, evaluations by other group and self-group for explanation using simili paper, evaluation by other groups and self-group for a system, evaluation by other groups and self-group for presentation, the number of submission times of a slide, the rating value of cooperation part in a report, the rating value of an individual part, and the number of characters in consideration, and the rating values of the first to the fifth time in personal records for discussions. However, only one person in the group No.1 attended at the fifth time. The group did not submit the file of the slide, and did not give a presentation. Therefore, the rating scale values by other groups are 1, self-group evaluation at one attendee is 1, and the number of submission times of the slide is 0 time for group No.1.

As a result of principal component analysis, the amount of information of a component 1 is 39.7%, and the amount of information of a component 2 is 15.4%, and these two components will have 55.1% of information on data. A coefficient in the first component is positive about all items in the readjusted component matrix. The following coefficients are greater in positive: the number of tags in the simili paper (0.75), the number of figures (0.55), rating value for explanation using simili paper by other groups (0.73), rating value for a system by other groups (0.77), rating value by self-group (0.79), rating value for presentation by other groups (0.64) and by self-group (0.67), personal records at the third and fifth times (0.72, 0.82), rating value for cooperation part for a report (0.69), and rating value for individual part (0.56).

The following coefficients in the 2nd component were greater in negative: six items of rating value by other group and self-group, and rating value for explanation using the simili paper by other groups (-0.57), rating value for a system by other groups (-0.53), number of characters for considerations (-0.50), and the rating values for personal records at the first time (0.71). Coefficients of principal component are shown in parentheses following above item. The first characteristic is named "vigor of activity" from coefficients of the first principal component. The second characteristic is named "non-goodness of evaluation" from coefficients of the second.

Using the first and the second principal component scores, they are classified into four clusters by cluster analysis and a scatter plot is shown in Fig. 1. The first cluster was groups No.16, 17 and 18 shown by O mark in the lower right. The second cluster was groups No.3, 4, 5, 6, 12, 19 and 21 shown by □ mark in the upper right. The third cluster was groups No.1, 2, 7, 8, 9, 11, 13 and 22 shown by x mark in the upper left. The fourth cluster was groups No.10, 14, 15, 20 and 23 shown by △ mark in the lower left.
This figure shows the following. The first cluster (O) is groups who are active with sufficient evaluation. The second cluster (□) is groups who are active with insufficient evaluation. The third cluster (x) is groups who are not so active with insufficient evaluation. The fourth cluster (△) is groups who are active with sufficient evaluation. The second cluster (□) and fourth cluster (△) have fewer tags and fewer figures than the first and second groups. The average attendance rate of group members of the first and second clusters is 0.88 and 0.91, respectively. The average attendance rate for the third and fourth cluster is 0.73 and 0.74, respectively. It turns out that the groups belonging to the third and fourth cluster are lower average attendance rate.

Thus, whether group activities are active or not is found by looking at the contents of the simili paper in which the result of discussions are arranged. When students summarize the result of groups learning into simili paper, it is thought that it is better to teach how these contents are improved well. Furthermore, it is thought that a teacher should devise so that the attendance rate may also become high.

3.3. Change of the consciousness related to skill

The degree of the consciousness related to skill of 29 items was investigated at the first, third and fifth times (3). An analysis of variance in one-way layout which corresponds for each item carried out for the rating values of 29 items about three times in Table 4. The items with significant differences or significant tendency are shown in Table 4. The items are arranged in descending order of F-ratio. The significance level is shown when the significant differences are recognized. Then, the multiple comparison was carried out about three combination of the rating values among the first, third and fifth times by the LSD method. The results are showed in columns of 1-3, 1-5, and 3-5, respectively.

The analysis of variance was carried out for the rating scale values in each time. The result is shown in bottom row of Table 4. Since the F ratio is

### Table 3. Change of the consciousness related to skills

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating value</th>
<th>Analysis of variance</th>
<th>Multiple comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First</td>
<td>Third</td>
<td>Fifth</td>
</tr>
<tr>
<td>(1) Interest in computers</td>
<td>3.8</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>(2) Understanding of computers</td>
<td>3.1</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>(3) Technical skills with computers</td>
<td>2.9</td>
<td>3.1</td>
<td>3.2</td>
</tr>
<tr>
<td>(4) Methods of computer use</td>
<td>3.0</td>
<td>3.9</td>
<td>3.1</td>
</tr>
<tr>
<td>(5) Skill in clarifying problems</td>
<td>2.8</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>(6) Skill in mapping out a plan</td>
<td>2.9</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>(7) Deepening of understanding knowledge</td>
<td>3.0</td>
<td>0.9</td>
<td>3.2</td>
</tr>
<tr>
<td>(8) Skill in studying independently</td>
<td>3.3</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>(9) Skill in collecting information</td>
<td>3.1</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>(10) Skill in sorting information and necessary data</td>
<td>2.9</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>(11) Skill in analyzing information</td>
<td>2.9</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>(12) Skill in expressing self-opinions in sentences</td>
<td>2.8</td>
<td>3.3</td>
<td>1.0</td>
</tr>
<tr>
<td>(13) Skill in expressing through non-verbal media</td>
<td>2.6</td>
<td>0.9</td>
<td>3.0</td>
</tr>
<tr>
<td>(14) Skill in creating simple explanations</td>
<td>2.1</td>
<td>0.8</td>
<td>2.9</td>
</tr>
<tr>
<td>(15) Skill in giving a presentation</td>
<td>2.3</td>
<td>0.9</td>
<td>3.0</td>
</tr>
<tr>
<td>(16) Skill in understanding others' explanations</td>
<td>2.8</td>
<td>0.9</td>
<td>3.1</td>
</tr>
<tr>
<td>(17) Skill in communicating with others</td>
<td>2.9</td>
<td>0.9</td>
<td>3.2</td>
</tr>
<tr>
<td>(18) Skill in accurately judging self-evaluations</td>
<td>3.2</td>
<td>0.9</td>
<td>3.3</td>
</tr>
<tr>
<td>(19) Skill in accurately judging others' opinions</td>
<td>3.3</td>
<td>0.9</td>
<td>3.1</td>
</tr>
<tr>
<td>(20) Skill in improving and correcting</td>
<td>2.9</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>(21) Skill in performing detailed investigations</td>
<td>3.1</td>
<td>1.0</td>
<td>3.4</td>
</tr>
<tr>
<td>(22) Skill in completing research</td>
<td>2.9</td>
<td>1.0</td>
<td>3.5</td>
</tr>
<tr>
<td>(23) Skill in cooperating with each other</td>
<td>3.2</td>
<td>1.0</td>
<td>3.1</td>
</tr>
<tr>
<td>(24) Sense of fulfillment</td>
<td>3.3</td>
<td>1.0</td>
<td>3.4</td>
</tr>
<tr>
<td>(25) Sense of accomplishment</td>
<td>3.1</td>
<td>1.0</td>
<td>3.4</td>
</tr>
<tr>
<td>(26) Skill in solving one's own problems</td>
<td>2.9</td>
<td>0.8</td>
<td>3.2</td>
</tr>
<tr>
<td>(27) Skill in organizing information</td>
<td>2.7</td>
<td>0.9</td>
<td>3.2</td>
</tr>
<tr>
<td>(28) Skill in thinking independently</td>
<td>3.1</td>
<td>1.1</td>
<td>3.3</td>
</tr>
<tr>
<td>(29) Skill in creating something</td>
<td>2.7</td>
<td>1.1</td>
<td>3.4</td>
</tr>
</tbody>
</table>

*** p<.001, ** p<.01, * p<.05, + p<.1
14.8, significant difference was recognized. Then, after multiple comparisons were carried out, the significant difference was recognized among the first time vs. the third time and the first time vs. the fifth time. However, no significant difference is recognized between the second and the third time.

Next, the multiple comparisons were carried out for the average rating scale values of each item, among the first vs. third time, the first vs. fifth time, and the third vs. fifth times. The number of items with significance difference was nine, fifteen and one, respectively. This showed that consciousness heightened by gradation with the first time to the fifth time. However, the improvement between the third time and the fifth time was slightly one until the third time. The following can be considered as this cause. After the explanations by simili paper finished at the third time, the study supports system of which individual group conceives will be fixable. Then, referring to advice by other groups, we required students to correct them. At the fourth time, they arranged and summarized it to a side. However, since contents of the study support systems were not modified greatly, it seems that there would be little improvements of consciousness.

Students came to think that many skills needed in case of solving one problem rose since fifteen consciousness is improved among 29 consciousness for the first vs. fifth time.

3.4. Activity which is useful for change of consciousness

In order to know which activity will improve the consciousness related to skill from relationship between consciousness and activity, some activities which are useful for it were filled for each consciousness. When investigating the consciousness related to the skill at the third time and the fifth time, the 26 activities are written in survey sheet. Students chose activities useful for each consciousness among them. The activities useful for improving the perception of skills were totaled by making a cross table.

The number of the activities enumerated at the third time and the fifth time was 2916 and 4488, respectively, and was 7004 in total. The numbers at the third time and the fifth time were united as the cross table for the consciousness and activities.

Many cells in the table had less frequency than five. The cluster analysis was conducted about the table using Ward’s method with perception as a variable, with the activity as a case. As a result, the activity was classified into next four groups.

The group I consists of (16), (17), (18), (19), (20), (26), (28) and (29). It was referred to as ‘consciousness about the problem-solving skill in thinking and improving.’

In the same way, the group II consists of (6), (7), (8), (9), (11), (12), (13), (14) and (15). It was referred to as ‘consciousness about the skill in expressing and explaining.’

The group III consists of (10), (21), (22), (23), (24) and (25). It was referred to as ‘consciousness about communications and cooperation.’

The group IV consists of (1), (2), (3), (4) and (5). These numbers are the consciousness shown in Table 4. It was referred to as ‘consciousness on computer.’

Frequency in the above-mentioned cross table is added up for every cluster about consciousness and activity. Results are shown in left of Table 5. Each expected frequency of cell in Table 5 was more than 70. Therefore, this table was considered to be $4 \times 4$.
contingency table. The $\chi^2$ test was conducted for this table. As a result, the frequency deflection was recognized ($\chi^2 (9) = 1125.8, p<.001$). Therefore, a result of residual analysis is shown in the lower left of Table 5. Significant deflection is shown by a * mark in the cell of the lower right of Table 5. Activities useful for improving the consciousness are explained by significantly cells with greater frequency in the following.

The group 1 "activity related to presentation" is significantly useful for improving the group III 'consciousness about the skill in expressing and explaining.'

The group 2, 'activity related to evaluating,' is significantly useful for improving the group I 'consciousness about the problem-solving skill in thinking and improving.'

The group 3, 'activities related to investigating and summarizing,' is significantly useful for improving the group II 'consciousness about the skill in expressing and explaining.'

The group 4, 'activities related to computer operation', is significantly useful for improving the group IV, 'consciousness on computer.'

Table 5. $\chi^2$ test and residual analysis about the cluster of consciousness and activity

<table>
<thead>
<tr>
<th>Cluster of consciousness and activities</th>
<th>$F$</th>
<th>$P$</th>
<th>$F$</th>
<th>$P$</th>
<th>$F$</th>
<th>$P$</th>
<th>$F$</th>
<th>$P$</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1: consciousness about the skill in expressing and explaining</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
</tr>
<tr>
<td>Group 2: consciousness about the skill in investigating and summarizing</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
</tr>
<tr>
<td>Group 3: consciousness about the skill in evaluating</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
</tr>
<tr>
<td>Group 4: consciousness on computer</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
<td>0.9</td>
<td>0.01</td>
</tr>
</tbody>
</table>

### 4. Conclusion

The course in which students construct and create knowledge was conducted by group learning. Information gathering, discussing and conceiving study support systems by group learning caused many interactions among students, such as the inside of a group, and between groups, and the inside of a class. One teacher designed, taught and practiced the course in which about 90 students participated. Although the teacher could not take much time to respond to one group for only one, it is thought that desired purpose has been almost attained.

Results of analyzing the information acquired by this practice showed as followed. Students worked through group learning for the much time of more than 23 hours. That raised motivation, pleasure, planned development, confidence, the explicitness of doing, and usefulness of discussions by causing interests in study support systems. Furthermore, since an opportunity to reflect them could be obtained, the systems which they conceived came to be able to be evaluated objectively.

The followings were found by this practice:

1. The group which was able to perform activities, such as thinking by themselves, in discussions positively, sharing work actively could conceive better system, and was properly appreciated.

2. It seems that difficulty, pleasure, etc. of working in cooperation were able to be known.

3. The group which uses figures explains concretely and acquires higher evaluation by the other groups.

4. More ideas were proposed by the group with more tags. It is suggested that multilateral standpoint and deep understanding can be caused by repeating discussions.

5. Since students who worked positively discussions deepen their thoughts, their understanding and ideas over a study support system are deep and their contents of reports are also substantial.

6. Whether group activities are active or not is found by looking at the contents of the simili paper.

7. The consciousness heightened by gradation with the first time to the fifth time. Students came to think that many skills needed in case of solving a problem rose.

8. Activities which are helpful for improvement of consciousness also became clear as follows: The 'activity related to presentation' is significantly useful for improving the 'consciousness about the skill in expressing and explaining.' The 'activity related to evaluating' is significantly useful for improving the 'consciousness about the problem-solving skill in thinking and improving.' The 'activities related to investigating and summarizing' is significantly useful for improving the 'consciousness about the skill in expressing and explaining.' The 'activities related to computer operation', is significantly useful for improving the 'consciousness on computer.'

We should consider ingenuity in the future so that individual or groups who could not be familiar with group learning and did not do positively participate might not appear.

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### References

1. Process leaders in equality and diversity – reflections from an ongoing action research model.
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4. School of Education, Culture and Communication, Mälardalen University, Box 883, S-721 23 Västerås, Sweden.
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The Process Leadership Education is part of an EU/EFS financed project, JämBredd, owned by Mälardalens University, Sweden. It is an advanced education for leaders focusing on change processes in multicultural workplaces. The whole project started in February and will ended in December of 2010.

The education consist of nine different theme modules with including lectures by various scholars in gender and diversity issues, seminars, group works and role plays. Around this education is run a research project to examine opportunities and obstacles in intercultural activities. Research methodology is action research and the first step is the implementation of an evaluation of the project’s mid-term. 10 process leaders were interviewed on questions mainly concerning: General experience of the education? How is your own participation in the project? Intentions after completion education?

The result show most participants are very satisfied so far: The education gives time for reflection when it lasting for almost a year. It gives an increasing awareness in dealing with gender and diversity issues. It gives more self-confidence. There is a strength to gain knowledge and tools to support their employees. They also see resistance.
Title: Improving high school reading comprehension through practices from the Reading Apprenticeship Approach: an action research trial project among French-speaking students in Montréal

Topic Area: Reading Education

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In high school, reading holds a prominent place in the lives of students. High school students must learn to read a variety of texts. High school teachers expect students to have the necessary reading skills to read course materials, but many students have inadequate reading levels to do so. Although the scientific literature in the field has shown the importance of teaching reading comprehension at the secondary level, the fact remains that few reading comprehension strategies are taught to students, and teachers in the Montréal area adopt, in this regard, conventional teaching practices (Van Grunderbeeck et al., 2004). Moreover, secondary teachers feel helpless when it comes to teaching reading comprehension strategies. The aim of this action research project was to provide eight French-language special education teachers, working with 230 students, with training in the principles and practices of the Reading Apprenticeship Approach (Schoenbach, Greenleaf, and Cziko, 1999), developed in California, and to test these in the context of secondary education reform in the province of Québec (Canada). The data for the study was collected among students using a pre and post comprehension test and a questionnaire about their reading strategies after seven months’ trial. The results obtained in terms of comprehension among all students combined were positive but not significant. However, in examining the differences between strong, average, and weak students at pretest, we see significant progress in weak students at posttest. Although the teachers applied only some of the components at different rates and with varying degrees of quality, all students are now aware of the importance of reading strategies for solving comprehension problems and mention using certain ones in particular, which may differ from those used by students participating in the study. In addition, qualitative data reveals that students are more motivated to read and are more engaged in class. Teachers, for their part, say they feel more competent to teach reading comprehension and better equipped to apply this new training program in Québec schools. These results, in addition to improving the performance and engagement of weak students, contribute to increasing the body of research on the testing of the Reading Apprenticeship Approach in different cultural and linguistic contexts. Finally, these positive results can reassure teachers and principals in the Montréal area and other areas of Québec about the choice of this approach for improving teacher competence and student achievement in reading at the secondary level.
The Effects of Concept Mapping Strategy on Statistics Anxiety and Statistics Achievements: The Moderating Effect of Students’ Learning Styles

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1. Introduction

Statistical knowledge is applied commonly in the academic fields as well as in practice. As a result more and more undergraduates, or even postgraduates, of different backgrounds are required to include statistics in their compulsory curriculum (Mundfrom, Shaw, Thomas, Young, & Moore, 1998; Onwuegbuzie & Leech, 2003).

However, for many undergraduate and even postgraduate students, statistics is among the most formidable courses in curriculum plans (Feinberg & Halperin, 1978; Onwuegbuzie & Leech, 2003; Schacht & Stewart, 1990). Moreover, many researches indicate that when the undergraduate and postgraduate students encounter such concepts, questions, cases, instructional or test situations as are concerning statistics, they are likely to develop severe statistics anxiety (Feinberg & Halperin, 1978; Onwuegbuzie, 1998; Onwuegbuzie & Leech, 2003; Zeidner, 1991). These research results evidently demonstrate that statistics anxiety is nowadays a prevalent issue deeply vexing the undergraduate and postgraduate students. Such negative outputs may debilitate learning. It has been proved in a great deal of literature published that statistics anxiety or statistics test anxiety is negatively associated with learning (Lalonde & Gardner, 1993; Onwuegbuize & Seaman, 1995; Ziedner, 1991).

However, there is not yet much literature expounding on use of instructional strategies for relieving statistics anxiety. Huntley, Schneider, and Aronson (2000) and Pan and Tang (2004, 2005) indicated that to mitigate statistics anxiety, it is necessary to develop more innovative instructional strategies. Therefore, this study is intended to apply concept mapping strategy in the course of applied statistics and to study whether or not it is conducive to reduce statistics anxiety and improve statistics learning.

Claxton and Murrell (1987) and Sarasin (1999) point out that it is necessary to consider different learning styles between students when teachers use various teaching methods. Furthermore, Budd (2004) indicates that auditory learning style learners might be able to gain benefit through a traditional teaching method while visual learners do well with support of visual sense. However, tactile/kinesthetic learners are able to learn through activities. Oughton and Reed (2000) shows learners of different learning styles demonstrate differently on the number of concepts, nodes, and links in concept maps as well as the depth of concept maps. Therefore, it can be inferred that using the concept mapping strategy should have different effects on students of different learning styles. However, there have been relatively few research studies which have compared the usefulness of concept mapping for students with different learning styles, especially in statistical education. This study has therefore attempted to investigate whether the concept mapping strategy’s effect on reducing students’ statistics anxiety and improving their academic achievement is affected by
students’ learning style types.

2. Method
2.1. Experimental design and participants

The experiment employed a non-equivalent pretest-posttest control group design. The participants in this study were two classes sophomore students enrolled in a business and economics statistics course at the National Changhua University of Education in Taiwan. The two classes were randomly assigned to one experimental class (i.e. concept mapping class) and one control class (i.e. traditional teaching class). The dependent measures were the statistics achievement post-test score and the statistics anxiety post-test score. Since the subjects in the two classes might have different prior knowledge and statistics anxiety, a pre-test measure of statistics knowledge and statistics anxiety served as covariates for the dependent measures. The teacher and the textbook for both classes were the same to reduce confounding effects. None of the students reported previous experience in concept mapping.

2.2. Instruments

A statistics achievement pre-test was applied to evaluate the students’ initial statistics knowledge, and a statistics achievement post-test was administered to measure the experimental effect on achievement. The two achievement tests were developed from the question database of the textbook. Both instruments included 10 multiple-choice and four calculation questions. The students scored four points for each correct answer to the multiple choice questions, and 10 points for each correct answer to the calculation questions. The pre-test range included chapters one through three of the textbook, and the post-test range included chapters four through seven. The KR (Kuder-Richardson) 20 reliability coefficients of both instruments were 0.83 and 0.88, respectively. The subjects were asked to complete both tests in three hours, under test conditions.

Statistical Anxiety Rating Scale (STARS) was used to evaluate students’ statistics anxiety. This survey developed by Cruise and Wilkins in 1980 contains 51 items with 5-point Likert scale (1= strongly disagree; 5= strongly agree). In Cruise, Cash, and Bolton’s (1985) research on statistics anxiety of 1,150 students, six major dimensions were loaded from factor analysis. The factor scores were loaded between 0.48 and 0.86 while the value of Cronbach’s alpha was between 0.68 and 0.94 in their study. The test-retest reliability coefficient was between 0.67 and 0.83 in a 5 week study of other 161 students in the study in 1985. The result in this study showed a Cronbach’s alpha coefficient was between 0.72 and 0.90.

This study adopted Learning Style Inventory (LSI) developed by Kolb (1984) to evaluate students’ learning styles. It contains 12 items with 5-point Likert scale (1= strongly disagree; 5= strongly agree). Blakemore, McCray, and Coker (1984) and
Sewall (1986) pointed out that the instrument has high construct validity, and the suitable target is university student and adult. Blakemore, McCray, and Coker (1984) evaluated the reliability of this instrument with the value of split reliability was between 0.55 and 0.58, and the test-retest reliability coefficient was between 0.49 and 0.60. Kraus, Reed, and Fitzgerald (2001) synthesized a series of the past studies and indicated the instrument’s Spearman Brown reliability coefficient was between 0.54 and 0.83, the Cronbach’s Alpha reliability coefficient was 0.29 and 0.71, and the test-retest reliability coefficient was between 0.34 and 0.73. Veres, Sims, and Locklear (1991) pointed out the instrument is quite valid in measuring learning styles. The result in this study showed a Cronbach’s alpha coefficient was between 0.68.

2.3. Experimental procedure

Several stages were implemented to accomplish the purpose of this study. First, at the beginning of the term, the teacher gave syllabuses to students and spent half an hour doing an introductory lecture about the course. Next, the teacher required students to fill out the LSI. Second, before the pre-test implemented, the teacher spent four weeks teaching all students chapters one through three of the textbook using the expository teaching approach. A pre-test was then administered after finishing teaching chapter three. Students finished the pre-test and filled out the STARS within three hours. Third, after the pre-test finished, the teaching experiment was formally implemented. The students in two classes then randomly assigned to experimental class and control class. The experimental group participated in the concept mapping program and the control group participated in normal statistics instruction.

In the experimental group, the teacher first explained why concept mapping is a useful tool for learning and how concept mapping can be used to show relationships among concepts, and then spent three hours training students to draw concept maps in accordance with the procedures suggested by Novak and Gowin (1984, pp. 32–34, Table 2.3). The teacher then taught from the textbook using teacher-constructed computer-assisted concept maps as the instructional medium. After finishing a chapter, the students were asked to use concept maps to represent what they had learned from the previous chapters. The teacher and the research assistants then corrected student-constructed concept maps together. During the correcting process, the teacher and the research assistants worked together in order to identify any statistical misconceptions and then modified these misconceptions for the class. After going through misconceptions using one hour in-class, students were asked to use the former same concepts to reconstruct their individual concept maps again. The students then used these modified concept maps as review tools for their independent studies. The above procedure was repeated until the end of chapter seven of the textbook, totalling an implementation period of 12 weeks.
In the control group, the teacher gave an introductory lesson that included the objectives of the lesson and how to proceed, and then taught from the textbook using teacher made computer-assisted abstracts as the instructional medium. After finishing a chapter, the students were asked to work on some questions. The teacher then taught the class correct answers to these questions. The above procedure was also repeated until the end of chapter seven of the textbook. The implementation period was the same as the experimental group.

Finally, at the end of the experiment, the statistics achievement and STARS post-tests were administered to the two classes to compare their learning achievement and anxiety level.

3. Results
3.1. The statistics anxiety comparison between concept mapping and traditional teaching classes: The moderating effect of students’ learning styles

Since the statistics anxiety pre-test scores may have influenced the experimental effect, a two-way analysis of covariance (ANCOVA) was applied. The pre-test scores were the covariates, the class, learning style and interaction were the independent variables, and the statistics anxiety post-test scores were the dependent variables. After controlling for the covariates, the main effect for post-test scores attained significance, $F=6.69, \ p<.05$ (see Table 1). The average score of statistics anxiety post-test for concept mapping class is 129.05 while the average score for traditional teaching class is 142.80. The result indicated that the experimental class that was exposed to concept mapping has a significantly lower statistics anxiety than the control class that received traditional expository teaching.

The learning style and the interaction of class and learning style both have not achieved statistically significant level, $F=1.25, \ p=.30; \ F=0.89, \ p=.45$. The results revealed that students with different learning styles have not appeared significantly different in statistics anxiety.

Table 1. Analysis of covariance for the statistics anxiety test of the two classes.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>33007.02</td>
<td>8</td>
<td>4125.88</td>
<td>12.20**</td>
</tr>
<tr>
<td>Constant</td>
<td>913.28</td>
<td>1</td>
<td>913.28</td>
<td>2.70</td>
</tr>
<tr>
<td>Covariates</td>
<td>24752.08</td>
<td>1</td>
<td>24752.08</td>
<td>73.17**</td>
</tr>
<tr>
<td>Class</td>
<td>2261.25</td>
<td>1</td>
<td>2261.25</td>
<td>6.69*</td>
</tr>
<tr>
<td>Learning style</td>
<td>1266.51</td>
<td>3</td>
<td>422.17</td>
<td>1.25</td>
</tr>
<tr>
<td>Class*Learning style</td>
<td>897.64</td>
<td>3</td>
<td>299.21</td>
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<tr>
<td>Error</td>
<td>24016.54</td>
<td>71</td>
<td>338.26</td>
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</tbody>
</table>

*p<.05  ** p<.01
3.2. The statistics achievement comparison between concept mapping and traditional teaching classes: The moderating effect of students’ learning styles

Since the statistics achievement pre-test scores may have influenced the experimental effect, a two-way analysis of covariance (ANCOVA) was applied. The pre-test scores were the covariates, the class, learning style and interaction were the independent variables, and the statistics achievement post-test scores were the dependent variables. After controlling for the covariates, the main effect for post-test scores attained significance, \( F=7.26, p<.01 \) (see Table 2). The average score of statistics achievement post-test for concept mapping class is 72 point while the average score for traditional teaching class is 54.08. The result indicated that the experimental class that was exposed to concept mapping has a significantly higher statistics achievement than the control class that received traditional expository teaching.

The learning style and the interaction of class and learning style both have not achieved statistically significant level, \( F=0.57, p=.64; F=0.21, p=.89 \). The results showed that students with different learning styles have not appeared significantly difference in statistics achievement.

Table 2. Analysis of covariance for the statistics achievement test of the two classes.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Constant</td>
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<tr>
<td>Covariates</td>
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<td>7881.94</td>
<td>30.14**</td>
</tr>
<tr>
<td>Class</td>
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<td>1</td>
<td>1899.56</td>
<td>7.26**</td>
</tr>
<tr>
<td>Learning style</td>
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<td>149.16</td>
<td>0.57</td>
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<tr>
<td>Class*Learning style</td>
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<td>55.13</td>
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<tr>
<td>Error</td>
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<td>261.54</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05  ** p<.01

4. Conclusion

This study was intended to apply concept mapping strategy in the course of applied statistics and to study whether or not it is helpful to reduce statistics anxiety and improve statistics learning achievement. This study also investigated whether the concept mapping strategy’s effect on reducing students’ statistics anxiety and improving their academic achievement is affected by students’ learning style types.

The results appeared that no matter what students’ learning styles were, the concept mapping strategy more effectively reduced students’ statistics anxiety and improved students’ learning achievement than the traditional expository teaching.
method. In addition, students with different learning styles have not appeared significantly different in statistics anxiety and achievement.

Reference


Title of the submission: Beliefs and Practices about Reading: Interim Findings from a Professional Development Program for Secondary Science Teachers in Canadian Minority-Language Schools

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Abstract:

Literacy in the Science Classroom Project is a multi-year professional development program for supporting science teachers in Canadian minority-language schools. This project is important because international and national assessments of science, reading, and writing have all reported significant differences between the mainstream English-language schools and the minority-language schools across the various regions of the country. Our research team has been working with minority-language teachers in one province to support their use of effective language-based instructional strategies for teaching science. The objective of our research study is to determine how teaching practices changed as a result of the program and how these were enacted in different classrooms. We also wanted to identify the successes and challenges to appropriating these strategies and practices at the classroom, school and district-wide levels. Data collection involved both qualitative and quantitative methodologies. Interim results from the study were presented along several dimensions. The first dimension involves changes in the students and teachers, specifically in their beliefs and practices about reading and text use. The second focuses on the teachers’ appropriation of strategies and practices for helping students read, as well as the successes, pitfalls, and obstacles to using these in the science classroom. The findings should therefore inform researchers studying the use of language-based activities for enhancing science teaching and learning. Moreover, this presentation should also inform educators who are presently faced with disparities between science learners based on the language of instruction, as well as others confronted with issues related to second-language, bilingual, and multilingual instruction.
Abstract
Native American tribes today face numerous challenges and immense opportunities. The ever-changing needs of tribes and Native communities call for a leadership base that is both educated and grounded in tribal values and traditions. As the role of higher education evolves into a place to foster future leaders for Native people, it seems now, more than ever, it is important that we understand leadership development among this particular population. The objective of this study is to examine how the annual Oklahoma Native American Students in Higher Education (ONASHE) conference facilitated the development of leadership skills among Native American student attendees. The researchers utilized criterion sampling to select participants, with the criteria being that participants must have attended two of the three annual meetings. Preliminary responses from participants have demonstrated the positive impact of the ONASHE conference on Native American students, particularly with regard to exploring a deeper meaning of leadership and connecting back to their Native American campus and respective tribal communities. Data collected through this study will further illuminate preliminary findings and provide a deeper understanding of concepts of leadership development among Native American college students.
Abstract

Today’s classrooms are more diverse than ever. In fact, research tells us that there will be a steady increase in Hispanic, Asian Americans, and African American students in the coming years. Therefore, differentiated instruction may be the panacea that educators are searching for. This paper commences with an introduction and then segways into a review of the literature that will elaborate on the following areas: the major principles of differentiated instruction, the essentials necessary for differentiating, ways to implement, the clichés, barriers, and myths surrounding the practice, and the research studies and theories supporting differentiation. The last section explains the results of a survey administered to middle school teachers to determine their level of knowledge in providing differentiated instruction in the classroom.

Introduction
Differentiation is not a novel concept. The one-room schoolhouse is an ideal example of how teachers have attempted to meet the needs of all students centuries ago (Anderson, 2007). Though differentiated instruction seems to be a broad term, it mainly refers to those classroom practices embodying student learning styles, interest, and prior knowledge (Benjamin, 2002). Understandably, state standards represent the knowledge to be taught but differentiated instruction gives us a meaningful way to teach those required standards (Protheroe, 2007).

Today’s classrooms are now defined by diversity. By 2035, students of color will be a majority in our schools with increasing populations of children of immigrant and migrant families. Half of all children will live in single-parent homes at some time during their school years (Tomlinson & Brighton, 2003). In the same way, the major purpose of differentiated instruction is to maximize each student’s growth by meeting each student where he or she is (Hall, Strangman & Meyer, 2003). On the other hand, traditional instruction has been equated with teachers who teach to the middle or use the one-size-fits-all approach (Rock, Gregg, Ellis, & Gable, 2008). One popular way of adopting differentiated instruction has been developed by Carol Ann Tomlinson (1999).

The Review of the Literature

The review of the literature covers the following sections: 1.) Major principles of differentiated instruction 2.) Essential components 3.) Suggestions for implementing differentiated instruction 4.) Myths, clichés, and barriers in differentiated instruction and the 5.) Research studies and theories supporting differentiation.

Major Principles

In order to understand differentiated instruction, the principles for practicing must be articulated. O’Brien & Guiney (2001) clearly enumerated these as major principles of
differentiated instruction: 1.) Every child can learn and every teacher can learn. 2.) All children have the right to high quality education. 3.) Progress for all will be expected, recognized, and rewarded. 4.) Learners in a classroom have common needs, distinct needs, and individual needs.

Other principles that are paramount to understanding differentiated instruction can be traced in Edyburn’s article (2004) entitled, “Technology Supports for Differentiated Instruction.” The principles are adapted from the work of Carol Ann Tomlinson (1999) and simply echo that teachers should focus on the essentials in learning, should attend to student differences, should collaborate with students on learning, and should not separate assessment from instruction. The teacher should constantly modify the content, process, and products produced from learning. Teachers must also allow students to participate in respectful work while maintaining a flexible working relationship.

Essential Components

In conjunction with the principles, teachers must engage in several key components for successfully conducting differentiated instruction in the classroom. Anderson (2007) insisted that the teacher must provide students with choice, flexibility, on-going assessment, and creativity in differentiating the concepts taught. At the same time, a teacher has to understand how students process and develop understanding of concepts and skills. Additionally, the teacher has to know the level of knowledge students must tap into when asked to develop products or projects to demonstrate learning.

Tomlinson identified three components that should be differentiated (Hall, Strangman & Meyer, 2003): content (elements and materials used in reaching learning goals and in teaching concepts, principles, and skills that students will learn), process (how you will teach the content, flexible groups or whole-group discussion of content or small groups or paired groups; groups
are not fixed), and products (students are allowed choices in products or final assessments which should offer a variety of ways for expression, degree of difficulty, and types of evaluation).

Langa & Yost (2007) remind us that three key components for differentiating is to assess each child’s readiness level (where they are in relation to a particular understanding or skill), interest level (their curiosity or passion for a particular topic or skill), and learning profile/style (how students learn as influenced by intelligence, preferences, gender, culture or learning style) before modifying content, process, and products. The teacher should use assessment data gathered from each child during the beginning of the school year. However, the teacher should continue to collect data daily on students’ readiness for particular skills and ideas, their interests, and their learning profiles/styles. Here are some possibilities for modifying content, process, and products (Langa & Yost, 2007):

Content (Materials & elements)

1. Select a variety of books and resource materials for handling variety in reading levels
2. Select specific areas of interest within the focus area
3. Use Learning contracts with students
4. Group students according to readiness levels or interest levels
5. Reteach to small groups who need support or explanations; exempt those who have mastered the material
6. Establish learning centers or stations
7. Allow students to work alone or with peers.

Process (how students gain understanding of main ideas and information)

1. Use tiered activities (a series of related tasks of varying complexity)
2. Use learning contracts based on readiness, interests, or learning profile of student
3. Use independent learning

4. Use choice boards, flexible grouping, reading buddies, learning centers and peer teaching

Products (ways students will demonstrate their knowledge or understanding of a topic)

1. Write a story or a poem

2. Write a book report, a play, or perform a play

3. Debate or investigate an issue

4. Design a model or a game

5. Create a mural or a song

6. Compare or contrast

Suggestions for Implementing Differentiated Instruction

In getting started with differentiated instruction, Anderson (2007) has several easy to follow suggestions. Begin with creating learning profiles. This will require the teacher to collect profiles of each student that include learning preferences, family structure, favorite hobbies, interests, state assessment scores, lexile reading scores and fluency in reading recordings.

Another suggestion deals with introducing students to differentiated instruction by modifying the process of a few lessons. This could include using a choice board in which students choose activities constructed from various reading levels in the classroom. Students could select two out of six activity options to demonstrate skill toward lesson objective. A teacher could very easily introduce differentiated projects for assessments. Suppose students are doing a unit on the state of North Carolina, students might draw a map of land forms or businesses, or could research another state and identify similar regions or create a travel brochure for a primary region to
include points of interest, food, lodging, historical features and fun things to do. The last
suggestion would allow students the right to work in small groups, alone, or with a partner.

Rock, Gregg, Ellis & Gable (2008) have designed a blueprint for differentiating
instruction called *Reach*. The first activity requires teachers to reflect on what it will take to
change to differentiated instruction. The second activity requires teachers to evaluate the
curriculum with a survey including what students should know, what most know, and what
standards they must be held accountable for. The next activity involves analyzing groups and
individual students to determine readiness, interests, preferences, strengths, and needs. The
teacher should then craft research-based lessons that include graphic organizers, opportunities for
students to work in small groups, whole-class, or individualized instruction units. The teacher
would allow for student response through dry boards, choral responses, cooperative learning
groups, class-wide peer tutoring and assistive technology such as, books on tape, talking
calculators, and manipulatives. The teacher should prepare to hone in on the data by using pre-
assessments or diagnostic assessments such as checklists, interviews, surveys, observations at the
outset to collect data on student interests, thinking styles, and readiness for teaching content and
skills. The teacher should use formative assessments during the instruction process through the
use of questioning, quizzes, probing, learning logs, work samples, or think alouds. The use of
summative assessments are also valuable after instruction, for example, the use of unit or chapter
tests, projects, or portfolios.

In making differentiated instruction manageable (Lawrence-Brown, 2004), teachers must
build upon personal strengths and talents (e.g., teacher may have interest in on-line projects or in
the arts, or in botanic garden projects). Teachers should build a collection of resources from
libraries, the department, local professional associations, or the district. Teachers should not try
to do everything at once but start with highest priority first and work with a collaborative team to set goals. Remember that all lessons do not need the same amount of support. Teams can decide which students need various supports.

Clichés, Myths and Barriers of Differentiated Instruction

Benjamin (2002) exposed a number of clichés from teachers on responses to teaching differentiated instruction. First, differentiation was thought of as just throwing the baby out with the bathwater. Second, differentiation means that we are abandoning our basic skills and are trying to reinvent the wheel, but we cannot make things any better than they already are. Third, differentiation is just another phase and the pendulum will swing the other way soon because the emphasis on testing will not last forever. The final cliché dealt with bringing a horse to water but that one cannot make him drink.

Barriers to differentiation according to Carolan & Guinn (2007) asserted that teachers lack the time for it, and teachers do not get the professional development resources and the administrative support needed for these endeavors. Teachers see differentiated instruction as another bureaucratic mandate heaped upon them. For teachers, it means teaching everything three different ways like a dinner buffet.

Tomlinson (1995) summarized the barriers to differentiation as a fear of faddism or just the thing to do this year and as a fear of not being able to manage a classroom with a number of learning activities happening at once. There is a fear of not knowing how to assess the readiness level of students, and how to match appropriate resources with teaching. Finally, there is a fear of concept-based teaching with the pressure of standardized tests. Teachers also fear that there are no teacher models to talk to about this process.
Benjamin (2002) explained that the common myths harboured pertained to the idea that differentiated instruction consisted of students doing exercises in self-correcting workbooks. The others say that teachers do not present any information to student (no whole-group teaching). Differentiated instruction is mainly for students with deficits in learning. Differentiated instruction does not work in a classroom where students need to master information for standardized testing. Brighter students are used to teach other students. The differentiated classroom has to do with dividing the class groups into bluebirds and redbirds.

Research & Evidence

The initial studies will share the results of how differentiated instruction was used in the classroom. The second half of the research will summarize the basic theories and studies on three areas that support the practice of differentiated instruction: readiness, interest, and learning profile (Tomlinson & McTighe, 2006). The final section will summarize another aspect that supports differentiated instruction (Tomlinson & McTighe, 2006), homework research.

Tieso (2001) looked at a qualitative study of teachers and students who took part in a 3-week enhanced unit in math and found that the students evidenced positive levels of engagement, motivation, and excitement about learning. Fisher, Frey & Williams (2003) documented that the average student in their high school read at a 5.9 grade level but moved from 5.9 to 8.2 after 4 years of differentiated instruction. Baumgartner, Lipowski & Rush (2003) used differentiated approaches in reading which included flexible grouping, student choice of various tasks, increased self-selected reading, and access to various reading materials. They saw improvements in instructional reading levels, number of comprehension strategies used, phonemic and decoding skills, and attitudes toward reading. Tieso (2005) examined the effects of curricular differentiation with between-and-within-class grouping on student achievement. After giving a
curriculum-based assessment as a pre- and post test measure, she inferred that the students with
diverse abilities who received differentiated instruction scored significantly higher in
mathematics achievement than those students who did not. Mastropieri, Scruggs, Norland,
Berkeley, McDuffie, Tornquist & Conners (2006) compared quantitative outcomes associated
with classwide peer tutoring using differentiated hands-on activities vs. teacher-directed
instruction for students with mild disabilities in inclusive 8th grade science classes. The results
indicated that collaborative hands-on activities statistically facilitate the learning of middle
school science content on posttests and on state high-stakes tests for all students. Students also
enjoyed using the activities.

Readiness explores the basic knowledge, understanding, and skill a student has
(Tomlinson & McTighe, 2006). Learners need to be challenged, and if their tasks are too easy,
they become bored and do not learn. Motivation is lessened when tasks are consistently too
difficult. Learners should be moderately challenged. Fisher (1980) determined that when
teachers diagnose the skill level and assign appropriate tasks, students can learn more effectively.
Hunt (1971) found that students learn more effectively if task structure is matched with
appropriate developmental level. Csikszentmihalyi (1993) found from a five-year longitudinal
study of adolescents that when students were underchallenged by tasks that they demonstrated
low involvement in learning activities with a lessening of concentration.

Interest is important because it explains a student’s affinity for and engagement with a
topic (Tomlinson & McTighe, 2006). When a student’s interest is tapped, learning is likely to be
more rewarding and the student may become an autonomous learner. Engagement with learning
is maximized and so is productivity. The student is more likely to work hard and work in a
sustained fashion. Hennessey & Zbikowski (1993) concluded that student motivation can be
maintained if teachers allowed time for students to discuss feelings, share ideas, and interests. Collins & Amabile (1999) suggested that, if students are given the freedom to choose questions and topics for study, that it can lay the ground work for creative achievement. Positive influences on learning can occur both short and long term if students are interested in what they study (Hébert, 1993; Renninger, 1990).

Learning profile pertains to modes of learning or the best processes students need in learning (Tomlinson& McTighe, 2006). Keep in mind that one’s learning profile is shaped by culture, gender, learning style, and intelligence preference. A classroom’s environmental, emotional, sociological, and physical features can influence student attitude about learning and learning itself. Attention control, memory systems, language systems, motor systems and higher-order thinking systems affect how students learn. Gender can influence the way people see and interact with the world, including the classroom. A person’s culture shapes his or her modes of communication, sense of identity, cognitive style, points of view, and frames of reference. Dunn & Griggs (1995) reported that when student profiles were addressed for elementary students, secondary students, students with emotional difficulties, learning disabilities as well as for Native Americans, Hispanic, Asian, and Caucasian students, positive learning effects occurred. Delpit (1995) concluded that the success of students from many minority groups is likely to be undermined when cultural differences are ignored. Students achieved significantly better when classroom instruction was matched to their preferred learning patterns (Grigorenko & Sternberg, 1997; Sternberg, 1997; Sternberg, Torff & Grigorenko, 1998).

Homework is another aspect of differentiated instruction. Homework fits well with the concepts of differentiation based on readiness, interests, and learning profile (Tomlinson & McTighe, 2006). Two researchers are discussed here. Harris Cooper (2001) analyzed 17 studies
involving 3,300 students in 85 classrooms and 30 schools in 11 states. He found that the average student completing homework had a higher achievement score than 55 percent of the students who did not complete homework. Cooper also found that the greatest positive effects of homework by subjects were found in mathematics assignments, followed by reading, English, science, and social studies. He also reported that homework effectiveness increases with the age of the child and had its greatest effects on high school students. Cooper suggested that homework should be viewed as a diagnostic tool rather than an opportunity to test. Homework should focus on practice, integration of concepts learned during the day, and simple introductions to the next lessons. James Strong (2002) agreed with Cooper in that homework should be about practice, preparation, and elaboration. He also pointed out that high school students who spend an additional 30 minutes per night on homework may increase their grade point average by a half-point. We need to train early our elementary school children to complete homework each day.

Summing Up the Research

Though differentiation is recognized as a compilation of many theories and practices, unfortunately, little research has been completed on the effectiveness of differentiated instruction (Edyburn, 2004). Based on the literature review, “the package” itself is lacking empirical validation (Hall, Strangman & Meyer, 2002). There is more and more research emerging within the field of education supporting the potential for differentiated instruction but more teachers need to investigate their applications of differentiated thinking toward instructional planning and implementation of lessons through action research projects, professional conference presentations, and other projects (Anderson, 2007). Tomlinson & McTighe (2006) insisted that we need more studies to indicate which elements of differentiation do or do not benefit particular students and to what degree and under what circumstances benefits do not show gains. There is a
need to add to the body of research on factors that encourage and discourage teachers in attending to student differences.

Method

The purpose of this study was to examine what teachers specify as key components of differentiated instruction. It also served to expose what differentiated instruction is or is not. The study was guided by the belief that educators may not possess a clear understanding of what differentiation is, the key components for implementing, as well as, the myths that surround the practice of differentiated instruction. Two questions emerged relating to differentiated instruction: will teachers agree on what is essential to differentiating instruction in the classroom and will teachers agree with the myths surrounding the practice?

Participants and Setting

This study was conducted in a school district located in southeast Georgia. In the spring of 2008, 141 teacher-participants responded to the survey. The examiner visited 5 of ten middle schools in a public urban school system of 33,400 students. Due to preparation for standardized testing, some schools were not visited. Over one-half of the schools in the districts are Title I schools and receive free or reduced lunch. The population of the school system is comprised of 65.8% African American, 28.5% white, 2.2% Hispanic, 1.8% Asian, .2% American Indians, and 1.4% multi-racial.

The teacher-participants in this sample consisted of 38 (26.9%) males with 103 (73%) females. There were 41 (29.0%) Blacks, 89 (63.1%) Caucasians, 7 (4.9%) Hispanics, and 4 (2.8%) Asians. In years of experience, 17% had taught from 1-3 years, 14.1% from 4-6 years, 10.6% from 7-10 years, 14.8% from 11-15, and 43.2% from 16-35 years. The participants taught 5th grade (1.4%), 6th (51.7%), 7th (23.4%), and 8th (23.4%). Their subjects ranged from language
arts (18.4%), math (17.0%), science (14.8%), social studies (15.6%), physical education (4.2%),
special education (9.2%), reading (2.1%), art (2.1%), music (2.1%), band (0.7%), Spanish
(2.8%), technology (1.4%), Latin (0.7%), drama (0.7%), and other courses (7.8 % e.g.
Connections).
Instrument
The qualitative survey used in the study was called Examining Differentiated Instruction
for Novices: Teachers Respond (2008). The survey was based on data gathered from an
extensive review of the literature. It contained 16 questions that pertained to 1.) the essential
principles 2.) the essential components and 3.) the common myths surrounding differentiated
instruction.
The questions were developed from the work of (Jacobsen, Eggen, & Kauchak, 2006; Rock,
Gregg, Ellis, & Gable, 2008; Tomlinson, 1999; Wormeli, 2005). The survey consisted of Section
#1 Demographics. Participants were asked to fill in or check the appropriate items including
these: content area, grade level, years of experience, sex, and race. Section #2 of the survey
engaged participants in 16 questions that asked participants to choose a response and then circle.
Some examples of the survey questions are “differentiated instruction should focus on essential
skills and ideas in each content area” and “differentiating instruction in the classroom will not
prepare students to compete in the real world.” The survey responses contained a likert-style
scale consisting of strongly agree, agree, disagree, strongly disagree, and not sure. The examiner,
for the most part, visited school sites minutes before faculty meetings to conduct the survey. The
survey took 15 to 20 minutes to complete. See appendix for sample. Final note—at the school
sites, principals were very complimentary about the survey and wanted additional copies from
the examiner.
Analysis & Results

Generally, the analysis of this qualitative data required labeling, categorizing, recording, tabulating, calculating, and inferring. This was an exciting task. This process began by sorting the 141 surveys by five schools. The examiner, with the assistance of a graduate student, developed two separate frequency tables (per school) for counting and recording the responses under Section I. Demographics (i.e. grade level, sex…) and Section II. Survey Questions (i.e. strongly agree, agree, disagree, etc.). After counting and recording all responses, the second step consisted of developing another chart for displaying the numbers and the data. Demographics were represented by symbols (e.g. B for Black, F for Female..). Responses to the survey questions were represented by symbols such as Q1 (Question #1), SA (Strongly Agree), D (Disagree) and so on. The third step consisted of recording totals from all data and responses per question and then calculating percentages for each. Finally, in an effort to determine to what degree participants agreed or disagreed per question, this examiner chose to add the sum of strongly agreed to the sum of agreed to get a combined total so percentages could be calculated. This same process was also used for items where participants tended to disagree. Percentages were also determined for those participants counted as Not Sure (NS). See appendix.

Teachers agreed at 94.3% in question # 16 that they must show respect for their learners’ commonalities and differences in many ways in the differentiated classroom. Question # 2 on whether differentiated classrooms should be responsive to individual student differences, teachers agreed at 92.1%. Question # 1 on whether differentiation should focus on essential ideas and skills in each content area, teachers agreed at 89.3%. Question # 15 on whether teachers collaborate with students about their learning in the differentiated classroom, teachers agreed at 85.8%. Thus, these responses are all representative of those vital principles (Tomlinson, 1999)
that differentiated instruction is built on. The results may imply that teachers may understand and do agree on the essential principles.

Secondly, it is also necessary to denote here that teachers agreed that processes (88.6%, question #5), products/assessments (87.2%, question #6) and content and materials (85.8%, question #4) must constantly be modified in the differentiated classroom (Tomlinson, 1999). These responses may imply an understanding of essential components necessary in carrying out differentiated instruction in the classroom. Additionally, teachers agreed with question #14 at 85.1% that teachers should assess the readiness level, interest level, and the learning profile/style of their learners which is another essential component in carrying out differentiated instruction in the classroom (Langa & Yost, 2007).

In reference to myths that surround differentiated instruction, teachers disagreed on two important ones. First of all, teachers disagreed at 90.7% on question #13 that there is only one way to differentiate instruction. This is indeed significant because this myth is considered to be the most prevalent myth surrounding differentiated instruction. Wormeli (2005) asserts that there is no set form or scripted program for differentiated instruction. It is about understanding the developmental level of students and differentiated practices.

Secondly, teachers disagreed at 85.8% on question #10 that all students must demonstrate mastery on the same day of grading. Disagreement with this myth is important because this may say that teachers are beginning to modify their thinking about grading in the differentiated classroom. Actually it does not matter when students demonstrate mastery if they sincerely work along the way for students should be allowed to retest and redo assignments (Wormeli, 2005).

There were other interesting responses to myths. In question #12, there were only 79.4% of the participants who disagreed with the myth that differentiated instruction creates unfair
workloads among students. However, this is worth discussing because apparently some recognize that differentiation is about providing challenges and motivating individual students differently. Also, in the differentiated classroom, students are given fair and developmentally appropriate work and are held accountable for more and they can achieve more (Wormeli, 2005).

On the myth that differentiation is only individualized instruction, 56.0% disagreed, 41.1 agreed, and 2.8% were unsure for question #8. There appears to be a split between teachers on this issue. This myth is simply not accurate. Wormeli (2005) discusses differentiated instruction as utilizing a sundry of teaching methods including whole-group teaching and small groups. Individualization is used only temporarily.

Question #9 revealed that only 76.5% disagreed, 14.1% agreed, with 9.2% unsure on the mistaken point that differentiated instruction does not use whole group instruction (Wormeli, 2005). This myth shows perhaps a lack of understanding of the many teaching processes that can and should be practiced by the differentiated teacher.

Finally, it must be noted that only 73.0% disagreed, with 21.9% agreeing, and 4.9% unsure of the myth in question #11 that differentiated instruction does not prepare students to compete in the real world. Differentiated instruction is not about lowering standards. Teachers do not differentiate all the time but only as needed. In the real world, differentiation occurs, for instance, when military recruits get many opportunities to disassemble and reassemble an assault rifle and when the driver’s test can be taken more than once (Wormeli, 2005).

Discussion

Though this survey shared some positive results, the next area that must be explored here is why more middle school teachers are not agreeing (or disagreeing). Research suggests that teacher education programs are falling short in preparing pre-service teachers for academically
diverse classrooms (Tomlinson, Callahan, Tomchin, Eiss, Imbeau & Landrum, 1997). The points noted from the research revealed that pre-service teachers seldom experienced differentiated instruction in their teacher preparation programs and generally had one class on academically diverse learners with little guidance on what to do with them. It was noted that pre-service teachers were almost never encouraged to differentiate by education professors, university supervisors, or master teachers and had few, if any, opportunities to see multi-tasking classrooms.

The other side of the problem lies with the public school. They must also take responsibilities for teacher-training. They can help prepare teachers by providing according to (Wormeli, 2003; Protheroe, 2007; Gregory & Chapman, 2007; Kise, 2007) resources on differentiating instruction and time for teachers to discuss the process. Schools can provide training in strategies, such as, curriculum compacting and learning centers. Schools can teach concrete details on how to differentiate instruction. Teachers need site visits to schools and teachers’ classrooms plus help on developing on-target assessments. Teachers need the knowledge on the processes involved in differentiated instruction and an understanding that not every part of a lesson or even every unit needs to be differentiated.

Other factors that may be significant to this discussable point of why more teachers are not agreeing (or disagreeing) on differentiating were introduced in these brief studies: From a nationwide survey of middle school teachers, 50 percent said that they do not differentiate instruction based on readiness, interest or learning profile because they saw no need to do so (Moon, Tomlinson & Callahan, 1995). Most general educators feel ill prepared to teach students with diverse learning needs (Schumm & Vaughn, 1991, 1995). General education teachers may also reject adapting instruction for individual learner needs because they feel doing so calls
attention to student differences (Schumm & Vaughan, 1995). Archambult (1993) concluded that third and fourth grade teachers, who were not trained, would not differentiate in their gifted classrooms. This was even true for experienced teachers involved in the study (i.e., average years over 10 years). A study by Sally Reis and her associates (1993) showed that teachers will differentiate if given the support to do so. Specifically, Reis trained teachers to do curriculum compacting (an effective way to eliminate already mastered content through pre-testing or some form of assessment).

Professors must, as often as possible, engage in professional conversations about differentiation by agreeing to serve as mentors to first-year novice teachers and by offering workshops on college campuses and at school sites. Education professors can find ways to incorporate this topic in all education courses. University professors, superintendents, and school administrators and teachers must present at state, national, and international venues to share what works. This examiner can attest to the exorbitant amount of books, articles, and websites available on implementing differentiated instruction.

Conclusion

Differentiated instruction belongs in middle school because this is where student differences are more apparent. Thus it is there, where we can be instrumental in helping our students to reach their heights and potential. Schools have a responsibility to adjust to the developmental needs and levels of our students. The National Board for Professional Teaching Standards (1989) has recognized that good teachers must respond to individual differences in students and must match their teaching styles to fit. We must move away from a pedagogy of poverty (Haberman, 1991)) to a pedagogy of plenty (Hodges, 2001). In doing so, we must choose educators who are risk-taking, flexible, empathetic, organized, tenacious, and are fleet of
foot, that is, they will take whatever steps that are necessary to make ideas clear to their students (Wormeli, 2001). Haim Ginott (1993) reminds us that teachers create the environment in their classrooms and possess the power to make a child’s life miserable or happy but, most importantly, teachers are part of a team that believes that all students are capable of learning.

References


Hall, T., Strangman, N. & Meyer A. (2003). Differentiated instruction and implication for udl
implementation. Wakefield, MA: National Center on Accessing the General Curriculum

Jackson, R., Harper, K., & Jackson, J. (2002). Effective teaching practices and the barriers
limiting their use in accessing the curriculum: A review of recent literature (Report No.

Pearson Merrill Prentice Hall.


learning that benefit the whole class. American Secondary Education, 32 (3), 34-62.

science: Effects on classroom and high-stakes tests. Journal of Special Education, 40 (3),
130-7.

O’Brien, T., & Guiney, D. (2001). Differentiation in teaching and learning: Principles and
Practice. London: Continuum.

Differentiation by Design Conference. Retrieved March 18, 2008, from
http://www.doe.state.inus/exceptional/gt/pdf/IAGResourceGuide.pdf


Appendix A


Section #1 Demographics- Please fill in or check the appropriate items below.

Content Area Presently Teaching: _____________ Grade Level: ____ 5 ____ 6 ____ 7 ____ 8
Years of Experience: ___ 1-3 ___ 4-6 ___ 7-10 ___ 11-15 ___ 16-35 Sex: ___ Male ___ Female
Race: ___ Black ___ Caucasian ___ Hispanic ___ Asian ________ Other

Section #2 Survey Questions- Please choose a response and then circle it- Strongly Agree, Agree, Disagree, Strongly Disagree or Not Sure.

1. Differentiated instruction should focus on essential ideas and skills in each content area.
2. Differentiated instruction should be responsive to individual student differences.
3. Differentiated instruction in the classroom is determined from teacher assessments.
4. Differentiated instruction demands a constant reconfiguring of content and materials to meet individual students’ levels of prior knowledge, critical thinking, and expression style.
5. Differentiated instruction demands a constant reconfiguring of the processes used for teaching to meet individual students’ levels of prior knowledge, critical thinking, and expression style.
6. Differentiated instruction demands a constant reconfiguring of final products/assessments offered to meet individual students’ levels of prior knowledge, critical thinking, and expression style.
7. Using differentiated instruction in the classroom will not prepare students to take standardized tests.
8. Differentiated instruction is simply individualized instruction.
9. Teachers in differentiated instructed classrooms do not use whole group instruction because students work individually or in small groups.

10. In the differentiated instructed classroom, all students must demonstrate mastery on the same day of grading because it is unfair to give them the same full credit if they do not.

11. Differentiating instruction in the classroom will not prepare students to compete in the real world.

12. When teachers differentiate instruction, they create unfair workloads among students.

13. There is only one way to differentiate instruction.

14. In the differentiated instructed classroom, the teacher should assess each student’s readiness level, interest level, and learning profile/style.

15. Teachers collaborate with students about their learning in the differentiated instructed classroom.

16. Teachers must show respect for their learners’ commonalities and differences in many ways in the differentiated instructed classroom.

Appendix B

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<th>%</th>
<th>D</th>
<th>SD</th>
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*SA-Strongly Agree  A- Agree  D- Disagree  SD- Strongly Disagree  NS- Not Sure*
Title: Teaching Counseling Skills via Distance Education

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Abstract

This poster presentation briefly outlines the development of a Distance Education online counseling course developed based on the design of a face to face course within a graduate level counseling program. Developing an online lab course is a challenging activity particularly when the central task of the course is focused on communication, counseling skills, and professionalism. Incorporating the face to face content and particularly the feedback on student practice videos presents challenging and exciting opportunities for learning in Distance Education. This poster will focus on how assignments and student progress are monitored in order to prepare students for a field practicum experience. Methods of providing feedback to students on their counseling skills and evaluating student progress will be identified.
The Changing Nature of Teaching: Contingent Work

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The Changing Nature of Teaching: Contingent Work

Abstract

One fifth of teachers in Canada work contingently. This paper explores who this group of contingent teachers are. Workforces are diverse and teaching is no exception. The findings reported in this paper come from a larger study that employed a mixed methods approach of focus groups and an online survey. Specifically, this paper describes the contingent teacher workforce in Ontario Canada. The demographics, education and work experience data revealed two general trends: evidence of an oversupply of contingent teachers and a demonstration of the gendered nature of contingent work. These findings have implications for how we understand the changing nature of teachers work.

Keywords: Contingent Work, Teaching, Canada, Gender, Oversupply.
The Changing Nature of Teaching: Contingent Work

When we think of teachers’ work we often envision a teacher who is hired in a full-time, permanent teaching contract where they teach a specific grade or subject to children at one school site. These teachers are hired with standard contracts that ensure job security and ongoing employment. But not all teachers’ work arrangements are standard. In fact, about one fifth of teachers in Canada work contingently (WALL, 2005). Teachers who work in these arrangements do not have a long-term employment commitments (Bjorkquist & Kleinhesselink (1998) and “the minimum hours are not set” (Connelly & Gallagher, 2004, p.960). The number of contingent teachers in the workforce continues to grow. For example, in Ontario, between 2005 and 2009, an average of 7,500 newly certified teachers have entered the workforce annually. These estimates are greater than the number of teacher retirements replaced annually in Ontario (Ontario College of Teachers, 2009). Both the Ontario Ministry of Education (2007) and the Ontario College of Teachers (McIntyre, 2006) report that many potential teachers spend two to three years working contingently before securing a full-time, permanent contract. Because of the growth in this contingent teacher workforce, government agencies, teacher federations, more researchers and practitioners are now studying the actual work that contingent teachers do (British Columbia Teachers Federation, 2005; Clark, Antonelli, Lacavera, Livingstone, Pollock, Smaller, Strachan & Tarc, 2007; Duggleby, 2007, Duggleby & Badali, 2007, Glatfelder, 2007; Johnston, Myers, Pollock & Zoet, 2008; McIntyre, 2005, 2006; Pollock, 2008, 2009, 2010a, 2010b; White, 2008). This paper continues with this trend. It explores who they are as a group.

Purpose

This paper describes a study that explored how contingent teachers in the English-speaking elementary school division in Ontario, Canada engaged in professional learning. It sought to examine the strategies contingent teachers used to participate in professional learning and the challenges they experienced when attempting to engage in professional learning. An unintended outcome of this study included a detailed description of the general contingent teacher workforce, one which has never been done before now. This paper explores the make-up of the contingent teacher workforce.

Theoretical Framework

Workforces are diverse and teaching is no exception. Acker (1999) argues, “In its search for generalities about teaching and the teaching occupation, the literature on teachers has been guilty of creating a category of “teacher” that does no justice to the diversity contained within the term.” (p. 19). There is an assumption that full-time, permanent contract teachers are the only teaching population and all teaching is the same. This, however, is not accurate. There are differences within the full-time, permanent teacher work arrangements and between full-time, permanent teaching and other work arrangements. Differentiation has always existed within the full-time, permanent teacher workforce. For example, teachers may be differentiated from one another by virtue of the duration of contact with students, grade level taught, curriculum subject, teacher’s first language, teacher’s race/ethnicity, type of student taught, academic success of particular groups of students, and teacher’s gender (Bascia & Jacka, 2001; Little, 1993; Metz,
These differences distinguish full-time teachers from one another, full-time teachers from contingent teachers, and contingent teachers from one another.

**Methodology**

The study employed a mixed methods approach. It used focus groups and an online survey. Focus groups were employed because it was thought that they would be the best way to generate information about an area which little is known (Betts, 2006; Duggleby, 2007; Duggleby & Badali, 2007, Pollock, 2008) and also to assist in developing the online survey.

**Focus Groups.** Eight focus group sessions were held. The focus groups occurred in rural, northern, urban and suburban locations and all included face-to-face interaction. The intended focus group size ranged from 5 to 12; actual sizes ranged from one to 9 participants. The focus group sessions were approximately 2 hours long. In the first hour participants were asked to describe the strategies used to participate in professional learning and to also include some of the challenges they encountered. In the second hour, participants were asked to answer pilot survey questions focusing on contingent teachers’ access to professional learning. They were also encouraged to comment on the survey layout, question design and content. The focus group sessions were audio recorded and transcribed afterwards.

**Online Survey.** In order to ensure a valid survey tool, the survey went through approximately seventeen iterations; once after each of the 8 focus group sessions and after 9 individual reviews by contingent teachers, Elementary Teachers’ Federation of Ontario representatives, PhD students, statistics experts, and academics in two universities. The final survey instrument consisted of 69 close-ended questions (most included an ‘other’ for participants who did not find an appropriate response). None of the participants should have completed all 69 questions as the survey was organized in a manner where a response to a question would bring the participant to a particular related question, skipping irrelevant questions. The only question that **required** a response was the first question, which was not part of the actual data collection, but rather involved participants’ consent. None of the remaining survey questions were forced questions; participants could choose not to answer a question and still proceed to the next question. **SurveyMonkey** was the online survey software program used to house the survey online.

The biggest challenge was finding teachers who work contingently. Teachers who work contingently are marginalized (Betts, 2006; Damianos, 1998; Duggleby, 2007; Duggleby & Badali, 2007; Galloway & Morrison, 1994; St. Michel, 1995). This marginalization can make it more difficult to access them for research. One way of addressing this issue was to work with the Elementary Teachers’ Federation of Ontario (ETFO). ETFO is one of four teacher federation/unions in Ontario. Approximately 76000 teachers and education workers are members of ETFO, of which approximately 12000 are teachers working contingently (www.ETFO.ca). ETFO endorsed the study and announced the launch of the online survey in their provincial e-newsletter in April 2010. The researcher then contacted, by phone, 32 of the 33 ETFO Local Presidents for contingent teachers asking them if they had read the e-newsletter, if they had any questions about the study and if they would support the study by providing potential participants with instructions of how to participate. The phone conversations were followed up with an email message that provided information about how to participate in the study. Electronic invitations
were sent to contingent teachers who were members of the Elementary Teachers’ Federation of Ontario. For anonymity and confidentiality reasons, participants interested in participating in the survey were asked to send an email requesting a link to the survey. The email was received by a third party who then forwarded a link to the potential participant. Each participant received a different link to the survey site. Four hundred and forty survey links were sent out to potential participants. At the end of the survey collection period, June 2010, 371 surveys were completed.

Findings

The online survey was organized in such a way that information about who contingent teachers were could be comprehensively organized around three broad themes: demographic information, education and work experience. These three categories were instrumental in describing the contingent teacher workforce.

Demographics. In terms of demographics, teachers working contingently provided varying degrees of information about their age, gender, and heritage.

Age. Three hundred and thirty-nine participants provided their age on the online survey. The ages ranged from 22 to 69 years of age. While the average was 39.7 (40) years, approximately 52% of the respondents were between 25-39 years of age.

Half of the contingent teacher workforce is 39 years of age and younger. The majority of candidates within the teacher education program in Ontario are under 26 years of age or younger.
(Teachers education application services, 2007, 2008, 2009). These numbers demonstrate an apparent trend from teacher education programs directly into contingent teaching.

**Gender.** Of the 371 occasional teachers that responded, 350 included their gender for a response rate of ninety-four percent. Forty-two (12%) identified themselves as male and 308 (88%) identified themselves as female.

**Figure 2. General Contingent Teacher Population - Gender.**
In some senses this was a surprise as the ratio of males to females in the full-time elementary English-speaking teacher workforce is 1:5 indicating that there are more women who teach contingently compared to men than in the larger full-time teacher workforce. However, contingent employment generally, women tend to be over represented (Cranford, Vosko and Zukewich, 2003); this is another example of this trend.

**Heritage.** Of the 416 responses, 41% identified themselves as British (England, Scotland, Ireland and Wales), 18% as Western European (France, Netherlands, Belgium, Germany, Italy, Sweden, Finland, Austria, Switzerland, Portugal, Spain and Greece), and another 19% indicated that they were Canadian.
Figure 3. General Contingent Teacher Population - Heritage.
A rough estimate from the data indicates that approximately 10.3% of the contingent teacher workforce can be considered visible minority teachers. This percentage is slightly higher than the 2006 Statistics Canada census of 6.9%.

Education. Data collected from the online survey made it possible to determine specific information about contingent teachers’ education such as the year they were awarded their teacher education degree, where the degree was awarded and the language of instruction.

Year degree granted. For 352 participants that responded, the range, in years, for completion of a teacher education program was between 1952 and 2010, a spread of fifty-eight years. A little more than half (53%) completed their teacher education degree between the years 2004 and 2009.
It is not surprising that approximately 50% of those teaching contingently graduated with a teacher education degree within the past six years considering that Ontario has seen a decade of teacher oversupply (Ontario College of Teachers, 2009).

**Place degree was granted.** Of the 350 who responded, 274 (78%) completed their teacher education degree in Canada, with the majority completing an education program in the province of Ontario (88%). The next largest group outside of Ontario received their teacher education in Quebec (7%). Seventy-six (22%) of contingent teachers responded that they received their teacher education outside of Canada, with 57% of the seventy-six from the United States; 18% from India, 11% from Australia and 9% from the United Kingdom.

**Language of instruction.** The language of instruction for the teacher education program was overwhelmingly English (98%) with French at 2%.

**Work.** Prior teaching experience either in a full-time permanent teaching position or years of teaching contingently proved to be important in determining how teachers engaged in their professional learning. The online survey provided information on the number of years of contingent teaching, current employment status, areas certified to teach, actual areas taught, number of school boards that employed them, whether or not they held permanent teacher employment in the past, and if so, the location of that employment and reason for leaving, whether being a care provider for a child or adult was a determining factor in teaching contingently and lastly, whether or not they were seeking full-time teacher employment within the next five years.
**Years of occasional teaching.** Of those who participated, 348 indicated the number of years of contingent teaching. Almost 90% of the respondents have been teaching contingently for ten years or less and of those teaching for ten years or less the majority are within their first three years.

![General Population - Years of Contingent Teaching](image)

**Figure 5. General Population - Years of Contingent Teaching.**

This pattern of the majority of teachers having less than ten years of contingent teaching reflects where the province of Ontario is in the supply-demand cycle for teachers. At the moment, Ontario is in a period of over-supply, so teachers new to the profession will often find themselves working contingently for a few years before securing a full-time permanent teaching contract. But it is not just new entrants who teach contingently for less than ten years. Retired teachers also teach contingently, encouraged to do so when there was a teacher shortage more than a decade ago.

**Current employment status.** Participants were asked at the time of the survey if they were currently working contingently on a day-to-day basis. Almost three-fourths (71%) indicated that they work on a day-to-day (known as daily) basis. Two percent were either on maternity leave, teacher federation release, or had completed the allowed number of days to teach as a retired teacher\(^1\). Others worked in different combinations: 19% were currently completing a long-term occasional teaching contract and 10% were working in a combined work arrangement (combined in the sense that they work on a daily occasional basis in addition to holding a long term occasion (LTO) teaching contract or part-time permanent contract).

\(^1\) In the previous decade when there was a shortage of certified teachers, the province of Ontario allowed retired teachers (who were collecting an Ontario teachers’ pension) to re-enter the teacher workforce and work for a limited number of days without receiving a penalty.
Figure 6. General Contingent Teacher Population - Current Employment Status.
The majority of contingent teachers work on a daily basis. The structure of day-to-day employment is what constitutes this work to be contingent because there are no guaranteed set minimum hours. The amount of work a contingent teacher works can be from five full days in one week to no work at all in another week. Some teachers can also go for a number of weeks with no work (which often happens in the months of September, January, May and June) but have some varying work for a number of other weeks.

Area certified to teach. In Ontario, teachers must have successfully completed teaching methodologies in two consecutive divisions in a faculty of education as part of their certification. Divisions consist of Primary (Grades K-3), Junior (Grades 4-6), Intermediate (Grades 7-10) and Senior (Grades 11-Ontario Academic Credit OAC) (http://www.oct.ca/become_a_teacher/certificates.aspx?lang=en-CA). Almost 70% of respondents were certified to teach primary/junior level.

Figure 7. General Contingent Teacher Population - Areas Certified to Teach.
By nature of how the Ontario public education system is structured, certified teachers tend to initially be certified for primary and junior or intermediate and senior divisions as the two required divisions. ETFO is the teachers’ federation that teachers working at the elementary/primary divisions could be a member of, so it is not surprising that the majority of members tend to teach at the primary and junior level. But the fact that approximately 31% of
contingent teachers work at the intermediate and senior divisions as well could mean that almost a third of these contingent teachers have taken additional qualification courses to receive more credentials to teach in other divisions.

**Areas contingent teachers taught the most last year.** Respondents were asked to indicate at what school level or subject area (i.e. French, Special Education) they did most of their contingent teaching in the past 12 months. Three hundred and forty participants answered this question and this is what they indicated:

![Figure 8a and b. Divisions and Subject/Discipline Contingent Teachers Taught the Most Last Year.](image)

Not surprising, 44% of the general contingent teacher workforce taught at the primary division and 19% taught mainly in the junior division. However, most interesting was that one quarter (24%) of the contingent teachers who responded that they taught mainly in the intermediate division. In terms of subject area, 43% of contingent teachers taught French while another 40% taught special education.
Teaching in areas not certified to teach. Participants were asked if they taught in a division or subject area (i.e. French, Special Education) in which they were not certified. Almost a third indicated that they had not taught in a division or subject area in which they were not certified. Another third indicated that they had taught in divisions for which they were not certified to teach, and the last third indicated the various subject areas they taught but were not certified to do so.

Figure 9a and b. General Contingent Teacher Population - Divisions and Subject/Discipline Not Certified to Teach.

Twenty-five percent of teachers working contingently indicated that they worked at the intermediate division even though they were not certified to do so. Forty-three percent taught in subject areas for which they were not certified and a little over a half (55%) did so in the area of French.

Number of school boards. Because of Canada’s constitution, the province of Ontario has four publically funded education systems: English Public, English Catholic, French Public and French Catholic. There are a total of 72 school districts in Ontario. Geographically, some of the boundaries overlap with the boundaries of other districts. This is particularly so in southern Ontario where most of the province’s population reside. For this reason, many teachers who work contingently can work for more than one school district. When asked how many school districts they have worked for within the last 12 months as a contingent teacher, 350 people responded, with an overwhelming majority (81%) indicating that they only worked for one school district within the last 12 months. Fourteen percent indicated working for two school
districts and five percent indicated working for three or more school districts within the last 12 months.

![General Contingent Teacher Population - Number of School Boards](image)

**Figure 10. General Contingent Teacher Population - Number of School Boards.**

Approximately twenty percent of contingent teachers work for two or more school districts. Having the potential of multiple employers can contribute to the complexity of teaching contingently. Potentially contingent teachers can possess the same credentials, work in more than one district, and receive slightly different compensation such as different wages, benefits, and different working conditions.

**Permanent teaching contract.** Participants were asked if they had held a permanent teaching position previously (including Canada and/or other countries in private or public school systems). Of the 351 that responded, 120 (34%) indicated that they had worked as a full-time teacher.

![General Contingent Teacher Population - Years of Permanent Teaching](image)

**Figure 11. General Contingent Teacher Population - Years of Permanent Teaching.**
The number of years that they taught in a permanent teaching position varied from one year to 37 years. Almost 42% of contingent teachers who indicated they had held a full-time teaching position previously did so for five or less years.

**Location of permanent teaching.** Participants were asked where they held their permanent teaching position. Of those that responded to the question, three fourths (76%) taught in Canada. For those who did teach in Canada, 93% did so in Ontario; others taught in the provinces of Alberta, British Columbia, Nova Scotia and Quebec. Some of this permanent teaching occurred outside of Canada (24%).

**Figure 12a and b. General Contingent Teacher Population - Permanent Teaching Within and Outside Canada.**

Responses to other questions such as where the teacher education degree was granted and heritage that many of the teachers who held permanent teaching positions overseas were not necessarily from that country but actually many have been Canadians who were teaching abroad and decided to return to Canada.

**Reason for leaving.** Respondents who left their permanent teaching position with five or less years of permanent teaching gave a number of reasons for leaving from relocation (from a different country, province, region or education system), not being satisfied with the position,
family reasons or personal choice, to reasons out of their control, such as the position no longer existing (i.e. redundant, being deemed surplus).

Figure 13. Teachers who taught Permanently Less than 5 Years - Reason for Leaving.

In terms of the reasons why teachers left their permanent teaching position, only 15% indicated that it was for reasons within the system such as the position being redeemed redundant. The other 85% gave reasons that it could be argued they had a choice.

Children. Of the 348 participants who responded to whether or not they have children under 18 years of age living in their household, 124 (36%) indicated ‘yes,’ while 224 (64%) indicated ‘no’. Almost half of the respondents (48%) indicated that being a caregiver for a child was a major factor in their decision to work contingently.

Care provider. Three hundred and fifty participants responded to the question: Are you a primary caregiver for an adult? Five percent indicated that they were the primary caregiver for an adult. Of those who answered yes, 8 respondents indicated that being a caregiver for an adult was a major factor in their decision to work contingently.

Intent in five years. Of the 351 occasional teachers that responded, 255 (73%) indicated that they intend to pursue a full-time teaching position within the next five years.

Discussion

Two general trends emerged from the data: evidence of an oversupply of contingent teachers and a demonstration of the gendered nature of contingent work. As indicated in the introduction, the province of Ontario is currently experiencing an oversupply of certified teachers who are registered with the Ontario College of Teachers and are available for teaching employment. A number of items on the survey confirm this oversupply of teachers. For example, half (53%) of teachers working contingently graduated with their teacher education degree between the years
of 2004 and 2009. The remaining years of graduation reach as far back as 1969 with an average graduation rate of three teachers per year prior to 2004. It would appear that the majority of teachers graduating in the years before 2004 had more success in securing full-time permanent teaching, although this cannot be known for sure as the exit data is not currently available.

The oversupply of contingent teachers is also apparent in participants’ responses to how long they have been teaching contingently. Ninety percent reported teaching for ten years or less, but more importantly, 50% have only taught for three years or less. The age ranges reported in this study also points to an oversupply. Forty-four percent of respondents were 34 years of age and younger. The percentage of respondents in the remaining age groups decreases steadily until age sixty-nine. This age pattern is also reflected in annual statistical summaries produced by the Teacher Education Application Service Ontario, Universities’ Application Centre. For example, in 2007, 38.6% of registrants to a teacher education degree program in Ontario were 22 years of age or younger. Seventy percent were 26 years of age and younger. These percentages were consistent for 2008 and 2009. This trend of about 38% of students in teacher education degrees under the age of 22 and about 70%, 26 years of age and younger means those teachers new to the teacher workforce will also be relatively ‘young’. Comparing the age of entrance into the teacher workforce and the current age of teachers working contingently, it appears that the majority of new entrants enter the teacher workforce by working contingently for a number of years before they either exit the profession or secure full-time, permanent teaching position.

Current research fails to acknowledge the place of contemporary contingent work in the life cycle of teachers’ careers. Most of this research makes the assumption that a teacher career commences when a teacher is hired into a full-time teaching position (Bascia & Jacka, 2001; Ozga, 2000). Huberman’s work in the 1980s is often cited as a seminal piece in the area of teacher career cycles and in many cases is used as the foundation for other studies (see Day, Sammons, Stobart, Kington & Gu, 2007; Garton & Richards, 2008, for example). Huberman attempts to “delimit the succession of phases in the teaching career” (1993, p. 4) yet he still uses particular phases to explore, analyze and explain teachers career cycles. This seminal work has limitations, however. Granted, Huberman does acknowledge that some teachers can work contingently at various points within their career. For example, when describing women entering the teacher profession, Huberman mentions that respondents come to the beginning of their career (known as Cycle d’Orientation) through a number of avenues, such as “after a period of substitution and of supply work (gradual path)” (1993, p. 39). In considering the mid-career phase of the teacher cycle, Huberman mentions teachers’ temporary exit from teaching for such things as raising a family (p. 47) and other pursuits such as studying (p. 53). But in each case, the alternate teacher employment arrangement of contingent teaching is included as something ‘other’ and not included as part of the teacher career cycle. It is only when teachers work full-time in a classroom are they considered engaged in a teacher career. In other studies that use Huberman’s framework, the contingent work is largely ignored.

This omission of the contingent teacher workforce has consequences. For example, phase one of Huberman’s teacher career cycle centres around career entry, often described as a time of survival and discovery (p. 5): survival in dealing with the reality of teachers work and discovery of enthusiasm in entering a profession that one has been trained for. It is a mistake to assume that teachers working contingently do not learn anything about their profession or their craft working
contingently is naive. It is not reasonable to believe that teachers coming from the teacher contingent workforce will experience the same insecurities and questioning in the survival component as one who has not come from contingent work. It would be a mistake, however, to assume, as Huberman appears to do, that contingent teachers only have the ‘discovery’ experience working in a full-time teaching position is also inaccurate. Previous studies (Pollock, 2008; Duggleby & Badali, 2007; Betts, 2007) have indicated that teachers working contingently do experience some form of survival and discovery as described by Huberman (1993, p. 5). There is also emerging evidence that the work contingent teachers do is somewhat different than that of full-time teachers (Pollock, 2008; Jennings, 2001). They also see their contingent work as part of their career journey (Pollock, 2008) and more importantly, for those who go on to secure full-time teaching, they bring to their full-time teaching position lessons learned from teaching contingently (Pollock, 2008).

Why is it important to reconceptualise the teacher career cycle? One reason is that professional support for teachers is usually based on how teachers’ careers are conceptualized. For example, the Ontario provincial government stated in its fifth mini discussion paper (August, 2004) prepared for the Education Partnership Table that “continuing professional development for teachers is about reinforcing all the dimensions of good teaching throughout a teachers’ career (emphasis added)” (p.1). If teachers’ careers and career cycles are conceptualized in the traditional way then only full-time teachers will receive this continuing professional development. As the survey data indicates, teachers new to the teaching profession in Ontario currently teach contingently for a number of years before they secure a full-time permanent teaching position (if they ever do). Consider for a moment one example of a contingent teacher’s career trajectory in Ontario, an individual entering the teacher workforce contingently or full-time must be a member of the Ontario College of Teachers which means they must be a certified teacher. The individual will have had to completed minimum, a three-year undergraduate degree, a one-year accredited teacher education program and a few other administrative tasks. Once they are certified they must go through an application process to be considered for an ‘eligible to hire’ list for individual boards, which essentially means they are on a substitute teacher call list. If they are lucky, they will be called and if they figure out the system, they will be called back until they either leave the profession, decide to teach contingently and not seek a full-time teaching contract or until they secure a full-time teaching position. If they do secure a full-time teaching position they are then granted access to much more professional learning opportunities. This essentially means a teacher is supported through their pre-service year, mainly ignored as they enter the teaching profession as contingent teachers (Betts, 2006; Damianos, 1998), and then re-invited into the professional learning community once they secure a full-time teaching position. This does not bode well for contingent teachers who both need and desire support for their teaching (Pollock, 2008).

Career concepts have historically been constructed with an unconscious assumption of artificial gender neutrality. Several researchers have argued that the traditional career conception, however, is socially constructed from a male perspective (Acker, 1992; Bascia & Young, 2001; Biklen, 1995). Traditionally, patterns of employment and organizational structures, predominantly practiced by men, consisted of a number of specific characteristics used to consider whether specific work can be considered a career. Huberman’s (1993) research assumes gender neutrality, even though he does report on men and women. While he did report that some
teachers do exit and re-enter the teaching profession, he did not emphasize the relevance of gender within this practice. This is also important when considering teacher career and career cycles because many teachers (men and women) do leave full-time teaching for a period of time only to re-enter again later, but they do so for different reasons. Traditionally, many of these people tend to be women as they balance family responsibilities and teaching careers. This reflects the general trend in nonstandard work. Vosko, Zukewich and Cranford (2003) cite statistics for 2002 where “42% of men compared with 25% of women worked part time because they were attending school, while 15% of women and just 1% of men cited child-care responsibilities” (p.2).

Statistics Canada 2006 census data indicated that the approximate ratio of female elementary and kindergarten teachers to male elementary and kindergarten teachers was 5:1. In this study the ratio was 9:1 with women over-representing the contingent teacher workforce. Between 2007 and 2009, the ratio of women to men entering teacher education programs in Ontario was 7:3 (Teacher Education Application Service, 2007, 2008, 2009). This statistic is not broken down for the education divisions such as primary, intermediate, junior and senior so it is not clear how many men enter the teacher education program at the primary/junior level. But this ratio can indicate in general terms that more men enter education programs than those that actually practice their profession contingently. There may be less men teaching contingently for two reasons; they either exit the profession or are hired into full-time teaching positions because of the current trend for hiring more men in the elementary division (Jamieson, 2007).

One can argue that it is important to understand how gender (or how unpaid work is delegated) can play out in terms of engaging in work because a portion of teachers working contingently do so because it is a work-balance strategy. The online survey hinted towards this when participants were asked if caring for a child or an adult influenced their decision to work contingently. While a small portion indicated that caring for an adult influenced their decision to work contingently, a larger group of teachers (approximately 61: 57 female and four male) indicated that caring for children less than 18 years of age influenced their decision to teach contingently. This reflects the previous statistics presented above. The over representation of women in the contingent teacher workforce reflects general trends within nonstandard work in Canada.

Why is it important to know the gender composition of the teachers who work contingently? Recognizing the gendered composition of the teacher contingent workforce in terms of numbers should be the first indication that this workforce may also be a feminized workforce. In this case, feminization does not refer to the numbers of women in the contingent workforce but to the fact that it is predominantly women who do the work, and that the work ends up being less autonomous, deskill in some way, provides reduced opportunity for upward mobility, lower wages, and greater pressure for rationalization (Apple, 1986). This study is not able to answer the question of whether or not contingent teachers work in a feminized workforce but it does provide the basis for moving forward in exploring the possibility. What is known from other preliminary studies is that this may be the case (Betts, 2006; Duggleby & Badali, 2007; Pollock 2006, 2007, 2008). The data in this study does indicate that two-thirds of contingent teachers teach in areas for which they are not certified to do so, mainly the intermediate division and French, a division and subject area that is more difficult to cover. Intermediate level appears to be the division most
difficult in terms of classroom management and French as a subject has been one of the most difficult areas to cover because many do not know the language.

It is also important to understand the gendered nature of the contingent teacher workforce because events such as having children or relocating can influence how women interact with the workforce. For example, in this study of the teachers who had held a permanent teaching position previously, 28% indicated that they had left for family reasons and another 28% indicated that they had left a permanent teaching position for reasons around relocation. This reflects the claim that Vosko and Clark (2009) make when they state that certain events such as the birth of a child or relocation, can increase workers’ exposure to forms of employment characterized by insecurity” (p. 26). There is no job security in contingent teaching. This phenomenon needs to be explored further.

**Conclusion**

Growth in the contingent teacher workforce has significant consequences for government, school districts and teacher unions. At the system level, policies and program will be affected. The government has begun the process of reducing the enrolment in teacher education programs. This will mean that faculties of education will receive fewer students and less revenue. School districts will continue to have the luxury of choosing from a large pool of teachers when hiring. But they will also be taxed as they attempt to provide professional learning opportunities for their large local contingent teacher workforce. Teacher unions will also see their membership composition change with more contingent teachers and less full-time permanent teachers.

The knowledge gleaned from this provincial study provides evidence that the contingent teacher workforce requires attention. This workforce will benefit from contracts that provide better working conditions for contingent teachers. A better understanding of the growing contingent teacher workforce means that teacher unions, school districts and governments can provide more targeted professional learning opportunities for this specific group of members.
References


Statistics Canada (2007). Occupation - Standard Occupational Classification 1991 (Historical) (707), Age Groups (12A) and Sex (3) for the Labour Force 15 Years and Over of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 1996 to 2006 Censuses - 20% Sample Data.


Exploring Grade Six Students' Comprehension of Statistical Graphs in the Social Science Curriculum

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In Taiwan Grade 1-9 Curriculum Guidelines (2003), interpreting statistical graph is suggested to teach in the social science curriculum while reading & comparing statistical graph are emphasized in the mathematics curriculum. Under this circumstance, statistical graph comprehension is partitioned into two parts to teach. This is for the idea of interdisciplinary connections. But, whether does this kind of curriculum setting help students to understand the social context conveyed by statistical graphs? How do students perform the comprehension?

To answer these questions, we designed an assessment test with 45 multiple choice items structured by two dimensions. One dimension was based on three hierarchical abilities for understanding statistical graphs—reading, comparing and interpreting. These abilities were proposed by Curcio (1987) as reading the data, between the data and beyond the data. In Taiwan, reading & comparing are emphasized in the mathematics curriculum while interpreting is suggested to teach in the social science curriculum. The second dimension was based on five types of statistical graphs found in the social science curriculum—bar graph, line graph, pie chart, complex graph & map chart. Except the map chart, the other four types of statistical graphs are also in the mathematics curriculum. All of the statistical graphs in the test were copied from the social science textbook. A total of 513 grade six students from twelve elementary schools in Taipei Area participated in this survey. The validity was constructed by several experts and the reliability was good with cronbach α=0.843.

As to three abilities for understanding statistical graphs, reading was performed best with 85.83% correct respondents, followed by comparing with 72.36% correct respondents, and then interpreting with 54.79% correct respondents. The performance of interpreting was related significantly by the performances of reading and comparing separately with determination coefficients 30% and 38%. As to five types of statistical graphs, bar graphs & line graphs were performed best with smaller variances, followed by map charts with largest variance, and pie charts & complex...
graphs were the worst. Hence, even though students’ comprehension of statistical
graphs in the social science textbook was related to their learning experiences of
statistical graphs in the mathematics curriculum and to the complication of the
statistical graphs, there were some other factors that affected the performance of
interpreting.

There was a significant interaction between three abilities and five types of
statistical graphs. Through interviews with some students, the type of the statistical
graph was not the only factor to the performance of the ability. For example,
complication of the graph and familiarity with the unit of data measuring affected the
performance of reading and vision decoding affected the performance of comparing.
For the performance of interpreting, students were convinced more easily by numbers
than by words as to inference descriptions. Some suggestions for teaching and future
work will be provided from the view of cross disciplines.

Key words: elementary school, social science curriculum, statistical graph

Reference


Ministry of Education of Taiwan (2003). Grade 1-9 Curriculum Guidelines, Taipei,
Taiwan.
Title: Does Parental Discussion About Personal Finances Make a Difference in the Amount of Credit Card and Student Loan Debt Incurred by Undergraduate Students?

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Abstract

The most current recession that began in December 2007 has shown that many Americans are living beyond their means and do not have a firm grasp of basic financial concepts. Studies have shown that four in ten Americans are misusing and misunderstanding credit, and high school seniors on average answered less than fifty percent of financial competency questions correctly. (Mandell, 2008; JumpStart Coalition, 2008). It appears that adults as well as many youth did not receive the adequate financial training necessary to make sound choices on how to spend, save and invest.

Multiple organizations have responded to this lack of training and developed financial curriculums to be used with high school-aged students. Forty states have responded by implementing some type of personal finance training into their high school curriculums however, only seven states require students to take a personal finance course as a high school graduation requirement (National Council on Economic Education, 2007). In addition to the response by organizations and public education, perhaps studies should examine the financial training and modeling (or lack of) occurring in the home between parent (or guardian) and the child.

Many researchers agree that financial education needs to begin at an early age and that educating children on personal finance management at a young age will have positive, lasting effects on the rest of their lives (Lai, 2010; Lunt and Livingstone, 1999; Staten, 1993; Sumarwan and Hira, 1993). A study done by Pinto, Parente, and Palmer (2001) showed that lack of parental involvement in a child’s finances can have serious implications on the amount of debt they will ultimately obtain. These researchers
examined the relationship between parental involvement in credit card acquisition and the amount of credit card debt that college students accrue. They concluded that college students whose parents were involved in the acquisition of their credit cards have lower overall credit card debt than students who had no parental involvement at all. A similar study conducted by Goldberg (2005) examined variables that affect debt accumulation and concluded that while 70 percent of parents in his study had taught their teens how to do laundry, only 34 percent of them had taught their children how to balance a checkbook. And, only 34 percent of them had taught their children how credit card fees and interest work.

For purposes of this poster presentation, a team of researchers from a university in the Pacific Northwest conducted an online survey in November 2009 of 2000 randomly selected undergraduate students (n=778). Specifically, the researchers examined if parental discussion about personal finances made a difference in the amount of credit card and student loan debt incurred by the young adult.

Preliminary analysis indicated that 45% of the respondents reported having credit card debt and 72% reported having student loan debt. Full-time, non-international, undergraduate students who discussed finances with their parents showed significant differences and had less credit card debt than those who did not (p=.0028) and less student loan debt than those who did not (p=.0245). Additional descriptive and statistical analyses will examine grade level, age, gender, part-time or full-time student, if they had a personal finance course in high school, as well as current financial habits in saving, budgeting, and overall perception of current financial situation.
Faculty Diversity in Rural Higher Education

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Faculty Diversity in Rural Higher Education

While much of the current literature focuses on the benefits of ethnic diversity as described above, other types of diversity are equally important on university campuses. Anyone who differs from the able-bodied Protestant-Christian Caucasian heterosexual male norm brings a different perspective to the classroom and could assist students increase their cultural sensitivity and broaden their belief that people different from the norm can succeed. The four areas of diversity of interest in this study were ethnic, religious, disability, and sexual orientation.

The literature pertaining to ethnic, religious, disability, and sexual diversity shares common themes. In every case, there is a lack of research investigating faculty members from diverse, as identified in this study, backgrounds working in rural Appalachian institutions of higher education (IHE). The purpose of this research project is to identify common themes that emerge from faculty members’ experiences as part of minority (diverse) populations in an Application University.
Interviews were conducted with faculty members and administrators at a 4-year public Appalachian University. Faculty informants indicated the acceptance of diversity depends to some extent on the department culture and the department leadership (e.g., chair). All informants commented on the importance of the administration's commitment to diversity and that the leadership commitment needs to be clearly stated for all types of diversity, and that needs to filter down to all levels of leadership – including the department chair level. Other common themes mentioned by faculty participants were culture of the community, recruitment and retention, and areas for improvement. Analysis of administrator interview data continues. Results will be available at the conference.
Learning across contexts: How students regulate their learning in an informal context

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Full Paper
Abstract

Primary school learners are often engaging in learning opportunities in both inside and outside of school contexts. To understand how these different contexts afford opportunities for metacognition and self-regulation, we follow local primary school students of elementary grades five and six. In Vygotsky’s work, metacognition appears as an awareness of one’s own thinking processes and the way they can be controlled and directed. For Vygotsky, metacognition and self-regulation are completely intertwined in which the latter takes the forms of control over one’s attention, thoughts, and actions (Fox & Riconscente, 2008). Consequently, the understanding of these important constructs supports the understanding of human behavior, learning, and development within a broader context of all human activities. To explore the learning of metacognition and self-regulation in students’ learning, we draw data from an informal context: a primary school, co-curricular activities (CCA), in bowling. Interpreting from a variety of data-collection techniques such as field observations, interviews, field notes, and video recording, the research team has been observing the bowling team’s practices at least once a week since January 2010. Although the school’s team comprises of more than thirty students, we targeted our observations to nine of these students. A further sub-section of two participants were selected and interviews were conducted to collect information on strategic planning, self-efficacy, and knowledge application. Moreover, artifacts such as written statements of the way their families assisted in their learning in an informal context were also collected. Preliminary findings indicate that learning in an informal context affords opportunities for metacognition and self-regulation in interesting and authentic ways. In addition, students point out that learning strategies can be used in both formal and informal contexts. The findings also illustrate the importance of linking students’ development of metacognitive abilities to parental mentoring in providing a fuller understanding of their learning in both formal and informal contexts.
Introduction

“Must still keep your mental calm and try to do better the next shot. And don’t keep thinking about the bad frame (Each game of bowling is made up of 10 frames. Each frame entitles the bowler up to two attempts to knock down ten pins); Just look forward to the next round”. (Mark)

I keep a notebook so you have notes and stuff, so if there is a spare (A spare indicates that all of the pins have been knocked down after the second ball of a frame), and you don’t know what line to use them, just refer to the notebook. (Jay)

The two eleven-year-old primary school boys who were quoted above are reflecting on their learning in an informal context and their strategies for gaining expertise. Their descriptions suggest that they move toward attainment of their goals with the engagement of self regulatory behavior; while Mark demonstrates regulation of one’s emotion, Jay monitors his learning through the use of a note book. These learners demonstrate that learning in an informal context requires more than compliance with prior directions (in cases whereby their school coaches would give specific bowling instruction to prepare students for their participation in various private bowling clubs due to differences in lane conditions); it also involves controlling, monitoring, and taking responsibility for one’s own learning processes. Metacognition is often described as conscious control, active monitoring, and regulation of learning processes (Flavel 1987; Baird & White, 1996; Larkin 2006). This article aims to investigate the impact of broader informal learning experiences on students’ metacognition and self-regulation as there is compelling evidence from formal classroom suggesting that students who are more metacognitive can improve their learning and while becoming more empowered learners (Baird, 1986).

Learning in formal classrooms provides students with the knowledge and skills that they need to become contributing citizen in a society. However, the importance of redirecting focus and attention upon contexts other than the classroom where students learn through participation in the communities and practices help to capture learning experiences and the understanding of different contexts and practices over time (Biesta, 2008). To shift away from class-room centric focus, the research emphasizes one particular setting, the
co-curricular activities (CCA) in bowling, and on the metacognitive learning afforded by this informal setting.

**Metacognition and Self-regulation**

The term “metacognition” is most often associated with the cognitive information-processing tradition represented by the early work of John Flavell (1979) and Ann Brown (1987). Metacognition was originally referred to as the knowledge about and regulation of one’s activities in learning processes (Veenman, Van Hout-Wolters, & Afflerbach, 2006). A review of seminal works in the field reveals that there appears to be no uniform definition of metacognition in the literature (Larkin, 2006). For instance, Kuhn, Amsel, and O’Loughlin (1988) view metacognition in terms of students’ ability to not only think with their ideas (knowledge), but about their ideas (knowledge). Gunstone (1994) considers metacognition as a combination of student knowledge, awareness, and control relevant to their learning. Moreover, White (1992) and Costa (1991) place emphasis on evaluation which represents another aspect or dimension of metacognition. Furthermore, Fox and Riconscente (2008) note that historical precursors of metacognition (along with self-regulation, and self-regulated learning) appear in the writings of James, Piaget, and Vygotsky, however, contemporary research has been heavily influenced by Flavell in the area of metacognition (Schunk, 2008). Being one of the earliest contributors to the conceptualization of metacognition, Flavell laid the contemporary foundations for metacognition. Flavell describes the conceptual definition of metacognition as “thinking about thinking (Miller, Kessel, & Flavell, 1970), he further operationalizes metacognition into four key areas: metacognitive knowledge, metacognitive experience, goals, and the activation of strategies. At a broader level, the foundation of metacognition is in the mind of the individual. Further, Baker and Brown (1984) separated metacognition into two distinct elements: knowledge about cognition (monitoring) and self-regulatory mechanism that contain monitoring as a central focus. The self-regulatory mechanism included checking the outcome, planning, monitoring effectiveness, testing, revising, and evaluating strategies (Dinsmore, Alexander, & Loughlin, 2008). Moreover, the term “self-regulation” derives from the socio-cultural
tradition founded on the work of the Russian psychologist, Lev Vygotsky (1978, 1986). In Vygotsky’s account of historically situated and culturally determined human behavior, self-regulation and metacognition are central to human development driven by language-based social interactions. For Vygotsky, self-regulation is an essential characteristic of human behavior; it takes the form of deliberate control of one’s own attention, thoughts, and actions (Fox & Riconscente, 2008). According to Dinsmore et al (2008), contemporary self-regulation research has been heavily influenced by the work of Albert Bandura. Bandura (1986) incorporated self-regulation into his social cognitive theory of human behavior. He views self-regulation as the process of influencing the external environment by engaging in the functions of self-observation, self-judgement, and self-reaction (Schunk, 2008). Schunk (1994) defines self-regulation as students’ self-generated thoughts, feelings, and actions, which are systematically oriented toward attainment of their goals. In this article, we have adopted Vygotsky’s model in which metacognition forming the cognitive parts of self-regulations, which also encompasses affective, self-efficacy, and social elements. Furthermore, both terms metacognition and self-regulation are used to identify multiple-dimensions of the two constructs which continue to be represented in the research literature. For instance, many researchers have argued that sport expertise also depends on learned cognitive processes and behaviors (Hodges & Staarkes, 1996; Paull & Glencross, 1997; Willimans & Davids, 1995). An expert tennis coach, who worked with world highly ranked players, described the advantages of metacognitive process along with motivational benefits such as attributions to strategy use (Zimmerman & Moylan, 2009). However, much less is known about the processes individuals are using during practice sessions, and what types of processes could benefit or impact the effectiveness of learners’ performance. Based on the above synthesis, in this article, we focus on one particular setting, that of CCA with primary students in bowling in order to explore the different dimensions of metacognition and self-regulation afforded by this informal context.
Methods

To explore metacognition and self-regulation in the context of bowling, the research involves the collaboration of a Singapore primary school with students from elementary five and six. The primary school bowling team consists of more than thirty students. To capture the breadth and depth of students’ experiences as they engaged in various aspects of training, this study targeted at two groups of the school team, which consisted of nine students. The teams practiced after regular class time, two hours a day, and three days a week. In addition, a further sub-section of two participants, one from elementary five and another from elementary six, were selected for regular interviews. There are two coaches for the bowling team, and they varied somewhat in their coaching experience. For example, Alex has more coaching experience than his assistant Victor, but both of them engaged in direct interaction and instruction with the learners.

The study drew on a variety of research methods including field observations, informal open-ended interviews, video-recording, field notes, and informal conversations with students, coaches, and parents during practice. Observations occurred regularly at least once a week beginning from January 2010. Students were interviewed with questions focused on individual’s learning strategies, peers’ learning approaches, and key learning experiences. Interviews were audiotaped and then transcribed. Moreover, we collected artifacts produced by students, like written statements of the ways their families assisted their learning in an informal context. The data analysis process was iterative and started early in the course of the study as we discussed observations, analyzed transcripts, and identified changes in students’ thinking and learning approaches.

After the initial weeks of observation, we identified two bowlers (both boys) that we thought represented the profiles of potential athletes as in their dedication to the sport. Both participants shared a common characteristic in which their parents (especially their fathers) played a prominent role in assisting their boys to excel in their learning. During school practice and competitions, we paid special attention to these two boys and conducted extra interviews with them during the course of this study. In short, we draw from these students’ experiences to represent aspects of metacognitive activities.
Findings

The research aimed to capture how an informal learning context such as the CCA activity, bowling, affords opportunities for students to understand the significance of their engagement in metacognition and self-regulatory activities. In this section, we present the findings from our analysis of the two groups of participants including individual interviews conducted with two selected participants. The first part, *engagement in self-regulatory processes*, focuses on the two groups of students’ experiences of metacognitive control, metacognitive monitoring, strategies selection, and help-seeking behavior. The second part, *a closer examination of metacognitive and self-regulatory processes within a case study*, presents the first case study of a primary five student who engages in goal setting strategy and knowledge application in different contexts. Finally, the third part, *the mentoring process of metacognitive and self-regulatory learning*, highlights the second case study of a primary six student who involves in the metacognitive processes with assistance from his father.

I. Engagement in metacognitive and self-regulatory processes with two groups of students

The two groups of participants from the school team that we interviewed commented on their learning approaches and experience learned from participation in school practice and competitions. Most students demonstrate some form of metacognitive control, which help them to exercise strategic judgment about ‘what works’ in the patterns of their performance. Note that in the transcript, parentheses denote explanations:

Yeah, because you know, like if you get a bad frame (*Each game of bowling is made up of 10 frames. Each frame entitles the bowler up to two attempts to knock down ten pins*), and you bowl, the next frame you feel negative but you must tell yourself positive. Then you can do it. (Jay)

Yeah, you must apply like, whatever you win or do well in a tournament, you must always remember what you did and try to do it in the next tournament. But if you do not succeed then it’s okay, because once in a while, life has ups and downs. (Mark)
Because when I bowl first game, I very concentrate, then after that, middle, I start to lose concentration…in the middle then the last game, I will put all my effort to go back. (Benjamin)

Also, students indicate metacognitive monitoring of their errors with the use of note-taking as a way to learn from their errors and avoid consequences of not knowing how to correct errors and experience failures:

I think it’ll be easier to write it down so that you won’t forget the things that you tried but failed…but I didn’t do that for two weeks. (Thomas)

Yeah, I take, I will jot in the notes then I will…and after that, I put in my bag, then I read, if I get that wrong, I read again until I get it back. (Dixon)

Taking down notes like, when the lane gets dry then you write down your strategy. (Rick)

However, not all students find that accurate records of what they have done can improve performance and provide cues for ways to improve expertise:

Not really…lazy. (Benjamin)

Students state that the experience of going through a bowling competition can be more stressful than academic examinations due to the fact that everyone in the bowling alley is watching how the bowler is performing. To overcome irritableness and nervousness, students select strategies they consider effective in helping them to perform productively during competition:

Listen to music… (During competitions, students are allowed to take a seat with earphones on while waiting for their turns to bowl). (Benjamin)

You cannot be pressured, because if you are pressured, because everybody’s pin fall, so if you’re pressured then if you like grip the ball a bit more then the ball will start doing things that you don’t want it to do, and then that’s where probably you lose out. And when you’re taking spares, you must not be…you don’t want to get over things quickly, although you strike…yeah you must be slow…slowly take the spares down. (Mark)
Finally, some students note that help-seeking from their coaches should be the last resource as experimenting through learning and fine tuning is more challenging:

Must be independent, yeah, you cannot rely so much on like somebody… (Jay)

No, you need to experiment it yourself. Or you can call coaches if you really, really, really need help. But otherwise, most of the time, we try to do it ourselves. If we cannot, then, we’ll ask coaches. (Mark)

In this section, we have highlighted the processes of informal learning and the way in which it provides opportunities for metacognitive activities. While we recognize the potential of informal learning as an opportunity for students to engage in metacognition and self-regulation, we would like to emphasize that these skills and capabilities can be learned and practiced in both informal and formal contexts or interchangeably.

II. A closer examination of metacognitive and self-regulatory processes within a case study

Research by Zimmerman & Moylan (2009) has revealed that novices attempt to self-regulate their learning in some way. In this section, we present the first case study of Dixon, a primary five student who engages in certain dimensions of metacognition and self-regulatory activities. Dixon demonstrates that he is able to apply goal setting strategy effectively and to make connection between learning in bowling and classroom as a way to improve on his formal and informal learning endeavor. Note that in the transcript, parentheses denote explanations:

Yeah, must have a goal. Example, if you want to win a tournament then you must have high score right? You want to get high score, you must strike a goal, I mean like, every each game you must get 200. If you never get 200 then try the next game. (Dixon)

So I can get more medals, for example like happy like that. So when the coach see I bowl very good right, I mean the national coach see that I’m very good, then later if you’re lucky the coach will like, the coach will see your results and the coach will pick you up for going to the national
To achieve his goals, Dixon demonstrates aspects of metacognitive controlling, monitoring, and help seeking behaviors such as simply asking the head coach for help when having difficulties in reading lane conditions:

The mindset that means like, example, alah I can actually fail...that means not to say that in your mindset, must say must achieve this, must achieve this. Must try and try and try. That your mindset must be like a good thinking. (Dixon)

No, I didn’t talk to myself, I like, the people in the, like for example like Mark, Jay encouraged me. Don’t cry lah...come on...come on...this is just the first game. And later I thought to myself that must be happy, must be happy, must be happy. Must be happy, regardless of my fever. (Dixon)

First thing, important in masters when we first throw, first throw already right, after that, example, your ball over-hooked, you must ask our coach. So our coach can help us the first important thing. For example, if your lane is very dry, very dry then you over-hooked, ask your coach, move where, move where? But if you already know that your coach teaches you, you can adjust yourself to follow the lane conditions. (Dixon)

These individual interviews with Dixon provided evidence of the different ways in which a learner was able to self-regulate his learning experiences in an informal context. Next, we analyze an aspect of self-efficacy, which is self-efficacy calibration. Calibration is a measure of metacognitive monitoring based on the disparity between one’s sense of efficacy about performing a particular task and one’s actual performance (Zimmerman & Moylan, 2009). Dixon’s is accurate in judging his capability to perform and thus learn more effectively. His self-efficacy judgement does not exceed his actual capability as over-optimism can lead to insufficient efforts to learn:
My normal average now is about 155 for the whole year. Not for the, sometimes the game, that one sometimes game. 155 and above. (Dixon)

Last year my average was about, total was 139. (Dixon)

Sure (Dixon indicates that his last year average was 139, this year average is 155, and he thinks that next year average would be 170. Dixon demonstrates accurate metacognitive monitoring of his actual capability and performance. (Dixon)

Interestingly, Dixon points out that if one is good at bowling, one must be very good at studies too, and he thinks that there is a connection between bowling and classroom study:

Example like, achievement goals like are goals, like example last year if your score is 70 something, this year you must get, this year I want to get 80 and above, get one, like that (Dixon is relating the examples of setting incremental goals from bowling to classroom study in which last year score for a subject was 70, and this year score for a subject can be 80). (Dixon)

Dixon’s efforts presented in the above example provide an indication of knowledge application from one context to another. He raises interesting examples of how learning can be related and even intertwined between different settings.

**III. The mentoring process of metacognitive and self-regulatory learning**

This section presents the second case study involving Nathan, a primary six student and his engagement in metacognitive and self-regulatory activities with assistance from his father. In the bowling practices, parental involvements are regular. Most parents almost always attended the practices and competitions in order to assist their children’s performance or cheer from the audience seats. Nathan’s father holds an academic position in a local university. Although his work and schedule put a certain pressure on his time and availability, he attended interviews with Nathan and actively participated during the meeting sessions. The excerpt below identifies the father’s role as an important mentor who assists Nathan in monitoring his learning:
Father: Okay. You feel that you must pick up your spares.
Nathan: Yeah.
Father: What else do you think you must do?
Nathan: Train hard?
Father: Train hard; Let me write down on the whiteboard, okay. So you can remember, okay. Never mind it’s alright. So the first thing you need to do is that you need to be determined…
Father: To work hard. Anything else? What about accuracy?
Nathan: Of course, accuracy. I almost forgot you have to be very consistent unlike me (Laughs).
Father: Okay, so to be consistent…
Nathan: Consistent in your shots because every shot counts.
Father: Every shot counts.
Nathan: In a competition (Laughs).
Father: Okay, don’t waste your time, okay. Any other thing that you feel that is necessary?
Nathan: Your goal.
Father: So, goal is necessary, okay.
Nathan: Wait, determination and confidence must be, especially when you are feeling down and your scores are bad.
Father: When…
Nathan: When you are going to give up.
Father: You are feeling…
Nathan: Wait, wait. No, no. Not feeling down. Going to give up. Some people when they are going to give up they don’t feel…
Father: Okay, when they are going to give up, okay. Give up, okay. Anything else? Do you think you’ll be doing all these from now till next year?
Nathan: Wait, wait, wait. Actually the atmosphere is very important.
Father: Well you can’t do anything about the atmosphere right?
Father: Okay, you got to overcome, to overcome…
Nathan: Overcome the bowling centre atmosphere…
Father: Basically yeah…
Nathan: You must actually when, when the person bowl right, the other side right, actually you must, you must actually like be, must be, this is a, this is a courteous bowling, you have to let the person go first then you go…
Father: Okay, so you must bowl by the rules.
Nathan: Yeah.

Similar to the above discussion about bowling, Nathan’s father helped Nathan with the development of understanding both informal and formal based experiences in future
learning. In the following excerpt, Nathan told his father that he did not want to discuss about bowling but he preferred to discuss about written composition. Nathan thought that the composition topic would be related to “ambitions” and he wanted to know how he could address the topic. Nathan’s father modeled to Nathan the kinds of sub-issues which can be discussed such as “designer”, “engineer” knowing that Nathan had an inclination on these topics:

Nathan: I want to be a designer-engineer.
Nathan: my ambition is to design a flying car. I excel in sport in primary school, in the arts in secondary school, and I want to do engineering in the university!
Father: You can write about the everyday things – sports, Mona Lisa, iTouch – that there is both science and art integrated.

It is clear that informal context played an important role in Nathan’s learning as his father with his multiple roles as mentor, learning broker, consultant, and as a pointer to knowledge integration is instrumental in helping Nathan to regulate his learning across different contexts.

**Conclusions**

From the analysis, it is evident that students have the potential to control, monitor, and select goal-setting strategy in an informal context and with support from parental mentoring. As pointed out by Hung, Kim, Lim, and Jamaludin (in press), “with a packed curriculum to be covered in schools, students are often not able to engage in experimentations and related 21st century skills, but such opportunities are possible in informal contexts”. Furthermore, Biesta et al (2009) indicates that in everyday lives, young people learn from opportunities for action, participation, and reflection afforded by practices and communities. In this article, we have presented the opportunities that an informal context provided for students to experience regulatory processes and learning in a social world, which is outside of their school environment. Most students in the group interviews demonstrated the application of regulatory strategies to meet the demands and challenges in bowling. To enhance their awareness of their faulty throwing techniques,
students used note-taking as a way to assist them in making strategic adjustment for future performance. The transition from school to bowling did not involve only the physical setting but also a shift from standard closed-door examinations to competitions that are open to public. Under such a different learning context, students monitored and regulated their responses differently either by listening to music to reduce stress levels; taking one’s time to spare without nervously rushing through; or approaching their coaches for helps. Students who engaged in these metacognitive and regulatory strategies can become increasingly capable of performing under different situations. The case of Dixon who approached his coaches for advice regularly indicates that a high achiever is more readily to seek helps from teachers (Puustinen, 1998; Wood & Wood, 1999). Further, the case example of Nathan reveals that the significance of mentoring is consistent with the views that “to understand fully the determinants and impact of educational setting, we need to consider their links to other aspects of an individual’s life context” (Moos, 1991). In the collected artifacts with students’ written statements of how their families supported their learning, Nathan wrote: “my father supports me by bringing me for bowling regularly and buying me balls. He also guided me and made me feel better during competition.” Similarly, these are other written statements by students, example two: “my parents support me. They bring me to bowl, they buy me new ball and they remind me to do the things that have been taught.” Example three: “my parents support me. Even if I do not do well, they will still encourage me and ask me to play my own game.” These examples document that social variable, parental mentoring, in an informal context can be an influential factor for students’ learning. Furthermore, when Nathan’s was facing difficulty in written composition, he asked his father for assistance and this help seeking adaptive behavior is an important self-regulatory strategy, which is crucial for student learning (Newman, 1994). Clearly, the understanding of ongoing social contexts in students’ learning experience highlighted the importance of mentor in demonstrating regulatory skills and supporting opportunities for learners to practice attitudes for metacognition and self-regulation on a daily basis.
References


Title
Contemporary organizations: Using a layered mentoring model to build relationships.

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Abstract
Mentoring models and types of mentoring have changed little over the last thirty years. In today’s contemporary organizations there is a need to provide mentoring that is collegial and is based on a mutual relationship. This paper explores a reconceptualisation of mentoring that is more conducive to modern organisations and workplaces in the 21st century. A layered model of mentoring is discussed and identifies within each layer the characteristics of the mentoring relationship. The mentoring relationship is examined in respect of the implications such relationships have on professional learning. In particular, a case study forms part of the methodology that explains the model in practice. The model, although explained through the lens of Academia is applicable to other organisations that are keen to move forward in developing mentoring relationships that are based on mutual respect and the ability of the relationship to offer learning opportunities for all parties involved in the mentoring process. This layered model of mentoring does not conform to any previously documented form of mentoring. It is a new way of thinking about mentoring. This model recognizes the contribution that each person brings to the relationship and is based on reciprocal benefit.
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**Introduction**

Raza and Mosca (2002) in their research explore ideas of changing employee-organisation relations. They posit that the ‘new age employee’ expects to be treated in a more equitable manner than previous generations. They believe that contemporary organizations need to provide opportunities for employees to have feedback on their progress and “proper tools to assist them achieve their goals” (p.2). Organizations in an attempt to provide these opportunities are turning to mentoring as one means to provide professional learning for their employees.

Mentoring is not a new concept; it has its roots in early history. The term was used as early as 800BC, in Ancient Greek mythology, in Homer's Odyssey (Debolt, 1992; Reglin, 1998; Bond, 1999; Schiewbert, 2000). The original Mentor was given the care and guidance of Odysseus' son, Telemachus. The Mentor in this instance served as a role model, guide, facilitator, and protector. There has been a resurgent interest in mentoring occurring as indicated by Mullen, Fish, and Hutinger (2010); Gabriel and Kaufield (2008); Le Cornu (2005); Goodwin (2004); Hegstad (1999); Zey, (1991); Carruthers, (1993) and Kerka (1998). Reasons for this renewed interest are due to organisational trends such as downsizing, restructuring, collaboration and teamwork. Increasingly,
managers in organisations are seeing mentoring as an important source of professional learning for less experienced employees. Many organisations are recognising that facilitation and support of a mentoring process is an effective strategy to build the organization.

Over time there has been a plethora of definitions on mentoring and often these definitions have been defined in terms of the type or form of mentoring. Usually, mentoring has been defined in terms of either informal or formal mentoring. By defining different forms of mentoring and the attributes of each form, communication pathways and types of relationships established can be identified. Mentoring can be recognized by the type of relationship that is evident in each mentoring process. It can be a formal or an informal relationship and within these boundaries the relationship can be reciprocal or non-reciprocal. It is the construct of the development of the relationships that is the focus discussed in this paper.

**Formal mentoring**

Formal mentoring relationships are generally designed for a predetermined length of time and are usually of short duration. Many managers implement formal mentoring programs as a strategy to induct new employees into their organisation (Douglas & McCauley, 1997). Within these programs the protégé is allocated to a mentor by the management of the organisation and usually, there is little or no involvement of staff in the selection process of matching the mentor and protégé by either party. These programs are purposefully developed, monitored and evaluated by the management in terms of expectations and goal attainment. There is an inequality of status in this relationship with communication usually being one-way. The mentor directs and drives the communication down to the protégé with little opportunity for the protégé to have input or respond to the communication from the mentor. The one-way communication in formal mentoring can result in the protégé being unable to 'connect' with the mentor. (Figure 1).

![Inequality of status with communication. Communication is driven down to the protégé](image)

**Figure 1: Formal mentoring communication pathway**
Phillips-Jones (1982), Kram (1991) and Murray (1991) have argued that management personnel in organisations do not fully understand the challenges inherent within formal mentoring programs. Ragins and Cotton (1999) put this lack of understanding down to the scarcity of empirical research related to mentoring programs. Indeed, practice still continues to exceed the pace of empirical research. In formal mentoring programs mentors do not have a previous personal connection with their protégé but participate in the mentoring programs for the 'good of the organisation'. As an outcome of this lack of connection, both mentors and protégé may not always be committed to each other or to the program. The consequences of this diminished commitment can result in an underdeveloped mentoring relationship.

**Informal mentoring**

The essence of informal mentoring is the establishment of beneficial interpersonal relationships based upon effective communication (Kerka, 1998). Mentors in informal mentoring relationships provide direction, support and insights and they essentially provide "...their protégés with a sense of what they are becoming" (Debolt, 1992, p.30). Opportunities for recognition, encouragement, feedback, advice on balancing responsibilities and knowledge of the informal rules of the organisation have been cited in the literature as some of the benefits of informal mentoring (Kerka, 1998; Schwiebert, 2000).

Informal mentoring relationships are spontaneously formed through people getting to know each other in the work environment. The relationship is usually voluntary and is often based on mutual professional identity and respect. The relationship is of a more personal nature and communication flows usually from the mentor to the protégé but it takes place in a more informal manner (Figure 2). This informality is derived from the fact that the management of the organisation does not initiate the relationship but rather the relationship often forms through social contexts such as meetings 'over coffee'. The communication in this relationship is more relaxed and has little structure. The mentor's communication is usually in the form of support, guidance and advice. Within this type of informal mentoring relationship there is still a hierarchical status with communication between the mentor to the protégé. The difference in the status of the relationship between formal and informal mentoring relationships is that the communication in informal relationships is less formal as the name denotes.

Ragins and Cotton (1999), in a comprehensive study in the United States, compared formal and informal mentoring. They found that informal mentoring relationships were much more beneficial to protégés than formal relationships as the strategies used in the informal process were of a more personal nature such as coaching, counselling, role modelling and providing friendship.
There is still a hierarchy of status in this relationship but the communication is less formal

Mentor

Protégé

Figure 2: Informal mentoring communication pathway

Perna, Lenner and Yurs (1995) concluded from their research that the effectiveness between formal and informal mentoring could be due to the differences in the structure of the relationships. The pairing in an informal mentoring relationship is often the result of both the mentor and the protégé selecting personal qualities that mirror the qualities they would like to emulate. The informal mentoring relationship offers both the mentor and the protégé the opportunity to select each other, an aspect not usually present in formal mentoring programs. Ragins and Cotton (1999) also indicated that formal mentoring programs often last less than a year. On the other hand, informal mentoring relationships can last for many years allowing for a personal connection between the mentor and protégé to develop.

Evidence from the literature indicates that there are fewer limitations in informal mentoring than formal mentoring. Ragins and Cotton (1999) found in their research that the benefits of informal mentoring were many. The two major areas of difference between formal and informal mentoring were in the levels of career guidance and psychosocial support. Informal mentors provided a higher level of coaching and increased the protégés visibility in the organisation. They also provided counselling, social interaction, role modelling and friendship.

Co-mentoring

In general, modern mentors are viewed as influential and more experienced people who can assist in the attainment of work and career goals of a less experienced person in the organisation. Mentors have been defined as guides (Bey & Holmes, 1992), counsellors or coaches and role models (Crow & Mathews, 1998). These definitions viewed mentoring as one-way relationships. Jeruchim and Shapiro (1992), however, presented a different view of mentoring encompassing a mutual and beneficial relationship between the mentor and protégé.
They define mentoring as

…a complementary relationship, within an organisational or professional context, built on both the mentor's and the protégé's needs (p. 23). One of the foci of this paper is to discuss this complementary aspect of mentoring.

A reciprocated communication pathway for each of the participants in the relationship and an equal role status of the mentor and protégé constitute the mentoring relationship that is referred to here as "co-mentoring."

The co-mentoring relationship has been a development reported in the literature in the last ten years (Jipson & Paley, 2000; Mullen, 2000; Kochan & Trimble, 2000; McGuire & Reger, 2003)). Terms such as “mutual mentoring” (Fritzberg & Alemayehu, 2004), ‘reciprocal mentoring’ (Gabriel & Kaufield, 2007) and “synergistic mentoring” (Goodwin, 2004) are used interchangeably in the literature to describe the practice of co-mentoring discussed in this paper. Co-mentoring recognises the contribution that each person brings to the relationship and is based on reciprocal benefit. In this relationship the status of each person is equal and the communication pathway is one of reciprocity with each person mutually benefitting from the relationship (Figure 3).

In this relationship the status of each person is equal and the communication pathway is one of reciprocity.

![Figure 3: Co-mentoring communication pathway](image)

Mullen (2000) defined the co-mentoring relationship as synergistic. She viewed it as providing opportunities to be involved in each other's learning by sharing purpose and commitment in common projects. A number of other writers including Jipson and Paley (2000) and Kochan and Trimble (2000) documented their personal co-mentoring experiences. In their stories they discussed how these experiences were mutually beneficial. Their discussions were based on collaboration and shared decision-makings. The ability to collaborate and share was seen as providing opportunities to strengthen personal and professional skills.

Rymer (2002) discussed two essential components necessary for a successful co-mentoring relationship. The relationship should be a friendship of peers rather than a hierarchical relationship and that communication was dialogue rather than the transmission of organisational information. The co-mentoring relationship serves the individual needs of each person involved in the relationship. Within the relationship the individuals act as partners often complementing each other's knowledge and skills. The co-mentors may be different ages and have different expertise, skills and knowledge.
What is important in this type of mentoring relationship is that the relationship is of mutual benefit.

Table 1 provides examples of characteristics of each type of mentoring. Examples of characteristics of design, allocation, selection and monitoring processes, communication, status, type of relationship, commitment and connection of mentors and protégés are drawn together in this table to illustrate the differences and similarities of each of the types of mentoring (Clarke, 2004).

Table 1: Exemplars of characteristics of types of mentoring relationships

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Formal mentoring</th>
<th>Informal mentoring</th>
<th>Co-mentoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design structure</td>
<td>Pre-determined length of time in the relationship</td>
<td>Often relationships last for an extended period of time</td>
<td>Often relationships last for an extended period of time</td>
</tr>
<tr>
<td>Allocation of protégé to the mentor</td>
<td>Allocated by the management of the organisation</td>
<td>Usually spontaneously formed</td>
<td>Based on each other's complementary knowledge and skills</td>
</tr>
<tr>
<td>Selection process</td>
<td>Little or no involvement of staff in the selection of mentor to protégé</td>
<td>Voluntary, often based on mutual professional identity and respect</td>
<td>Friendship of peers</td>
</tr>
<tr>
<td>Monitoring procedures</td>
<td>Monitored in terms of expectations and goal attainment</td>
<td>No formal monitoring</td>
<td>No formal monitoring</td>
</tr>
<tr>
<td>Communication</td>
<td>One-way communication from mentor to protégé</td>
<td>Communication takes place in an informal manner</td>
<td>Dialogue occurs</td>
</tr>
<tr>
<td>Status of each person in the relationship</td>
<td>Inequality of status</td>
<td>Still a hierarchical status but communication less formal</td>
<td>Equal status</td>
</tr>
<tr>
<td>Type of relationship</td>
<td>Non-reciprocal</td>
<td>Reciprocal benefit</td>
<td>Reciprocal benefit</td>
</tr>
<tr>
<td>Mentor connection with protégé</td>
<td>Sometimes lack of connection occurs</td>
<td>More personal connection of protégé to mentor through coaching, counselling and role modelling strategies</td>
<td>Individuals act as partners complementing each other's knowledge and skills</td>
</tr>
<tr>
<td>Commitment to the mentoring program</td>
<td>May not always be committed to each other or to the program</td>
<td>Self selection based on personal and professional qualities</td>
<td>Mutual benefit gained from the relationship</td>
</tr>
</tbody>
</table>
A further model of mentoring that involves overlapping layers of mentoring was reported in the literature by Clarke (2004). That study, revealed that mentoring experiences could involve three stages. They were

- collegial friendship
- informal mentoring and
- co-mentoring.

This model is a new conceptualization of mentoring and portrays mentoring not as phases but rather as a series of overlapping experiences. These experiences can be schematically described as a set of layers (Figure 4). The results of the study by Clarke (2004) indicated that there were not distinct phases but rather the mentoring relationship and its characteristics moved between layers and also that the layers overlapped as indicated in Figure 4. There was not a distinct break between each layer but rather the process merged one layer into the other. The results from this previous research led to the development of the "Layered Relationship-Mentoring Model".

![Figure 4: Layered relationship mentoring model](image)

In Layer 1, Collegial Friendship formed the basis of the professional relationship. The focus of this layer of the mentoring relationship is on the development of an interpersonal relationship with the mentor and the protégé. The characteristics of layer 1 are social meetings, seeking guidance and support and the identification of and involvement in project opportunities.

The second layer, the Informal Mentoring Layer has as its focus the relationship between the mentor and protégé’s interaction regarding the protégé’s professional learning and development. For the protégé the characteristics of layer 2 are developing a positive feeling and progressing their work, affirmation of their work and seeking guidance and support.

Layer 3, the Co-mentoring Layer, develops as a result of the interpersonal dynamics of the relationship. The relationship becomes equal with support and guidance being offered by each of the participants in the relationship. The focus in this layer of the relationship is
on an equal partnership and equal status of each of the participants. The characteristics of layer 3 for both of the partners are the development of a positive feeling, identification of and involvement in, project opportunities and seeking guidance and support (from each other).

The layered relationship mentoring model provides a new way of thinking about mentoring as a layered process with identifiable characteristics and outcomes evident in each layer (table 2). Much of the literature discusses mentoring as a fairly linear process but personal experiences as discussed by Clarke (2004) did not support this. The data clearly supported the view that a mentoring relationship can be layered and that the layers are not separate, but in fact overlapping. The literature also discusses the deliberate pairing of mentors and protégé with mentors and protégés’ being carefully matched. The data in the previous study did not support this formal matching of mentor and protégé. Indeed, it was the coming together through collegial friendship that supported the further mentoring layers of the relationship to develop with the mentors and protégé.

Table 2

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Collegial Friendship Layer</th>
<th>Informal Mentoring Layer</th>
<th>Co-mentoring Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal relationship formed in the workplace</td>
<td>A safe haven is established for the protégé</td>
<td>Mutual guidance, support and encouragement is given</td>
<td></td>
</tr>
<tr>
<td>Social meetings held</td>
<td>Guidance and support given by the mentor</td>
<td>An equal partnership is developed</td>
<td></td>
</tr>
<tr>
<td>Conversations about work/research</td>
<td>Professional dialogues takes place</td>
<td>Identification of work/research opportunities for both partners (either separately or together)</td>
<td></td>
</tr>
<tr>
<td>Discussions about the ‘informal rules’ of the organisation</td>
<td>Affirmation of work from the mentor to the protégé</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encouragement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcomes</td>
<td>A network of friends is developed</td>
<td>Confidence building by the protégé</td>
<td>Own professional identity is developed by the protégé</td>
</tr>
</tbody>
</table>
Common work /research interests discussed | Work progressed by the protégé | The mentor role is being phased out
--- | --- | ---
| Trust developed by the protégé with the mentor | The protégé moves towards becoming a mentor for others
| Common work interests/research developed | Collegial friendships forming with others
| Protégé exposed to new professional opportunities |

**Methodology**

This current study is research in progress. The study is based on the mentoring process occurring with two academics at a metropolitan university in Sydney, Australia.

**Participants**

One of the academics is a full-time academic and the other is a casual academic teaching in the same program at the university. Both academics are female. One is newly appointed as a casual tutor and lecturer to Academia (pseudonym “Claire”) and the other has been working in academia for twelve years (pseudonym “Kathleen”). The process began in February 2010.

**Collection of data**

The data for this research is drawn from two sources; the literature on mentoring and journal reflections by the two academics. Specifically,

1. the research literature is used to assist in an understanding of the variety of relationships that can be formed during mentoring and to give form and shape to the data and the analysis of that data.
2. journal reflections on the mentoring relationship by the two academics are being collected over a twelve month period. The reflections will be analysed in terms of the identification of the characteristics of the layered model of mentoring using the exemplars of characteristics of types of mentoring relationships indicated in table 1 and characteristics and outcomes of the layered model of mentoring indicated in table 2.

To date, only the fulltime academic’s (Kathleen) journal reflections have been analysed
Analysis and findings of data

Literature

The literature indicates that mentoring is not confined to one type or form of mentoring relationship although formal mentoring programs are usually researched and reported on in organisations. An analysis of the literature revealed that in each mentoring process some form of relationship was evident. It also gave form to the fact that mentoring relationships could be formal or informal and that the relationship could be reciprocal or non-reciprocal. Also evident from the literature were the communication pathways that were part of each type of mentoring relationship.

The Academics’ reflections

To date the journal entries of Kathleen comment on the support given to Claire. The support has been in the form of conversations around teaching and pedagogy. Emotional support has been given providing advice on working with students and academics in the teaching team. The support has been given in both a formal and informal environment. In the workplace support and advice is given in a structured work office while at other times support is given ‘over coffee’ either in the workplace or off-campus.

“Claire emailed me this morning and seemed concerned about a range of issues. I immediately rang her and asked her to meet me for coffee off-campus. Her email contained a long list of concerns ranging from not having resources to develop the lecture, student issues, staff issues …. She seemed like she just needed some guidance and a whole lot of support” (Journal entry 1 September, 2010).

They were able to discuss her concerns away from the workplace in an environment where she would feel comfortable talking. Claire commented that she felt much better after discussing her concerns and felt that she had confidence to deal with the issues detailed in her email.

Collaboration is also apparent in the journal entries providing evidence that the mentoring process is more than a one way form of communication. Collaborative tasks were undertaken such as assessment tasks development and rubrics for marking assessment. The journal entries discuss the guidance given by Kathleen to Claire in the early stage of the professional relationship.

Further analysis of Kathleen’s journal entries showed that her reflections revealed a number of supportive strategies used in the developing professional relationship. These strategies included nurturing and collaboration and development of research and writing skills such as writing academic papers. These reflective statements identified the outcomes of the mentoring relationship and described the results of this relationship as providing trust and a critical friend to Claire.
As time progresses the journal reflections will be analysed more fully in terms of characteristics and outcomes identified in the layered relationship mentoring model. To date the relationship is in the first and second layer of the layered relationship mentoring model. Layer 1, the collegial friendship layer has been the initial phase in the relationship. In this phase, interpersonal interaction developed in a social environment in and outside the workplace. Kathleen and Claire met socially over coffee with conversations centred on their families, their work, their research and their teaching. Kathleen’s relationship with her colleague Claire developed naturally because they taught in the same teaching unit. The mentoring relationship came together in an uncontrived way as Kathleen was more experienced and guided Claire in her first teaching position in a university. Claire was enthusiastic and keen to learn. These characteristics and outcomes constitute the first layer of this mentoring relationship.

Once the collegial friendship was established they began to work on common research interests. One interest was in the area of mentoring. This common interest fostered discussions about joint papers being written.

As the relationship develops the process will be further documented in the academics’ journals and a continued analysis of the journal entries in relation to the layer relationship mentoring model will be undertaken. This further analysis will form the basis of the concluding section of this paper.

References


Myths in the Academe – Academic Education or Pre-Enrollment Profiles as a Key to Employment and Satisfaction?

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Abstract

Academic education is considered a key to gaining employment and satisfaction. This study attempts to explain the association between the demographic and pre-enrollment profiles of graduates of one academic institution, and their retrospectively reported satisfaction with their academic studies, and with their career. The study, based on a case study of the Ariel University Center of Samaria, Israel, integrates Holland’s classic congruence theory and Seligman’s innovative theory of positive psychology, specifically the hypothesis concerning everyday deployment of individual character strengths. Findings of the study demonstrate that deployment of character strengths was a significant predictor of graduates’ work satisfaction. The interesting finding in this exploratory study is the failure of graduates’ pre-enrollment admission profiles to distinguish among graduates based on their post-graduate employment status or job satisfaction. This finding is especially interesting in the context of the accepted myth in the academe, according to which admission profiles are key predictors of future success.

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Introduction
Academic education is considered a key to gaining employment and satisfaction. This study examines the imperviousness of this myth and attempts to explain the association between the personal and scholastic pre-enrollment profiles of graduates of one academic institution, and their retrospectively reported satisfaction with their academic studies, and with their career. The study integrates Holland’s classic congruence theory (postulating congruence between occupational tendencies, the field of academic studies, field of post-graduate employment, and occupational and overall satisfaction) and Seligman’s innovative theory of positive psychology, specifically the hypothesis concerning everyday deployment of individual character strengths (which has not yet been examined empirically pertaining the studies and employment of academic graduates) in a case study of the Ariel University Center of Samaria, Israel.

Findings of the study confirm the significance of an academic education for high school graduates with college entrance profiles that do not support their admission into undergraduate programs at research universities that set extremely high admission requirements. In this study, 80% of the graduates reported satisfaction with their current job, 41% noted that they their job is ideal for their lives; 81% believe that they are successful in their current job. Deployment of character strengths and the significance attributed to character strengths were the two most significant factors predicting graduates’ satisfaction. The interesting finding in this exploratory study is the failure of graduates’ pre-enrollment admission profiles to predict graduates’ post-graduate employment status or job satisfaction. This finding is especially interesting in the context of the accepted myth in the academe, according to which admission profiles are key predictors of students’ future success.

The global revolution in higher education
Until the end of WWII, higher education reflected the existing social order [1, 2] and functioned as a hothouse for cultivating members of the elite class. Since the since half of the 20th century, higher education expanded [3] (OECD, 2003, Table A2.4) and its target audience completely transformed, which fueled debates on the topic of “higher education for the masses,” or the “massification of higher education”[4]. As higher education became viewed as a universal right and privilege [5], a BA (or equivalent) degree became the norm in developed countries, similarly to the former status of a high school diploma [6, 7, 4]. Today,
however, the debate focuses not on the target audience of higher education but on the need and the means to increase access to higher education based on the principle of social justice. The assumption is that higher education should be available to all able individuals [8], because by virtue of the prevailing principles of “human capital economics,” well-being of the individual and society, and increasingly dependence on formal education [9, 10].

The expansion of higher education has incited heated arguments on its social implications. At one extreme are advocates of the diversity approach, representing the functionalist stream, while at the opposite end are advocates of the stratification approach, representing the conflict stream. The first approach views the extension of higher education to the masses as a development that contributes to increased social equality. Its contribution is expressed in the development of a diverse range of institutions of higher education that operate alongside traditional research universities, and appeal to various and specific segments of students [11, 12]. The educational policy of expanding higher education to the masses was designed to implement the principle of a “knowledge nation” [13, p.]. A broad range of institutions of higher education developed in response to the changing attitude to higher education, both those providing an academic emphasis and those providing vocational training for graduates.

The second stream views the expansion of higher education in its current format as an optical illusion that has no effect in creating a genuine opportunity for members of marginal social classes. According to this approach, the expansion of higher education creates a hierarchy of institutions that deliver different levels of education, corresponding to the existing class order: the center remains a center while the periphery remains a periphery [14, 15]. Furthermore, inequality in higher education was perpetuated by the credential inflation produced by the expanding system of higher education [16, 17]. Individuals were now required to present academic credentials even for jobs that did not effectively demand academic qualifications, while competition ensued over more highly considered degrees from prestigious institutions [18, 19].

The higher education revolution in Israel

The number of students in Israel has increased enormously since the establishment of the State in 1948 [20], when 1,600 students attended the country’s two institutions of higher education – the Hebrew University and the Technion. At the end of the first decade of independence, there were 9,000 students in the country, and this group continued to grow
rapidly to 35,000 students in the 1970s, 56,000 students in 1980, and 76,000 students in 1990 [21]. The Association of Regional Colleges of Israel summarized this development in a publication in the late 1990s, and determined that “according to statistics of the Commission of Higher Education (CHE), the population of undergraduates students in Israel has grown forty-fold since the establishment of the State, while the country’s population increased by five fold” [22].

Up until the 1980s, over 90% of Israel’s undergraduate students attended one of the country’s six universities [23]. In the 1990s, the Law of Higher Education was amended and the Commission of Higher Education certified a long line of colleges to award academic degrees. The decision was accompanied by the explanation [24] that the higher education system would comprise two strata: the first stratum would include universities, which would engage in research and award advanced degrees, and the second stratum would include colleges, which would focus on undergraduates studies and function as a means to achieve social equality and justice through access to higher education for students in peripheral regions.

The amendment to the Higher Education Law caused a dramatic and rapid change in the map of higher education in Israel. While in 1989/90, 46,516 students attended undergraduate studies in a university, and only 8,286 studies toward an undergraduate degree at a college, in 2002/3 the number of students attending universities and colleges was 76,581 and 68,115, respectively [25]. As an additional 11,971 students attended 18 university extensions, the number of undergraduate students at colleges surpassed the number of university students. For the first time in the history of the state, over one-half of all undergraduate students in the country studied at academic colleges.

Following the reform in the 1990s and the Commission of Higher Education’s declaration of intentions, Israel’s system of higher education is now defined by some as a binary system [26, 27], while others prefer to define is as a stratified system containing two types of academic institutions that differ in their degree of prestige [23]. According to the stratified perspective, universities should engage mainly in the “autonomous function” of higher education, that is in imparting “high culture”, promoting science through research, and shaping and certifying elite groups, while colleges should engage in the “popular functions” of higher education [28], that is, exposing new population segments to high culture contents, awarding certificates necessary to gain adequate employment.
By opening the doors of higher education to students in peripheral regions and providing access to new population segments to whom such educational opportunities were not previously available, the CHE viewed the academic colleges as a tool to achieve social equality and justice [29, 30]. The number of rejected admission requests declined from 30%-34% in the 1990s to a mere 19% in 2000 [31]. The consistent increase in the percentage of high school graduates who were admitted into institutions of higher education is another important indicator that confirms that achievement of this goal. Statistics show that the proportion of students in colleges compare to the total number of students in academic institutions is steadily rising [32, 25].

We can also infer the colleges’ role as a tool for equality from the relatively high of college students who are from towns classified in the bottom SES clusters. While only 31.8% of all 2005 high school graduates in towns classified in SES clusters 1 and 2 (lowest clusters) pursued academic education within eight years, 73.6% of all high school graduates in SES clusters 9 and 10 did so. Furthermore, 38.1% of all high school graduates in cluster 1 and 2 who pursued a post-secondary education, did so at a college, compared to 27.0% who did so at a university. In the top SES clusters, the situation is different. Of all high school graduates in clusters 9 and 10, 50.3% continued to universities while only 27.4% continued to colleges [25].

The pursuit of academic studies and other variables

There is broad agreement that education in general, and higher education in particular, in modern, industrial, and post-industrial societies is a key resource in the acquisition of socio-economic status. Studies indicate a growing gap between income of college and university graduates and income of high school graduates [33]. US college and university graduates’ incomes were 48% and 100% higher than incomes of high school graduates in 1979 and 2000, respectively. Studied in Israel point to a similar trend: Wages of individuals with 16 years of education or over were 171% higher than the average national wage in 1995–1997, while wages of individuals with 8 years of education dropped to 59% of the national average wage in 1997. The academic credentials awarded by academic institutions, rather than the education per se, account for most of the difference in earnings. US Census Survey data from 2000 show that twenty of the top-earning occupations demanded an academic degree (Fenwick, 2005). Students’ decisions to pursue education after high school are a function of diverse
factors, the most important of which is high school achievements [34, 35, 36, 37, 38], but include career aspirations and cognitive abilities [39, 40], gender [41, 42, 43, 44, 45, 46, 47] and the family’s SES (parents’ education, occupation, and income) [48, 49, 50, 51, 37, 52, 53]. It is accepted that the family imparts various types of capital to its offspring, which encourage or inhibit the pursuit of higher education. Thus, families may impart economic capital, which helps students during their studies and occasionally contributes to the choice of more expensive programs of study [54]; social capital, which implies attitudes, tastes, preferences, orientations, language usage and style of speech, which also have a considerable impact on the choice of higher education [55, 56, 57, 58]. Studies show an association between the various types of family capital and the academic achievements of their offspring [59, 60].

Institutions of higher education in Western countries have conducted orderly, detailed tracking of information on their alumni for many years, and international agencies such as UNESCO and the OECD publish details findings of such alumni studies. Although the climate in many countries is amenable to alumni research, there is a dearth of information in this area in Israel. We were unable to find a single national-level study published on this topic. Several institutions conduct such in-house studies, but access to such material is difficult. A study conducted in 2006 [61] was designed to characterize the students at the Ariel University Center and its graduates, and to identify associations between students’ profiles at admission, their subsequent academic achievements, and their pursuit of graduate studies. The current study expands on this efforts, and explores the associations between alumni’s personal and academic background and a series of measures of satisfaction with previous academic studies and job and work satisfaction.

Holland’s P-E Fit Theory and Seligman’s Positive Psychology

John Holland (1985) introduced a model of occupations emphasizing the fit between the individual and the environment. In this model, which contains six categories that describe various personalities and work environments, work satisfaction, perseverance, and success are dependent on the fit between an individual’s personality and his or her work environment. The tools relevant for applications involving this typology include the Dictionary of Holland’s Occupational Codes (DHOC) [62]. Holland defined six types (RIASEC – realistic, investigative, artistic, social, enterprising, conventional). Congruence is the degree of fit
between an individual’s RIASEC profile and the RIASEC profile of his work environment. Numerous studies have focused on the association between congruence and work satisfaction, work stress, psychological adjustments, and self-image. A longitudinal study conducted at the University of Maryland in 1989, on a sample of 774 graduates, examined the association between congruence and work performance. The study found a weak yet statistically significant link between congruence and performance among graduates employed in business administration and technologies, but not among graduates employed in administrative jobs [64]. More recently, an association was found between congruence and performance of administrative and senior personnel in the military [65].

Seligman [65] introduced a model of human happiness comprised of two key elements: enjoyment and satisfaction. Enjoyment is a short-term phenomenon, involving little reasoning, has features of addiction, and therefore increasing quantities are needed over time, as its effect fades over time. Satisfaction is a more sophisticated phenomenon that includes reasoning and analysis and tends to survive over time and therefore increasing quantities are not necessarily required. Seligman also argues that enjoyment is related to the senses and emotions, while satisfaction is related to the deployment of signature character strengths and human virtues. Seligman claims that individuals currently seek more enjoyment than satisfaction, because the effect is immediate and the required effort is limited. Nonetheless, increasing enjoyment and an absence of satisfaction increases the tendency toward a sense of emptiness and depression. The remedy to depression, according to Seligman, is to identify character strengths and derive satisfaction from their deployment. In their book, “Character Strengths and virtues: A handbook and classification” [67] whose title is itself a challenge to the DSM Diagnostic and Statistical Manual of Mental Disorders, Peterson and Seligman claim that work satisfaction is not a function of wages but of the ability to use character strengths and exhibit an optimistic outlook.

**Aims of the study**

The current study focuses on the population of alumni of various programs of the Ariel University Center, and explores the congruence between graduates’ academic experience (including their satisfaction with their former studies and with their instructors’ teaching), and the deployment of character strengths at work contribute to their current work satisfaction and success.
Data collection
In 2008, three strategies were used to contact and enroll prospective participants from among the graduates of an academic institution. The first two enrollment strategies (direct mail and telephone solicitation, and distribution of an e-mail) generated a very poor response rate: Only 30 of the 600 (5%) distributed questionnaires were returned. Finally, researchers enrolled potential participants at an alumni conference, where alumni were asked whether they are currently employed and willing to complete a questionnaire pertaining to their character strengths. Of the 120 alumni conference participants, 58 agreed to participate in the study (48.3%). Three questionnaires were not completed and therefore eliminated from the study. Thus the study sample comprised a total of 85 alumni. The third strategy was more successful as graduates who attended the conference may have been more committed to the university and therefore more willing to participate in affiliated research projects.

Research instruments
Data were collected from two sources:
(a) Demographics and academic profiles: The Ariel University Center Michlol Database. This database contains demographic information on alumni background (gender, age, country of origin, marital status, religiosity, town of origin, and employment status) and their academic studies (degree, graduation year, faculty, final grades, and admission profile – composite psychometric score and Matriculation grade average). Town of residence information was used to classify participants into SES groups.

(b) Self-report questionnaires. Alumni completed a self-report questionnaire which subjectively measures the following:

(1) Character strength deployments. Participants' strengths were measured using the VIA Inventory of Strengths (VIA-IS, Peterson and Seligman. 2004). The VIA is a self-report questionnaire, assessing the endorsement of 24 character strengths. Ten items are used to evaluate each strength, resulting in a total of 240 items (e.g., "Being able to come up with new and different ideas is one of my strong points" for creativity; "I never quit a task before it is done" for persistence). Participants rated the extent to which each item describes them on a 5-point Likert scale ranging from 1 (not at all) to 5 (very much). In this study, we used a Hebrew version of the VIA. The original inventory was translated into Hebrew by two bilingual experts (psychologists with doctoral degrees) using a back-translation technique.
(also used in [68]). Scale scores were averaged across items, yielding 24 scores for each participant, reflecting their ratings of each of the 24 strengths. Scale reliability was very high (Cronbach's alpha = .94).

The questionnaire was modified for the present study to measure deployment of character strengths specifically in vocational activities. Respondents were asked to rate the extent to which their current job offers them an opportunity to deploy each of the listed 24 character strengths. Items were rated from 1 (very little) to 5 (very much).

(2) Congruence between academic field of studies and current occupation. As recommended by [69], a specific and subjective measure was used. In this study, the measure comprised the following single item: “To what degree is your current job (position) related to the field you studied at the University?” Responses were given on a 5-point Likert scale, ranging from 1 (very little) to 5 (very much).

(3) Vocational Interests. This measure was based on Holland’s RIASEC model. A version of the categories were translated into Hebrew by the authors for the purpose of this study. Students reported their interests in the following six categories: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Graduates marked the professions that attract or interest them, of a list of 14 occupations in each category.

(4) Job Satisfaction. This criterion variable was measured by the Short-Form Minnesota Satisfaction Questionnaire (MSQ), which was developed by the Work Adjustment Project [70, 71]. The Short-Form MSQ consists of 20 of the original 100 MSQ items that best represent each of the following 20 job dimensions: Ability Utilization, Achievement, Activity, Advancement, Authority, Company Policies and Practices, Compensation, Coworkers, Creativity, Independence, Moral Values, Recognition, Responsibility, Security, Social Service, Social Status, Supervision –Human Relations, Supervision–Technical, Variety, and Working conditions. Participants rate their satisfaction with each dimension, on a 5-point Likert scale from 1 (very dissatisfied) to 5 (very satisfied). Scale reliability was very high (Cronbach's alpha = .95), and consistent with reliabilities reported in the literature.

(5) Work success. The measure comprised a single item: “How successful are you at your current job?” Responses were given on a 5-point Likert scale, ranging from 1 (very little) to 5 (very much).
(6) Career Commitment. This criterion variable was measured by The Career Commitment Scale [72, 73]. The scale comprises seven items that express commitment to a career or profession (e.g., “It is the ideal occupation for a life work.” “I like this occupation too well to give it up.”). Responses are given on a 5-point Likert scale from 1 (not true for my career) to 5 (very true for my career). The average of the seven responses served as the Career Commitment Index. Scale reliability was very high (Cronbach's alpha = .83).

(7) Personal Well-Being. This criterion variable was measured by the Mental Well-Being Scale of the Mental Health Inventory (MHI) [74]; The scale was translated into Hebrew by [76]. This scale comprises 16 items relating to the intensity or frequency of respondent’s feelings and evaluations during the past month (e.g., “How much of the time, during the past month, have you felt calm and peaceful?”). Responses are given on a 5-point Likert scale, ranging from 1 (none of the time) to 5 (all of the time). The average of the 16 responses served as the Well-Being measure. Internal consistency was highly satisfactory (.92), and consistent with the internal consistency (.94) reported both by the questionnaire’s authors and by [75].

Statistical Analysis
Statistical analysis was designed to explore the associations between enrollment profiles, vocational interests, academic achievements, deployment of character strengths, and job satisfaction, career commitment, vocational preferences, personal well-being, and the contribution of these variables to work satisfaction.

We used Chi Square tests to examine the association between the variables, t tests for independent samples to examine contrasts, and one-way ANOVA. Where significant differences were found, we used Bonferonni tests to examine the source of the differences.

Findings

Participants
Participants were 85 graduates of an Israeli university who were employed at the time of the study. Of these, 94.7% had earned a bachelor’s degree, and the remaining graduates (5.3%) were graduate students at the same institution at the time of the study. The vast majority (98.0%) had completed their degrees at the university in the decade between 1998 and 2008.
Almost one-half of the participants (43%) graduated from the Faculty of Social Sciences and Humanities, 46% graduated from the Faculty of Engineering, the Faculty of Natural Sciences or the School of Architecture. 42% of the participants were accepted to Ariel based on their psychometric score or Matriculation average. Participants’ final grade average ranged from 50 to 96.91, with an average of 84.85 (SD = 7.02).

Over one half of the participants (54%) were female, almost three quarters (74%) of the participants were married, and the average age of the participants was 32.7 (SD = 6.80). The majority of participants (87.2%) were born in Israel, while the remainder had immigrated to Israel from various countries between 1970 and 1996. Based on participant’s place of residence, 23%, 55.4%, and 21.6% of the participants were classified as belonging to low, moderate, and high socio-economic environments, respectively. Participants were classified by their current occupation as follows: engineers, and employees in hi-tech and industry (40.5%); managerial positions (16.2%); education, welfare, and healthcare (14.9%); public sector employees (23.0%); and security-related occupations (5.4%).

Career commitment: The average of this measure was 3.65 (SD = 0.87). Reliability of the measure was high (α = 0.95). 77.9% of the participants noted that they have no regrets about entering their current occupation. Only 40.7% noted that that their current job was not their ideal job.

Job success: The majority (80.7%) of participants feel that they are successful at their current job. Only 31.3% noted that they would be more successful at work had they studied at a university or a different academic institution.

Job satisfaction: The average of this measure was M = 3.68 (SD 0.74). Reliability was high (α = 0.95). Highest satisfaction was recorded for the items “I am constantly occupied in my work”, “My work offers employment stability,” “I can do things that are not against my conscience.” Lowest satisfaction was recorded for “The way the company’s policy is executed,” “My salary and the quantity of work I perform,” and “My chances for a promotion in this job.”

Professional interests: Graduates were more strongly interested in social occupations (M = 4.03) and investigative occupations (M = 3.83) and least interested in conventional (M = 2.11) and realistic occupations (M = 2.69).

Personal well-being: The average measure was 3.87 (SD = 0.56). Reliability was high (α=0.92). Items which received the highest ratings included: “My everyday life is full of interesting events,” “I am happy or satisfied with my personal life,” “I feel loved and
wanted,” and “I generally enjoy the things I do.” Items which received the lowest ratings included: “I feel refreshed and relaxed when I wake up in the morning,” “Life is a wonderful adventure for me,” and “I feel calm and free of any tension.”

To examine the associations between personal well-being, deployment of character strengths, job satisfaction, and job success, we performed four step-wise regressions. Alumni’s demographic variables (gender, age, marital status, religiosity, type of residence, and socio-economic status), academic background variables (faculty, final grade, satisfaction with studies), character strengths and occupational interests were used to explain personal well-being, deployment of character strengths. Personal well-being, deployment of character strengths and significance of character strengths were used to explain job satisfaction and work success. Findings are presented in the tables below.

Table 1
Regression coefficients in predicting personal well-being

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>b</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deployment of character strengths</td>
<td>0.10</td>
<td>0.53</td>
<td>*** 5.03</td>
</tr>
<tr>
<td>R</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>28.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(1,66)</td>
<td>*** 25.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The single variable that predicted personal well-being was the deployment of character strengths (beta = 0.53, p < .001). Character strength deployment predicted 28.7% of the variance of personal well-being.

Table 2.
Regression coefficients for deployment of character strengths

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>b</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal well-being</td>
<td>0.57</td>
<td>0.47</td>
<td>*** 5.02</td>
</tr>
<tr>
<td>Career commitment</td>
<td>0.24</td>
<td>0.30</td>
<td>** 3.20</td>
</tr>
<tr>
<td>Interest in enterprising professions</td>
<td>0.06</td>
<td>0.27</td>
<td>** 2.87</td>
</tr>
<tr>
<td>Interest in investigative professions</td>
<td>0.04-</td>
<td>0.21-</td>
<td>* 2.24</td>
</tr>
<tr>
<td>R</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>46.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(4,63)</td>
<td>*** 13.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
These variables predict 46.5% of the variance of character strength deployment. The variable with the greatest contribution is personal well-being (beta = 0.47, p < .001). Interest in enterprising professions contributes to explained variance (beta = 0.27, p < .001) while interest in investigative professions is inversely related to deployment of character strengths.

Table 3.
Regression coefficients for job satisfaction

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>b</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deployment of character strengths</td>
<td>0.71</td>
<td>0.68</td>
<td>*** 8.04</td>
</tr>
<tr>
<td>Career commitment</td>
<td>0.20</td>
<td>0.23</td>
<td>** 2.74</td>
</tr>
</tbody>
</table>

The above set of variables accounts for 61.2% of the variance in job satisfaction. The variable with the highest contribution to prediction is deployment of character strengths (beta = 0.68, p < .001). Career commitment also contributed to the prediction (beta = 0.23, p < .01).

Table 4
Regression coefficients for work success

<table>
<thead>
<tr>
<th>Explanatory variables</th>
<th>b</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career commitment</td>
<td>0.28</td>
<td>0.32</td>
<td>** 2.79</td>
</tr>
<tr>
<td>Deployment of strengths</td>
<td>0.07</td>
<td>0.31</td>
<td>** 2.66</td>
</tr>
</tbody>
</table>

This set of variables accounts for 27.2% of the variance of work success. The two variables that contribute to the prediction are career commitment (beta = 0.32, p < .01) and deployment of character strengths (beta = 0.31, p < .01).

Discussion
In this study, we attempted to examine the resilience of the prevalent myth in the academe, according to which academic studies are the key to employment and work satisfaction. We examined the associations between the demographic data and academic background of alumni.
of the Ariel University Center, their satisfaction with their academic studies, current character strength deployment, and work success.

The study integrates Holland’s classic occupation theory, which has been prevalent for over 30 years, with the more recent theory of positive psychology developed by Seligman, the study of which has been limited to recent years. Specifically, the study examined Holland’s congruence theory (the congruence between occupational interests, field of academic education, current occupation, job satisfaction, and overall satisfaction) and the deployment of signature strengths (which has not yet been studied empirically in an occupational and academic setting), among alumni of one academic institution: The Ariel University Center of Samaria.

We found associations between academic studies and alumni’s satisfaction with their academic studies. The majority of the alumni (80%) were satisfied with their current occupation, 41% noted that their occupation was ideal for their lives. 81% noted that they feel success in their current job. Alumni also noted a high degree of satisfaction in terms of personal well-being. They reported a sense of satisfaction and stability from their work and from the extent to which they were free to act according to their conscience. Alumni reported strongest professional interests for investigative and socially oriented professions. The most important factor in graduates’ work satisfaction was the deployment of character strengths.

Deployment of character strengths was found to be a significant predictor of graduates’ work satisfaction. The interesting finding is the absence of significant differences between graduates’ work satisfaction and success based on their admission profiles. That is, graduates’ pre-enrollment profiles do not predict differences in work satisfaction. The role of academic studies as a key to employment and work satisfaction was found to be independent of the admission profiles of academic graduates. This finding is especially interesting in view of the myth in the academe, which views admission profiles as the primary criterion and predictor of future success. The current study highlights the role of graduates’ character strength deployment as a key to success and satisfaction. The findings of this study offer an interesting perspective to be taken into account in academic decision making on admission policies.

The current study offers a theoretical contribution in expanding Holland’s theory of interests, and as an exploratory study in the field of character strengths and their deployment (two
constructs of positive psychology) for alumni of an academic institution. The study has a practical contribution for the field of student guidance and counseling (before, during, and after academic studies), with the aim of increasing satisfaction and self-realization. One of the goals of vocational counseling is to encourage clients to consider entering a work environment that fits his or her personality profile. Work satisfaction and occupational satisfaction play an important role in productivity, perseverance, work success and overall personal well-being.

As such, findings of the current study refute the criticism which views the expansion of higher education in its current format as an optical illusion that has no effect in creating a genuine opportunity for members of marginal social classes. Findings of this exploratory study on alumni of the Ariel University Center lead to two main conclusions: (a) Admission profiles of many alumni are such that they would have no chance at higher education were it not for the Ariel University Center; (b) These relatively poor admission profiles did not detract from their ability to pursue an academic education, fulfill their requirements, and earn a degree. The study confirms that the Ariel University Center achieved its original social goal, defined by the Commission of Higher Education in its resolutions supporting increased access to higher education. On both counts, the CHE’s philosophy is justified. The Ariel University Center — and the remaining non-university institutions in Israel, it may be assumed — offer a “last chance” to populations groups who would otherwise have no chance of earning an academic degree. Findings show that the satisfaction graduates derive from their work is less related to their pre-enrollment profiles and more strongly related to the deployment of the character strengths.

The data were based on a study in a single academic institution, and should be viewed as the first step in a genuine examination of the intriguing issues relating to higher education policies and the profiles of college graduates.
References


On legislation, policy, and market forces in Israel’s higher education sector

Dr. Nitza Davidovitch

Introduction

In recent years, the Israeli education system has undergone a revolutionary change in recent years, which has been called a genuine metamorphosis (Gur-Zeev, 2005). The changes in this field are reflected in multiple aspects of Israel’s higher education system: a sharp rise in the number of students, the proliferation of accredited institutions, legislative changes, changes in regulatory policy, including changes in the defined goals of higher education. These drastic changes have sparked a series of pointed public debates which all touch upon a key issue: the connection between supervision of higher education and academic freedom, reflected in an unrestricted academic “market.”

Sine the 1980s, globalization has been accompanied by competition, merchandising, market forces, free markets, affecting every location it reaches. While traditionally considered the site of freedom of thought and freedom of research (Volensky, 2005), protected from society’s economic changes (Eckel, 2007), higher education is now visited by capitalist reasoning, veneration of the principle of utility, and reliance on the invisible hand as compasses for action, all of which threaten to gnaw at the quality of higher education. The knock on the academic door occurs at a different pace in different parts of the world.

In Israel, a member of the global village, these changes have proceeded since the early 1990s, and the end is nowhere in sight. We believe that the massive transformation is at least partially due to a lack of uniform or clearly-defined policy by the relevant agencies. In many cases, higher education policy is largely a directive to “sit and do nothing.”

The absence of a clear, uniform approach to higher education triggered the current study, which focuses on an issue that is at the core of the public debate on higher education: Should the central agency or government intervene and regulate higher education? This principled issue is accompanied by many related questions, such as whether existing academic supervision is appropriate, and if so, to what extent? If a liberal market policy is adopted for higher education in Israel, to what extent should market forces be allowed to act? What is the price of such a decision? Is it possible to maintain excellence without compromising access to higher education? In the current study we describe the development of higher education policy in Israel and point to policy changes which we believe are necessary if we are to achieve our dual goal of increased access and quality.

On regulation and globalization – Changing public policy

Broadly understood, regulation is a series of rules and regulations that regulate the exchanges of goods and services in society (Moran and Wood, 1993). The term...
“regulation” may be interpreted as supervision, intervention, control, or organization of a certain action. In the governmental context, regulation refers to actions that regulate operations in the government’s sphere of authority; countries differ from one another in the extent, the design, and the application of regulatory practices.

The term regulation originated in the field of economic theory (Stigler, 1971), which defines protection of the public interest as the major goal for regulation (Waters and Moore, 1990). Historically, the United States is considered the first country to adopt governmental regulation through mechanisms that supervise the free market. As early as the beginning of the 20th century, the United States, icon of the free market, recognized the need to supervise the markets in order to stabilize market forces, supervise prices, and define minimum conditions for participation in markets. These goals have changed over time, and today regulation is designed mainly to protect public health, safeguard against hazards, and prevent exploitation of society’s weaker groups (Sunstein, 1990).

Since the 1960s, the change in the subjects of regulation is closely associated to growing globalization (Arimoto, Huang, and Yokoyama, 2005), the socio-economic process that has generated an ideological and paradigmatic revolution all over the world, spreading the principle of competition, and leading to liberalization and privatization of the markets. As the status of the welfare state declined, Keynesian economics, supporting government intervention and supervision of the markets, has cleared the stage for a “weak state,” one which allows the invisible hand to dictate economic reality.

However, after many years of complete confidence in the powers of pure market forces and a society and economy navigated by the invisible hand, the “new regulatory state” has taken the stage. The new regulatory state exists in widespread geographic areas, including the United States, Great Britain, and other European states, and may exist within states that are not regulatory by definition (Moran, 2002). The regulatory state is an improved nation state, a state which waives bureaucratic policies and the principle of Welfarism in favor of public supervision based on the principle of separation in public policy. This separation drives a wedge between policy makers in various departments, and policy executors, as it structures a formal distinction between consumers (the government) and suppliers (the market), and establishes independent institutions that act as the government’s long arm in order to affect the market in the name of the public interest (King, 2007).

As a result of globalization, concepts from the field of economic capitalism have penetrated the ivory towers of universities and affected all areas of their existence. “Globalizing political economy affects the way universities are governed, discussing practices such as managerialism, accountability, and privatization which represent a shift toward business values and a market agenda” (Currie and Newson, 1988, p. 1).

These effects, transforming knowledge into a “commodity” (Marginson, 2009), increased competition and access in higher education, but also created an urgent need to ensure the quality of the system’s products, protect the status of higher education, and avoid an “inflation” in academic degrees. In the context of higher education in Israel, the question arises of whether similar regulatory mechanisms are in place, and if so what are they and how do they operate? Does Israel contain within it a regulatory
state? To answer this question, we present the history of the higher education system in Israel, with specific reference to regulatory mechanisms.

A historical look – The development of Israel’s higher education system

**Independent self-regulation**

Even before the establishment of the State of Israel, higher education was a high priority for the local Jewish community, and two of the finest institutions of higher education were established during that period: the Technion (in 1925) and the Weizmann Institute (1934). Their establishment reflected the significance of higher education for the state-to-be: “The State of Israel must represent a goal for itself: to provide elementary, high school, and higher education to the entire young generation without exception, whether their parents are affluent or poor, whether they come from Europe or from Asia and Africa – this means, giving each young boy and girl in Israel academic education…” (Ben Gurion, quoted in Michaeli, 2008).

Although most areas of life had a quasi-military nature at the time (Gal-Nur, 1985), the academic institutions conducted themselves according to an independent self-regulatory regime (Menahem, Tamir, and Shavit, 2008). While satisfactory before the establishment of the State, these arrangements gave rise to concerns in view of the political nature imposed on the academic institutions: In the State’s early years, most budgets were controlled by the government, and repeated attempts were made to ensure that academic institutions become “relevant” and to impose bureaucratic supervision (Gal-Nur, 2009).

**Supervised Self-Regulation**

Government intervention in the academe was prevented by the enactment of The Commission of Higher Education (CHE) Law in 1958, which put an end to the diverse proposals that sought to impose government supervision on higher education in Israel. The Law regulated the establishment of the Commission of Higher Education, which was declared a “government institution for the matters of higher education in the State.” Its role included accreditation, examination of curricula, and allocation of public government funds to all institutions of higher education.

The Commission comprised 25 members who had no political affiliation, 17 of which were from the academe. The Commission’s goal was to act as a buffer between the government and the self-administered institutions of higher education (Gal-Nur, 2009). From the mid-1970s, the CHE was joined by a second entity in charge of budgetary aspects of higher education: the Planning and Budgeting Committee, which acted as the Commission’s executive arm and was responsible for budget allocation, based on CHE-defined eligibility criteria.

The joint actions of the CHE and the Planning and Budgeting Committee created a public regulatory system that allowed the universities to operate independently, under supervision of state agencies. Universities benefited from self-supervision, while the CHE has supreme administrative responsibility for Israel’s higher education system, and functioned as the academe’s gatekeeper, exclusively limiting access to higher education, and affecting the structure of the market through the budgets allocated to each institution (Menahem, Tamir, and Shavit, 2008). This policy, also known as the
“uniform policy regime” continued until the reform in the higher education system in the early 1990s.

**Higher Education Reform as a Response to Change**

Economic, social, political, and demographic changes in the late 1980s led to a change in the approach to public services. The rising power of the new right and neoliberalism called to give greater reign to market forces to redesign public services in general, and education in particular (Volensky, 1994). This call also was voiced in the Israeli Knesset, which, in Israel Government Resolution 3694 (of 1994) approved the expansion programs of several accredited institutions.

At the same time, operations of non-funded academic institutions was permitted, including the establishment of local extensions of foreign universities (Bernstein, 2002). In 1995, Amendment No, 10 the Higher Education Law provided that colleges would also be permitted to award academic degrees and would constitute part of the higher education system. According to the Law, a college was defined as “a higher education institution that is not a university and is accredited to award to its graduates recognized degrees in one or more of its units, or has been granted a certificate of permit” (Commission of Higher Education Law, Amendment No. 10, 1995).

These legislative reforms created diversification, privatization, and internationalization of Israel’s higher education system (Menahem, Tamir, and Shavit, 2008). Diversification was reflected in the three-fold increase, compared to the 1980s, in the number of public non-research colleges eligible for public funding. Privatization was created by permitting private institutions (supervised but not funded by the CHE) to award academic degrees. Internationalization was reflected in the penetration and proliferation of extensions of foreign universities into the Israeli higher education system and their accreditation. Before 1998 (Amendment No. 11 to the Higher Education Law), these extensions were not subject to local supervision of any kind.

In response to the new legislation, which marked a paradigmatic change in the regulatory regime at the time, newly established (funded) public colleges and (non-funded) private colleges, as well as new extensions of foreign universities, increased in number, and the number of students increased enormously. In the late 1980s, only 8% of all 20-29-year-olds were enrolled in undergraduate programs, and the number of students at colleges, relative to those enrolled in universities rose steadily, especially in college vocationally oriented programs that had value in the job market. This trend accelerated further after the CHE approved colleges to offer research-track graduate degree programs (Zussman, Forman, Kaplan, and Romanov, 2007). As in 2009, of the 245,000 students in Israel, 64% were enrolled in colleges (CBS, 2009).

**High Education Policy – Examples from the world**

The increasing prominence of higher education on the public agenda and in the public limelight since the 1990s is not incidental. Rather, this development mirrors the trend of global massification of higher education (Kim and Lee, 2006). The enormous growth in the demand for higher education has created pressure on
governments to resolve the issue of accessibility, and at the same time, highlighted the
need to supervise the higher education system. This struggle over the future of higher
education (Gur-Zeev, 2007) is mainly an ideological one, in which one side wishes to
impose market forces on academic life, while academe wishes to preserve existing
regulatory mechanisms.

At the policy level, the State must make determinations on two main issues:
access and funding. The relationship between these two variables is relatively
complicated. Extending access increases the number of students but imposes a greater
economic burden on the State, forcing the State to open the market to private
institutions. As a result, access is increased and funding issues are resolved, yet
differences in quality among the institutions are created. This is the situation in the
United States, where private universities and public colleges exist alongside each
other: While accessibility is great, there are genuine differences in quality between
educational institutions and their products (Eckel, 2007).

A second option is to limit access through selection by fully funded
institutions. This creates a smaller system of higher education with restricted access,
yet the system, such as that in China or the FSU, is elitist and maintains high
standards (Zhong, 2006).

Most countries in the West tend to follow demands for greater access as they
open the higher education market to competition (Kelchtermans and Verboven, 2008;
Kim & Lee, 2003), and democratization and privatization develop concurrently to the
imposition of government supervision (Beerkens, 2008; Douglass, 2007).

The scope of supervision may vary: In some countries, all institutions of
higher education are subject to state supervision, while in other countries, privately
administered institutions exist alongside supervised institutions. Supervision may
include self-assessment of the institutions themselves (Brown, 2006), accreditation,
public reporting, audit committees or peer-reviews. Funding of supervision may be
public or private, and the composition of the supervisors may include university
representatives or representatives of all institutions of higher education (Bernstein,
2002).

Sources of funding may also vary. Some countries operate according to a
model in which universities are operated and funded by the government and tuition
fees are very low or non-existence. In such countries, higher education is considered a
right to which all citizens are entitled. In other countries, higher educational
institutions are public but students must pay a large portion of their tuition. A third
model is collaboration between private institutions and public institutions (Douglass,
2007).

In the United States, for example, the regulatory model operates on several
levels. Enrollment is on a national level, supervision is performed by the federal
governments and by private accreditation institutions. Private accreditation is
performed by professional and regional entities that are funded by universities and
include representatives from all institutions (Bernstein, 2002).

In Sweden, higher education, which is public, also faces a market dilemma.
Sweden evolved from a model welfare state to a country that is administered in a
global style. Higher education was planned and controlled yet has evolved into a
system with extensive freedom of operation. Universities in Sweden oppose the
further commodification that would increase their independence from the
establishment but would involve expanding the sub-contractor element in institutions
of higher education. A comprehensive survey by Tolofari (2008) found that the
consensus in the academe and among policymakers in Sweden supports the public
nature of the country’s higher education institutions. According to this study, Swedes are fearful of the repercussions of a more global education that might increase emigration.

Echoing the developments in Israel’s higher education system, higher education in South Korea has become more widespread in the last several decades. In the 1970s, only 7% of the population’s relevant age-group were enrolled in higher education institutions, yet today, over 50% of all high school graduates continue to pursue higher education (Phelps, 2003). Similarly to Israel, South Korea faces a host of economic, social, political, and educational challenges resulting from the transformation of the higher education system, although it has been argued that this growth failed to lead in an improvement in academic standards (Kim and Lee, 2006). The South Korean government elected to address the enormous rise in the demand for higher education by removing the strict regulatory mechanisms and relying broadly on the private sector. As in Israel, removing the restrictions on private institutions to award academic degrees marked the beginning of the privatization of higher education: Currently 95% of all Korean students are enrolled in private institutions.

Kim and Lee (2006) claim that the reformed system is now able to cater to over 80% of Korea’s high school graduates. The blooming of the private institutions also contributed to the development of South Korea’s economy. Such changes were accompanied by increased access, but they created a higher education system that is highly reliant on the private sector. These researchers state that this is a problematic fact in the absence of appropriate supervision on the state’s part. In order for the higher education system to benefit from market forces, the state must impose supervision and determine the most appropriate structure for the operations of the institutions, the students, and the faculties. In the researchers’ opinion, this is an essential condition in creating an academic sector that is both equitable and efficient.

A similar development occurred in China, where strict supervision of higher education institutions was traditionally imposed in an elitist system. Increasing globalization, combined with an increase in the demand for higher education led policy markers to rethink the strict supervision policy (Mok and Ngok, 2008). The state responded to globalization and market demands by allowing the establishment of private institutions and even foreign extensions into the higher education sector, increasing decentralization, and leading to increasing diversification, and proliferation in the number of institutions. Nonetheless, tension between the government and the private institutions currently creates a feeling that the government has lost its control and ability to supervise this sector. According to Mok and Ngok (2008), a development of a formal, uniform mechanism of regulation, which fits the new market reality, is urgently needed.

Therefore it seems that numerous countries all over the world are facing a new situation in which regulatory policy is proving to be inconsistent with the changing market. Countries who acted traditionally in leading a well-supervised higher education system have been forced to outline new policies in order to cope with encroaching privatization and marketization (Beerkens, 2008; Eckel, 2007; Mok and Ngok 2008; Van der Walt, Bolsmann, Johnson, and Martin, 2003). Israel’s situation is no different.

**The higher education system and quality assurance**

Quality assurance and assessment of higher education institutions one aspect of regulation. In many countries, specific agencies and models are in place to ensure
quality in higher education, although such agencies would disagree with their
definition as auditors or setters of external standards for academic institutions, and
would argue that they merely verify the standards that the community and the
institutions determine for themselves (King, 2007; King, Griffiths and Williams,
2007).

The introduction of the concept of QA into the academe in itself is a contested
issue. Some have argued that the use of the word “quality” in the context of higher
education is misleading because ostensibly, it concerns an improvement in the quality
of services. In practice, when we speak of “quality assurance,” we mean an aggressive
all-encompassing procedure of control and supervision of the entire academic job
market (Worthington & Hodgson, 2005). While such supervision leads to increased
self-discipline, managerial control, and more effective supervision, it evokes serious
opposition on part of the objects of the supervision.

Such opposition is known as “resistance through distance,” a term which
described a situation in which the objects of supervision attempt to avoid the demands
of the authorities by creating space for themselves and avoiding quality audits.
Academics typically see themselves as being whole-heartedly devoted to their
profession and generally motivated by non-economic factors. As such, external
quality assurance is not necessary because they themselves tend to analyze their own
products from a very critical point of view. As they see it, they themselves provide
careful self-regulation and quality assurance (Worthington & Hodgson, 2005).
Furthermore, academics view their freedom of research and teaching as a legal right
to which they are entitled in the academic institution. Consequently, to gain supports
of the staff in higher education institutions, implementation of quality assurance
mechanisms in the academe must be highly subtle and sensitive to the scholars’ needs,
yet at the same time, loyal to the needs of the clients-students.

In England, the national Quality Assurance Agency (QAA) was established to
supervise the quality of the products of all higher education institutions. King and
associates (2007) studied the operations of this agency as one of several aspects of
regulation in the higher education system. They believe that although research
literature showed no great interest in academic regulation, today its role in higher
education demands that the sector be studied through “a lens of regulation.” Findings
of their study showed that the the QAA serves as a mediating regulator able, as such,
to provide an external assurance of quality and mediate between the various pressures
exerted by the regulator and by the academic institutions. The researchers believe that
the system could be improved by a clearer uniform code, comprehensible to all rather
than solely to those well-versed in specific academic jargon.

Additional evidence of the power of the QA procedure is offered by a study
by Nelson (2997), who examined quality assurance in EU countries in the specific
field of pharmacology, and found that determining core QA criteria, both for private
research institutions and for academic institutions, is an essential condition for
excellence in research. Findings of this study also indicate that government regulation
and annual reporting to an independent committee reinforce the QA element and
ultimately create greater quality.

In the case of the EU, diverse methods are used to regulate research
institutions, despite the fact that all the institutions had shared goals of promoting
research and development. Despite the common goal, the two classes of institutions
did not operate in collaboration due to difference in regulation styles.

Despite the findings supporting the significance of QA in the higher education
system, opponents have argued that the cost-benefits attributed to this procedure are
no more than a myth (Blackmur, 2004). Blackmur, who studied the costs and effects of operations of the National Qualifications Framework (or NQF), the agency responsible for regulation and QA of higher education institutions in South Africa, and concluded that the NQF’s operations had a detrimental impact on the products of higher education and the job market, because of the lack of congruence between national legislation and the global pressures acting upon the education system or the complexity of QA systems.

This argument has been joined by Lieven and Graeme (2006), who studied the operations of the British university extensions in Israel. The researchers believe that although the extensions entered the higher education system on the basis of market forces and consumers’ needs, these factors were insufficient to maintain quality of the institutions. They believe that this case illustrates the inability of market forces to guarantee the quality of higher education, of the need for external entity to supervise institutional operations.

The decision to incorporate QA mechanisms is a complex decision that entails preparations on the policy and the structural levels, and the impact of a QA system on quality is only one of many issues arising in this context. For example, a decision is needed on whether concurrent self-regulation should be permitted; Should the ratings of independent QA agencies be accepted? What is the legislature’s position on the issue?; What is the nature of the future regulatory agency?; What are the funding sources of these agencies? These are only some of the factors that should be considered when developing quality assurance procedures.

Decisions are also needed on structural issues such as, for example, national and internal refereeing, the role of the QA system in design and development training, definition of the quality that is to be measured (Hodgson and Worthington, 2005), the QA standards to be applied, the relationship between QA and public funding of higher education, compatibility of costs, and other factors (Blackmur, 2007).

In his article, King (2007) reviews several possible models of higher education supervision. The most simple of these is the Command and Control model, in which regulation is performed by controlling the final product. Regulation is applied narrowly in this top-down model, supervision is conveyed linearly from the supreme authority in the state to the higher education institutions, and the final product that must meet the requirements is what matters rather than the method. Most objects of supervision are aware of what is precisely required of them. This model is in place in the higher education system of South Africa, where its faults, including resistance and an adverse effect on motivation, are evident. Other problematic aspects of this model include inflexibility and an adversarial approach to the supervised parties.

Meta-regulation is a second model, in which self-supervision is performed by an organization whose members come from the academic sector. Although this model makes a greater contribution to motivation, it has prompted extensive criticism by consumers, who argue that the model is a “conspiracy by experts against the consumer,” and as a result, this model is viewed by some as more of a problem than a solution (King, 2007).

In the responsive regulation model, sanctions are imposed on academic institutions that fail to meet the defined requirements. This model assumes that self-regulation typically works well, but when institutions fail to meet the QA rules, they should be stripped of the right of self-management and come under strict supervision.

Yet another method to assure quality is through the use of secondary regulatory factors such as the media or publications, for example, by publishing
information on the quality of the products, the media may act as a regulatory element in “naming and shaming.”

According to King (2007), “Regulation is less a single arrow than a quiver, a mosaic rather than a simple picture” (p. 423). In other words, a holistic approach should be embraced: one that is comprehensive and takes into consideration both the urgent needs and market forces and the unique fabric of the academic world. In 21st-century Israel, consensus has yet to be reached about when and how to lead the higher education system. An expression of this is evident in the current higher education policy.

**Current higher education policy in Israel**

Higher education in Israel is unstable, as reflected in the numerous public committees on this issue and strikes. A lack of clear, uniform policy on the relationship between market forces and governmental supervision creates tension between the government, the universities, and the private institutions in Israel, which concurrently seeks to endorse globalization and extend access to higher education, yet continues to discriminate among the different classes of higher education institutions. A convention of the heads of higher education institution in Israel described this situation as follows: “While the heads of universities are interested in government funding, without which they would collapse, the public colleges believe that the current crisis is an opportunity to develop a new model that is based more on self-resources. While universities are confident that the crisis will increase the demand for graduate education, colleges treat such projections with reservation…” (Greenbaum, Amsterdamsky, and Kurtz, 2009).

Expression of the desire to subscribe to a global market ideology is clearly evident in the conclusions of the Meltz Committee (2001), which called to implement the principles and the values of the global world, and especially the principle of efficiency: “The Committee has resolved that the structure and work patterns prevalent in universities do no permit efficient utilization of the physical resources available to them. The Committee recommends a significant change in the universities’ administrative and academic methods of operation (Meltz Committee Report, 2001).

In principle, the Committee’s recommendations call to apply that global economic neo-liberalism should be applied to the academe (Slaughter and Rhoades, 2004) and transform universities into corporate entities obligated to submit reports on financial deficits and academic products – a process seen as the first step toward privatization of the universities (Odin and Manicas, 2004).

Despite the Committee’s resolution, regulatory policy applies differential budgeting of different classes of institutions: 60% of the budget is designated for universities while 40% is earmarked for colleges (CBS, 2009), forcing universities, which previously benefited from the vast majority of the budget, to share limited public resources with other budgeted institutions. The distinction between universities and colleges is the result of a “divide for privatization!” policy initiated concurrently with the cuts in higher education budgets and in employment conditions of instructors and research fellows. The colleges, both public and private, allowed an increase in the number of enrolled students while reducing per-student public spending on higher education compared to universities. The inferior employment terms of college instructors also made it possible for colleges to expand their faculty while reducing
salary costs by limiting expenditures on research, among other things (Gutwain, 2008).

Privatization, originally an exclusive process of the colleges, began to filter through to the universities, which responded by adapting to the new business-oriented logic. For example, universities began to separate between budgeted programs and unbudgeted programs that imposed a higher tuition burden, and modified curricula and conditions of learning to the demands of the students-consumers.

However, not only did consumer-appeasing marketing strategies infiltrate the system, these ideas also filtered down to the field of research: high-demand areas of knowledge received larger research grants, while in other fields research grants were significantly reduced or eliminated. Teaching was also affected by privatization, as a distinction was made between senior faculty employed by the institution and adjunct faculty. This was once again results of adopting the market logic that called for the employment of less expensive instructors, which resulted in a reduced proportion of research activities being conducted in the academe. The Shohat Committee endorsed differential salary pay to instructors, and encouraged “differential remuneration” as a function of instructors’ achievements (Shohat, 2007).

At the same time, universities remained official opponents of the introduction of market principles, arguing in support of academic freedom and research excellence. Gordon (2009), for example, argued that the Meltz Committee disregarded the aspirations that constitute a key means to promote excellence, and “unfortunately, the Meltz Committee makes no reference to the association between the organizational structure it proposes and the search for truth and the aspiration for excellence… the original sin of the report lies in its authors’ ontological superficiality. They do not distinguish between excellence and success… although some members of the Meltz Committee were professors, the report it submitted is based on historical, philosophical, and political ignorance…the short-sightedness, superficiality, and paucity of the Meltz Report authors is evident in their decision to abolish the Senate.”

In his article, “The academe, the incessant improvisor, and optional meanings in a post-modern world” (2009), Gur-Zeev links the dramatic changes deep-seated transformation that has affected universities, instigated by supposedly administrative decisions of diligent neo-liberal Ministry of Finance clerks. According to Gur-Zeev, the change in status of universities reflects the change in the status of knowledge; the status of the human subject; changes in the modes of inquiry, decoding, and representation of meaning; and the horizons of human stabilization, compared to man’s re-emerging destiny.

We are witness to a paradigmatic change in Israel’s conception of education in general, and of higher education in particular. From a system that has touted the values of equality and universal access and viewed education as a means of social mobility, the system now champions individual interests, and the values of competition and capitalism. A change in consciousness is evolving toward the privatization of public education. This transformation has not yet occurred, only because diverse interests are pulling in different directions. These changes are supported by representatives of the colleges, who claim that the higher education system in Israel should also be associated with economic and social changes and should adapt to the Zeitgeist. “It is proper that the governing institutions of universities in Israel, whose principles were formed before the establishment of the State, reorganize and adapt to the needs of the contemporary and future academic world,” without adversely affecting the academic faculty who are concerned by the
“aggressive political culture in various sectors of Israeli society which might penetrate into the academic world” (Guri-Rosenblit, 2005).

Evidence shows that opening the doors of the academe to globalization implies adoption of an ideological perspective that dictates a policy paradigm and conventional regulatory approach. We believe that the problem lies in the regulator’s lack of a clear policy line, to which the diverse voices sounded on this issue attest. While his colleagues from the universities view privatization as “the end of the academe” (Gur-Zeev, 2005), Prof. Neuman, President of the College of Administration has stated that “Universities are like banks,” and the CHE should operate similarly to the Commissioner of Banks and Insurance: “It should determine the criteria that define what a university is, and any institution that meets these criteria will be called a university,” which is similar to the determination “Any company that meets the conditions of the Commissioner of Banks is called a bank.” He also stated, “The current situation in our sector is like we were only to give existing banks a license and not grant a license to any new bank to operate” (Neuman, cited in Traubman, 2007, p. 1).

Others claim that “The academe is an anti-democratic entity…like the army. There is no room for democracy where efficiency is essential…If only numbers matter, these is no room for excellence” (Pines cited in Shechter-Rochman, 2008, p. 2). Privatization opponents claim that applying economic policy to the academe is “an ongoing blow, a creeping disaster which is difficult to catch at any point in time, which is why it is so difficult to fight it. This blow is expressed in budgetary strangulation: classrooms expand, laboratories become old, positions vanish. It is not a dramatic even, it is a war of attribution” (Elgazi, cited in Shechter-Rochman, 2008,).

Governments have several strategies available to manage higher education in a global world: One option is to employ governmental control and command in the form of strict regulations, widespread supervisory mechanisms, and budgetary controls. A second option is self-regulation: By deregulation higher education, authority is delegated to the higher education institutions themselves while the government maintains remote supervision (Bernstein, 2002).

In Israel, no consistent policy has been officially adopted. Instead, what has been adopted is the policy of “holding the stick at both ends.” On one hand, we witness the privatization and commercialization of the education achieved through permitting private institutions to award academic degrees, and on the other hand, a discriminatory budgetary policy that distinguishes between universities and colleges, despite the workings of market forces (over 64% of all students are enrolled in colleges!).

At this crossroad, several scenarios are possible. The first possibility is based on inertia: We will pursue this strategy of inaction as academic research activities continue to dwindle, and the number of students enrolled in colleges continues to grow. In one or two decades, we will be faced with a system that offers universal access and low quality. This will be the result if we continue the current trend, where no policy is defined, and where supervision is neither consistent nor structured.

Another option is to view education as a means to social and economic mobility, and as an expedient long-term public expense. This view adopts both access and quality as values. This option may materialize by adopting the principle of equality and opening the market to competition, both in universities and in colleges, based on equal budgeting and the establishment of a regulatory mechanism that guarantees that all academic institutions meet high standards of quality.
Today, we cannot return to the past and reinstate higher education in its former “ivory tower”: There is no turning back. We cannot shut ourselves to the effects the privatization, but must work to rationalize the system, and adopt a market approach accompanied by built-in checks and balances in the regulatory system.

The need to adopt and apply a consistent, uniform policy on all academic institutions is now urgent. Such a policy should, at the end of the first decade of the 21st century, be consistent with a changing competitive world yet retain quality and excellence in research. Achieving both these aims is possible by opening the market to genuine competition, such that treats all institutions equally, and allows market forces to navigate the ship of higher education and lead it to research excellence through competition. These should be conducted by a regulatory and supervisory system that audits, increases efficiencies, and improves the operations of higher education institutions – universities and colleges both.

Furthermore, we must decide on the image of the graduate we wish to develop: Do we wish to send graduates into the job market in the same state as when they first enrolled? Do we wish to create differentiation between graduates of different institutions in the job market? Former Minister of Education Amnon Rubinstein’s vision of universal education has indeed materialized, but at what price? Have we embraced quantity at the expense of quality? Access on its own is insufficient because its value is diminished if not coupled with excellence. To achieve genuine equality and genuine access, we must confirm that academic institutions of all types meet a single standard of academic excellence.

The most effective way to achieve our goals is to develop and apply a quality assurance mechanism in higher education. Academic’s initial tendency to recoil when hearing the term QA is misplaced: This may be a fixation originating in the years in which academic institutions operated under “autonomy and self-regulation.” We, however, believe that quality assurance is not as elusive a concept as some would believe. Quality can be defined. Constructing identical academic foundations, defining curricular requirements, and inspecting their quality, implementing identical exams in all institutions are only several of the possible means of QA.

It is time for higher education in Israel to embrace the post-modern age, an age in which knowledge is not restricted to a few, an age of the IT revolution, an age in which knowledge is power and many seek it. In this age we have two options: to continue the current division, where we have competition at the expense of excellence and collaboration between academic institutions, and where the quality of higher education diminishes as the number of student's increases. The second option is to embrace the transformation and support academic institutions that are involved in a free, open, and competitive market, yet are required to meet high standards of quality assurance as a condition for their existence.
References (Hebrew)


http://www.calcalist.co.il/local/articles/0,7340,L-3186362,00.html


The Commission of Higher Education Law 5718-1958


### References (English)


Academic literacy and learning: Challenges and innovation: The case of South African and Zimbabwean tertiary institutions.

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Abstract

There are various reasons as to why some students encounter difficulties in their academic studies. Historical factors due to the political considerations that prevailed at a particular era play a key role. Due to this, some students see themselves coming from and using a language that is not of ‘academic purposes’. Almost all students in African countries find themselves in a predicament in which the language of education is at variance with their home language. To add on this, after they have attained ‘success’ at a particular level of studies they only get shocked when they go for university education and they find themselves being required to ‘start all over again’. The majority of students in South African and Zimbabwean tertiary institutions encounter several challenges in adjusting to tertiary academic environments. This discussion suggests that in the formative stages of university learning many students face various challenges hence the facilitator must be in a position to realize this and decide on ways to effectively bridge the gaps. As they continue with their studies, this article posits that the challenges can be narrowed as they begin to appreciate the way things are done in their new discourse communities. As a result, a blend of approaches that are characteristically learner–based must be explored and used so that discovery and exploratory teaching-learning tactics are enhanced. This in turn increases the learners’ motivational levels and the resultant mastery of the taught concepts. When this is done, this study reckons that the learners would have become full members of the discourse communities who are ready to participate in the academic activities of this community.
Institutional Teaching Excellence Award: Challenges and the way forward: The case of the North West University, South Africa

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Theme: Academic Advising and Counseling

This article discusses the challenges characterizing the implementation of the Institutional Teaching Excellence Award (ITEA) at the Mafikeng Campus, North West University, South Africa and the proactive way forward. By way of foregrounding, the North West University is a merge of three campuses with different historical backgrounds, namely the Potchefstroom, Vaal and the Mafikeng all located in the North West province of South Africa. When appointing lecturing staff, the University policy does not insist on the candidates having a teaching professional qualification. It is within this context that the University imbibed the hands-on ITEA approach to ensure that the lecturing staff’s performance improves. This aims at the improvement of the teaching and learning environment, a move in agreement with many progressive universities across the globe. The Academic Development Centre (ADC), through its arm of Academic staff support is tasked with the responsibility of coordinating the implementation of the ITEA program within the campus. Prominent challenges ranging from the recruitment of participants, formulation and coordination of faculty assessment committees, disregard of specifications to time constrains among others are being experienced. Therefore, this article probes these issues by advocating for a unified approach towards the successful implementation of ITEA program that stands to improve the lecturing staff’s performance and student throughput.
A Content Analysis of Turkish Newspapers: Prevalence of Articles Containing Health Information Related to Physical Activity

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Abstract
This study was retrospective in design and the purpose was to review health information related to physical activity in articles of Turkish newspapers. Four daily Turkish newspapers were identified as having regularly archived documents on web pages. The key words used to identify articles to analyze included “physical activity” and as a result 184 articles from four newspapers were identified and analyzed. There were 165 (89.7%) articles that presented health information messages related with physical activity. General health information (35.9%), weight management (21.2%), cardio-vascular (11.9%) effects of the physical activity were the mostly frequently given as the main content of the articles. The target population in the articles included sedentary population (27.8%), individuals having specific disease (23.9%), and overweight people (16.9%). Twenty eight of the articles (15.2%) contained information regarding the duration and frequency of the physical activity for the target population. Thirty articles (16.3%) contained information suggesting general exercises for muscle strength and flexibility. A total of 27.7% of the article was provided by health professions (doctors, physical therapists, dieticians etc.). It was found that articles in Turkish newspapers relating to and promoting physical activity in the community contained insufficient health information and inadequate suggestions for promoting physical activity.
The Evaluation of Health Behaviors, Physical Parameters and Posture Among Child Laborers 14 to 18 Years of Age

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Abstract
The purpose of the study was to investigate health behaviors (smoking, physical activity), and evaluate physical parameters and posture among child laborers 14 to 18 years of age. This cross sectional study included 522 (Boys/Girls: 435/87) children laborers aged 14 to 18 years old (mean age: 16.71±1.02 years) attending apprenticeship school in Istanbul, Turkey. Data regarding socio-demographic characteristics (i.e. age, gender, social security, education level of mothers & fathers, income status of their parents etc), working conditions; working’s sector, starting age for working, daily working hours, health behaviors (smoking, alcohol, physical activity habit, type of physical activity) were collected via questionnaires during face to face interviews. Information also collected in the study included any musculoskeletal problems such as pain and the body part(s) affected from experiencing musculoskeletal pain. An evaluation of the physical capacity was conducted on the study group by doing pinch grip and hand grip strength for right and left side. Skinfold thickness was measured from three sides: 1) triceps, 2) sub-scapular and 3) calf according to AAHPERD health fitness standards. The New York Posture test was used for the postural assessments (range of score from 15-75 points). Most child laborer’s parents have a low level education and income status. The mean age for the study group to start working was 15.03±1.71 years. Their mean working
periods were 11.41±2.03 hours per day. The prevalence of reported musculoskeletal pain in the neck, lower back, lower and upper extremity was 47.7%. The prevalence of participation in regular physical activity habits were found to be 11.8% for both sexes. The ratio of current smoking and alcohol usage were 40.4% of the participants. The points of posture assessments, the results of sum skinfold thickness were higher in female participants (respectively p>0.05, p≤0.005). As a result of this study it was concluded that health promotion programs for child laborers can contribute to a gain in positive health behaviors including participating regularly in physical activities, and abstaining from tobacco and other substance usage.
The Effects of Teacher Modeling and Textual Prompting on Sixth-Grade Students’ Self-Explanation and Reading Comprehension Performance

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The Effects of Teacher Modeling and Textual Prompting on Sixth-Grade Students’ Self-Explanation and Reading Comprehension Performance

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Abstract

The aim of this proposed study is to investigate the effects of teacher modeling and textual prompting on 120 sixth-grade students’ self-explanation and reading comprehension performance after receiving the training of self-explanation. The participants will be divided into four groups—three experiment groups: Group MP (with both modeling and prompting), Group M (with modeling only), and Group P (with prompting only) and one control group: Group C. Upon these four different conditions, this study is going to analyze the types of self-explanation that students use, and compare the scores of reading comprehension tests among four groups. It’s expected that there will be two significant main effects (teacher modeling and textual prompting) but no interaction between modeling and prompting. Additionally, it is also expected that there will be a positive correlation between numbers of self-explanations in advanced level and reading comprehension performance.

Keywords: Self-explanation; Teacher modeling; Textual prompting; Reading comprehension
The Effects of Teacher Modeling and Textual Prompting on Sixth-Grade Students’ Self-Explanation and Reading Comprehension Performance

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According to Programme for International Student Assessment (PISA) planned by The Organisation for Economic Co-Operation and Development (OECD), the definition of scientific literacy is “the capacity to use scientific knowledge, to identify questions and to draw evidence-based conclusions in order to understand and help make decisions about the natural world and the changes made to it through human activity” (OECD, 2003, p. 133). Moreover, PISA also indicated that there are three scientific processes of scientific literacy; the primary process is “Describing, explaining and predicting scientific phenomena” (OECD, 2003, p. 137). Therefore, in order to promote students’ scientific literacy, the first work for teachers is to guide students to describe, explain, and even predict the scientific phenomena. McNeill & Krajcik (2007) further identified that students could gain deeper understanding of the content by constructing explanations; however, it is not an easy task for students to construct an explanation correctly all by themselves. Could it be possible that teachers provide some methods or strategies to help students construct explanations in the class?

Self-explaining is a promising and effective strategy that can help learners in learning and develop deeper understanding of the content. According to Chi’s definition, self-explaining is “the activity of generating explanations to oneself, usually in the context of learning from an expository text (Chi, 2000). From the series of studies conducted by Chi, self-explaining could improve students’ learning by enabling them to make connections between learned and unlearned experiences and gain a deeper understanding of the content (Chi, 2000; Chi & Bassok, 1989; Chi, Bassok, Lewis, Reiman, & Glaser, 1989; Chi, De Leeuw, Chiu, & Lavancher, 1994). In the present study, self-explaining is not only a knowledge-building activity but also an effective strategy to promote readers’ comprehension and understanding of the expository texts. Furthermore, the term “self-explanation” refers to “a unit of utterances produced by self-explaining” (Chi, 2000). Therefore, self-explanations produced by students in the present study will be analyzed to find out the relation between the quality of self-explanation and the levels of students’ comprehension.

The early period of Chi’s researches focused on knowledge acquisition and problem-solving to develop the meaning of self-explaining and further supposed that if
students already knew the knowledge about some topic, then they could understand the examples and produce the instances (Chi & Bassok, 1989; Chi et al., 1989). Moreover, Chi applied self-explaining to different learning situations, such as scientific learning; students need to understand and explain “how” and “why” does a scientific phenomenon happen (Chi & Bassok, 1989). After that, Chi et al. (1994) viewed from a learning perspective and pointed out that learning involves integrating new information with past experiences, and self-explaining could facilitate the process of integration.

McNamara and her colleagues conducted a series of self-explanation reading training (SERT) studies, and defined self-explaining as a process of generating the explanations of the article’s meaning to oneself (McNamara, 2004; McNamara, Levinstein, & Boonthum, 2004). In the studies, students could use six reading strategies (i.e., comprehension monitoring, paraphrase, bridging inference, elaboration, using logic, and prediction) while they are generating self-explanations.

In conclusion, the definition of self-explaining is when students are reading, they are explaining to themselves, and the generated self-explanations could make them comprehend the text and learn from the content. Therefore, the content of self-explanations include the connections of prior knowledge, the examples drawn from the article’s meaning, or applications of analogy in order to show what the students really learn but not just read for memorizing. Accordingly, based on the literature review, this study summarized six types of self-explanations as follows:

1. Paraphrasing: After understanding the meaning of the sentence or paragraph, readers could paraphrase it or say it in his/ her own words. This type of self-explanations might be the easiest one, and most of the readers paraphrase to help understand the text while reading.
2. Making Connections: Readers could think about related or similar experience in his/ her life, and make connections between experiences, prior knowledge, and the text.
3. Giving Examples: Readers could integrate the information conveyed by the text, and give some other examples to explain and to help understand the text.
4. Comparing/ Contrasting: Readers could point out the similar and different concepts from the text, and show the similarities and differences between two or more concepts.
5. Making Inferences/ Analogies: Readers could identify the principles or concepts in the text, and integrate them throughout the whole article; or he/she could combine his/her learning experiences, and make inferences/analogies.

6. Explaining How & Why: After comprehending a passage or a whole article, readers could explain how and why does a scientific phenomenon happen in detail.

In short, these six types of self-explanations could be divided into two levels: basic level and advanced level. Type one to type three (paraphrasing, making connections, and giving examples) belong to basic level; the others (comparing/contrasting, making inferences/analogies, and explaining how & why) are advanced level. If readers could generate more self-explanations in advanced level, then the quality of self-explanations would be better.

Previous researches have investigated not only the quantity but the quality of self-explanations in order to study the relation between self-explanations and learning. Chi et al. (1989) found out that students who were good at problem-solving could generate a larger number of self-explanations than students who were not while learning from worked-out examples in physics. As for quality of self-explanations, better problem-solvers could generate more elaborative self-explanations and comments. In order to investigate the differences of quality and quantity of self-explanations, this study contrasted the students with different levels of problem-solving ability, just like expert and novice.

Atkinson, Renkl, & Merrill (2003) indicated that using prompts in learning environment encourage learners to be more active and might foster transfer. The study examined the effects of backward fading and example-problem pairs incorporate with the presence or absence of self-explanation prompts. The result showed that even using very simple prompting procedure—let students simply choose the item instead of requiring them elaborate—can foster understanding and transfer. Thus, this study implied that self-explanation prompts can encourage and urge students’ learning attitude from passive to active, from superficial to profound.

Chi et al. (1994) investigated 14 eighth-grade students on self-explanations while learning from expository text of the human circulatory system. The study found that the prompted group made more progress than the unprompted group on the posttest; furthermore, prompted students who generated more self-explanations could answer more complicated questions. The prompted group had to self-explain each sentence’s meaning after reading the text; there were 22 functional prompts among 101 sentences of the text. Those prompts urged students to explain the functions of certain circulatory components. The students in unprompted group read the same text twice, but with no prompts to self-explain. The study
revealed that self-explanations could help students on comprehension performance, and it also conveyed the concept of teaching methods—using prompts to facilitate students’ self-explaining.

McNamara (2004) followed the line of thinking by Chi et al. (1994) and conducted the self-explanation reading training (SERT) to investigate the effectiveness on improving self-explanation. The experimental group received SERT training, but the control group didn’t. The result suggested that experimental group’s reading comprehension scores and quality of self-explanations were better than the control group. It also implied that the possibility of using reading strategies and training to improve the effectiveness of self-explanations.

Based on the studies above, it is concluded that self-explaining is beneficial for students’ learning and comprehension. However, what kind of teaching methods could teacher use to help students on improving the effectiveness of self-explanations? Collins, Brown, & Newman (1989) proposed six significant characteristics in cognitive apprenticeship, they are: modeling, coaching, scaffolding, articulation, reflection, and exploration; these are very common teaching methods used in practical field or in research. The idea of Chi, et al. (1994) prompted and unprompted groups were based on the concept of scaffolding; SERT adapted both modeling and coaching.

McNeill, Lizotte, Krajcik, & Marx (2006) investigated 311 seventh-grade students on scientific explanations in chemistry. The students received two different types of written support: continuous and faded, respectively; these two supports belong to the concept of scaffolding. Based on these findings, McNeil & Krajcik (2007) proposed five strategies for teachers to support students on writing scientific explanations, and these strategies are: making the framework explicit, modeling and critiquing explanations, providing a rationale for creating explanations, connecting to everyday explanations, and assessing and providing feedback back to students. They also showed the concept of modeling and scaffolding. McNeil & Krajick (2008) condensed the strategies from five to four, but still preserve the idea of modeling.

In conclusion, modeling and scaffolding were two of the most common and well-known teaching methods. Therefore, this study aims to investigate the effects of teacher modeling (modeling) and textual prompting (scaffolding) on students’ reading comprehension performance and the quality of self-explanations.
Method

Participants

The participants will be 120 children from four sixth-grade classes in Taiwan. And the participants will be divided into four groups—three experiment groups: Group MP (with both modeling and prompting), Group M (with modeling only), and Group P (with prompting only) and one control group: Group C.

Design

A 2 × 2 factorial design will be used, employing the teacher modeling (with teacher modeling or without teacher modeling) and the textual prompting (with textual prompting or without textual prompting). Therefore, there will be four conditions in this experimental design: Group MP, Group M, Group P, and Group C as Table 1 presents. The dependent variables will be self-explanations produced by participants and their reading comprehension performances of pretest and posttest.

<table>
<thead>
<tr>
<th>With modeling</th>
<th>Without modeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>With prompts</td>
<td>MP(30)</td>
</tr>
<tr>
<td>Without prompts</td>
<td>M(30)</td>
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</tbody>
</table>

Table 1. Four conditions and the number of participants for each condition

<table>
<thead>
<tr>
<th>With modeling</th>
<th>Without modeling</th>
</tr>
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<tbody>
<tr>
<td>With prompts</td>
<td>P(30)</td>
</tr>
<tr>
<td>Without prompts</td>
<td>C(30)</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
</tr>
</tbody>
</table>

Research Materials

There are three major tools will be used in this study: Chinese Reading Comprehension Test, 4 Expository Texts, and 2 Reading Comprehension Tests. The following will describe the details of these materials for the present study:

Chinese Reading Comprehension Test. The aim of this standardized test is to measure the ability of participants’ Chinese reading comprehension. The present study will only excerpt the expository texts from the original test for the study’s pretest. There will be 4 texts and 24 multiple-choice questions in the test.

Expository Text. During three phases of experimental period, participants will need to read 4 expository texts. The 1\textsuperscript{st} expository text, entitled “The Rock Cycle,” will be used both in the pretest and in Lesson 1; the 2\textsuperscript{nd} and 3\textsuperscript{rd} expository text (“Wind” and “Why does soda fizz?”) will be used in Lesson 2 and 3 respectively. Participants will read the 4\textsuperscript{th} text, entitled “Mist,” for the posttest. All the expository texts will be developed and designed by
researchers; the principle of developing the expository texts will also take sixth-grade students’ scientific textbooks and materials into consideration, and make the texts applicable to participants.

**Reading Comprehension Tests.** The aim of these reading comprehension tests is to measure the performance of participants’ reading comprehension on pretest and posttest. Based on the expository texts, the researchers will develop the Reading Comprehension Tests of pretest and posttest respectively. For the validity of the tests, there will be three experienced sixth-grade teachers, as experts, to evaluate and give suggestions for the tests. There will be 10 multiple-choice questions, including factual questions and inferential questions, to evaluate participants’ comprehension of factual and conceptual knowledge.

**Procedure**

There will be three major phases of this experiment: pretest, teaching intervention, and posttest. Therefore, all the participants will go through three phases.

**Pretest.** In pretest, all participants will take the Chinese Reading Comprehension Test first in their regular classroom; it’ll be a 15 to 20 minutes paper written test. Then, the participants will read the 1st text—The Rock Cycle” while constructing self-explanations in computer classroom where each participant will have one computer, a pair of earphones, and a microphone. After receiving the instructions, the participants will be given a paragraph to practice, and see if there’ll be any problems for them while accomplishing the task. During the period of self-explaining activity, the whole process will be recorded by computer microphone and camera of desktop operating system. At the end of pretest, all participants will take a reading comprehension test of text 1; it will be a paper written test as well.

**Teaching Intervention.** In teaching intervention, there will be three lessons, and each lesson includes 20-minute instruction and 20-minute individual practice so there will be 120 minutes in total; however, the treatments (teacher modeling and textual prompting) will be different among four groups. The teacher will give instruction in self-explaining first, and the participants in different group will receive different treatment of teaching (with modeling vs. without modeling). Group MP and Group M will have teacher modeling so the teacher will demonstrate how to construct self-explanations, but in Group P and Group C, the teacher will just conduct the teaching activity by describing the definition and function of self-explaining without demonstration; likewise, the participants will be given different texts (with prompting vs. without prompting) to practice constructing self-explanations in class. Group MP and Group P will be given texts with prompts to practice constructing self-explanations, but
Group M and Group C won’t; they will practice without prompts. Additionally, the form of the prompts will be questions represented by significant concepts of each paragraph. For example, the main idea of the last paragraph in “The Rock Cycle” concludes that rocks would change, and the phenomenon is called “the rock cycle.” Therefore, groups use the text with prompts will have a question such as “What is the rock cycle? And how does it happen?” In addition, one of the researchers will be the instructor through the whole intervention process; another two researchers will be responsible for classroom observation and recording.

Posttest. In posttest, all participants will read the 4th text and also have a self-explaining activity first, and then they will have a 15-minute reading comprehension test of text 4 after finishing their self-explaining. The location will be in the computer room like pretest, and all the participants will have one computer, a pair of earphones, and a microphone as well.

Data analysis

There will be two parts for data analysis: First, the self-explanations produced by participants from pretest and posttest; second, the reading comprehension test scores from pretest and posttest.

Reading Comprehension Test Scores. Two-way ANCOVA will be used to analyze participants’ reading comprehension test scores of pretest and posttest. The scores of four groups from pretest will be used as covariance in order to compare the scores of posttest.

Self-Explanations Data. After transcribing the self-explanations data from verbal recording into transcripts, the researchers will code and classify the self-explanations into six types:

1. Paraphrasing
2. Making Connections
3. Giving Examples
4. Comparing/Contrasting
5. Making Inferences/ Analogies
6. Explaining How & Why

The first three types –Paraphrasing,” “Making Connections,” and “Giving Examples” belongs to basic level, and the others are advanced level. Therefore, the quality of self-explanations could be compared and investigate the relationship between types of self-explanations and reading comprehension performance. Besides, there will be three coders to complete the coding and confirm the reliability.
Expected Results

It is expected that there will be two significant main effects (teacher modeling and textual prompting) but no interaction. That is, if there is teacher modeling in teaching, the reading comprehension performance of Group MP will be better than Group P, and Group M will be better than Group C. As for textual prompting, if there is textual prompting in texts, the reading comprehension performance of Group MP will be better than Group M, and Group P will be better than Group C. In general, the reading comprehension performance of Group MP shall be the best (the reading comprehension test scores will significantly higher than other groups.)

It is also expected that Group MP will produce more self-explanations in advanced level than the other three groups. Furthermore, there will be a positive correlation between numbers of self-explanations in advanced level and reading comprehension performance.
References


The Research of Service-Learning Activities in Life Education—the Case of Taiwan for “Fusion of Horizons” in Multiculturalism

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Life Education has been developed and promoted for over 10 years in Taiwan. The most challenging issue for the curriculum is that how to measure the effect of the learning. In this case, we designed a series of Service-Learning programs in class, demanding students to get involved in situation.

This study was intended to develop the course of Life Education applied with immersing Service-Learning activities with students who attended the programs held by non-government organizations. These programs were all about native culture issues and inspired college students to empower and to concern their existence and the relationship between himself/herself and nature/society. This action research study also attempted to help students to understand the transformative process and the teaching effect of “fusion of horizons” by viewing the situation. The first research objective is to explore the possibility of immersing Service-Learning activities to the curriculum of Life Education. The second objective is to apply the “fusion of horizons” concept to the curriculum of Life Education in a university classroom. To meet these objectives in this course, the teacher transformed the concept of “fusion of horizons” into two essential concepts of “ground” and “vision” and put it into the teaching of Life Education to encourage students to apply it in their learning process.

In order to know the students learning attainments, circumstance, observation and documentation analyses were conducted in this study. By ways of engagement and service in native community, students learned to acquire deeper understandings of other lives and culture, thus opened their eyes to see through the differences between multiculturalism and resources limited, and thought through how they could transform such new understandings for their teachings after graduation as teachers and social justice themselves in reflection.

This study described 5 sequential stages for the teaching transformative process, including conception, contextualization, activation, meaningfulness and self-reflection. The results of the study found that students recognized service-learning immersed in courses. Students learning attainments after participating service-learning activities were good with changes in students’ attitude and cognition as citizen identity.

According to the findings, the following suggestions are proposed. First, the service-learning teaching method needs to be conducted deeper and much more diverse training programs both for students and teachers. Second, the concept of “fusion of horizons” can provide a good understanding of life as citizen responsibility and gain advanced personal growth.

Keyword : Service-Learning, fusion of horizons, life education
A comparison of the eye-movement patterns of kindergarten teachers and college students toward free-playing scenes: An eye-tracking study

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Introduction

Playing freely has an important role in early childhood education. Teachers must support children’s free play in terms of security, promotion of social interaction, development of emotions, and so forth (MEXT, 2008). Actually, free playing is based on teachers’ attention to the playground and the attention would be ameliorated through experiences in the field.

Eye movement is one of the scientific indices of attention, and it can be precisely measured by using eye-tracking devices. However, the eye movements of experienced teachers have rarely been examined, although they might provide useful scientific information for the improvement of early childhood education.

The purpose of the present study is to demonstrate the effects of teaching experience on eye movement patterns of teachers in playground through a comparison of experienced kindergarten teachers and college students.

Method

Participants

Participants were divided into two experimental groups: twelve kindergarten teachers with more than 5 years experience (Mean = 15.8, SD = 8.6) and fourteen college students belonging to an early childhood education course.

Materials

The Tobii T60 eye-tracking system (Tobii Technology AB, Danderyd, Sweden; Fig.1) was used for measuring eye movements.

Five 2-min video clips that showed scenes of large play equipment or of a sand pit made up of free-play scenes at kindergarten were used as stimuli (10 min in total). The order of the video clips was randomized among participants. Fig. 2 indicates the stimuli flow of the present experiment.

A brief questionnaire (including questions about years of experience, scenes in which the participant feels danger, and what consideration the participant make at playground especially) was arranged in order to eliminate the possibility of participants becoming conscious of being measured by their eye movements.

Procedure

All participants were tested individually. First, they were instructed to watch free-play videos for 10 min. Second, video stimuli were presented to them on a Tobii T60 LCD display, and their eye movements were recorded simultaneously. Finally, participants answered the questionnaire. After the experiment, the experimenter explained the purpose of the study and why the participants’ eye movements had been recorded. All of the participants agreed to use the data gained from eye tracking and questionnaire anonymously.

Fig.1 Tobii T60 eye tracker and a participant.

Fig.2 A stimuli flow of the experiment.
**Results**

Fig. 3 shows the mean number of gaze fixations in all of the video clips of the two experimental groups. The mean gaze fixation of experienced teachers were more than those of students ($t(24) = 2.575, p = 0.02$, two-tailed). Furthermore, we defined areas of interest (AOIs) on the video clip including large play equipment (AOI_1 - AOI_4, see Fig. 4(A)) and obtained the number of gaze fixations on each AOI. The result was that only at AOI_2, which contains a shadow area, were the mean number of gaze fixations of experienced teachers more than that of students ($t(24) = 3.362, p = 0.003$, two-tailed with Bonferroni correction; Fig. 4(B)).

**Discussion**

There were some differences between the eye movement patterns of experienced teachers and college students in this study. In specific, the teachers showed more eye movements in total compared to the students. In addition, the less-visible area drew more attention from the teachers. These results have some commonalities with several eye-tracking studies done on automobile drivers, which showed that experienced drivers have wider functional field of view and more flexibility to meet changing demands than novices. (Crundall and Underwood, 1998; Crundall et al., 1999). It is suggested that the attention of experienced teachers would become more frequent and more flexible to the demands in playground by experience, at least in preventing accidents.

The present study scientifically demonstrated an aspect of experience in early childhood education. This trial may contribute to the education of college students or young teachers through showing the actual eye movement patterns of experienced teachers.

**Acknowledgement**

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**References**


Title of Proposal: UDI Online: Applying Universal Design for Instruction to Online and Blended Courses

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Proposal Abstract:
This presentation will address the work of the UDI Online Project at the University of Connecticut, which extends the construct of Universal Design for Instruction (UDI) into online and technology blended courses at the postsecondary level. Results of interviews and surveys with faculty and students will be presented, as will example “e-Tools” that foster the use of UDI in online and technology-blended courses.

Proposal Description and Goals:
Enrollment in online and technology-blended courses in institutions of higher education is growing at a dramatic rate across the United States. According to an
investigation of over 2,500 institutions by the Babson Survey Research Group, the College Board and the Sloan Consortium (2008), nearly 3.9 million college students were enrolled in at least one online course during the fall 2007 term. This represented a 12% increase from the prior year. Despite this rapid growth, there is limited evidence related to effective teaching practices in online and blended courses for diverse learners, particularly those with mild cognitive disabilities. The goal of the UDI Online project is to extend prior work in Universal Design for Instruction (UDI) into online and technology blended learning environments. This presentation session will present highlights of activities to date of the UDI Online project, which is one of the funded Demonstration Projects to Ensure Students with Disabilities Receive a Quality Higher Education from the US Department of Education. Highlighted activities include the results of a needs assessment of students and faculty at six postsecondary institutions in the northeast, the development of an electronic toolbox of “e-Tools”, and the development of a series of online instructional modules for postsecondary faculty. Each is described in more detail below.

Needs Assessment - Student surveys and interviews:
Students (n = 400) with and without learning disabilities and/or Attention Deficit Hyperactivity Disorder - from six institutions in the northeast are currently being surveyed using an electronic survey instrument designed by the project staff. The survey gleans information regarding student experiences in online and technology-blended courses. The students were asked to rate their perceived importance of various components of course organization, course delivery, and course evaluation (assessment). To gather additional insight into student experiences, 30 students from the same six institutions are currently being interviewed related to their experiences in online and technology-blended courses. Half of the students being interviewed have learning disabilities and/or attention deficit/hyperactivity disorder. These students are enrolled at a research 1 university, two public universities, a private college, and two community colleges. Surveys and interviews with students at several institutions have already been completed.

Needs Assessment - Faculty surveys and interviews:
Simultaneously, interviews and surveys are being conducted with faculty at these six institutions. A total of 350 faculty, representing a range of disciplines, rank, and experience teaching in an online or blended format are being surveyed, while 30 are being interviewed. Questions focus on the benefits and challenges of teaching in this format, as well as on techniques found to effective and important.

Electronic Toolbox:
The needs assessment described above serves as a guide for the development of an electronic toolbox that consists of a series of “e-Tools”. These e-Tools are digitally presented materials, instructional techniques and/or strategies that can be used or manipulated by a course instructor to proactively create a learning environment that benefits a broad range of learners. These e-Tools range from simple, readily available features of common programs (e.g., Microsoft Word Highlighting tool that
helps to scaffold student readings), to free downloads (e.g., Jing, Doodle; Skype – programs that allow increased collaboration and interaction between students and faculty), to low cost programs (e.g., Adobe Acrobat 9.0). Using a cycle of developing, piloting, and revising, the electronic toolbox focuses on “faculty as designer”.

Instructional guides have been created for faculty to locate and use the tool, without the need for support from an instructional technology department. Faculty users will also provide ratings and feedback related to the tool that future users can employ to guide their selection and use of e-Tools.

**Instructional Modules:**
The electronic toolbox also contains a series of online instructional modules related to a range of topics such as introduction to UDI, the history of UDI, the application of UDI to postsecondary education, legal issues in serving students with disabilities in postsecondary education, and learning disabilities/attention deficit hyperactivity disorder. Other modules contain model resources that faculty can use and adapt to their courses as needed, including a list of important campus resources for students, an introductory session of an online class, and resources related to developing course objectives and grading rubrics.

**Results:**
Participants will learn about the application of UDI to online and technology blended courses, and about resources that can be used and shared with campus faculty teaching in these environments.

**Topic Area:** Distance Education

**Format:** Workshop (90 minutes long)
Promotional Tools in Higher Education: the case of Private Universities in Cyprus

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Key Words: Promotion, Communication, Tertiary Education

ABSTRACT

Cyprus's higher education system is in transition and the role of the private higher education sector is under review. These internal changes are intended to market Cyprus's educational system more competitively. Our argument is presented in three stages; an initial exploration of the tertiary education market of Cyprus, then a consideration of the necessary promotional tools in educational marketing and finally the use of Facebook as a major promotional tool.

INTRODUCTION

The operationalisation of marketing in Cyprus’s private tertiary education system as ‘increasing student numbers’ is problematic from both an educationalist’s and a marketer’s perspective. Although the USA has embraced a specific professional stance as ‘enrollment management’ and the UK has taken a broader marketing orientation that clearly embraces recruitment. These different perspectives lead to differences in implementation for both domestic and international recruitment and of course it has affected the promotional tools used.

Cyprus’s private higher education sector – influenced by both of these international traditions – is facing new challenges in terms of domestic demand, the need to increase international student recruitment, pressure of EU harmonization and the realization of the potential growth due to its geo-political location. This paper uses these insights on the readiness of private higher educational institutions to exploit national and regional markets and the marketing communication used as Cyprus seeks to become a regional centre of educational excellence.

RESEARCH OBJECTIVES

Our argument is presented in three stages; an initial exploration of the promotional tools used in tertiary education of Cyprus, then a consideration of educational marketing and the use of Facebook as a major promotional tool. We will not be making the case for private versus public institutions in this paper but we follow Zumeta assessment that nonprofit higher education “is a valuable to the nation” (1992:363) when referring to the USA.

RESEARCH METHODOLOGY

A quantitative research method was used through the use of a personal survey in order to seek an understanding and develop a language of the university’s main marketing issues. Semi structured questionnaires have been used as this is a working paper. A random sample of 400 students attending the three private institutions in Cyprus has been used. One hundred and fifty questionnaires have already been completed although the results can only be considered as tentative at this stage they do shed light on the promotional tools used in the private institutions of tertiary education in Cyprus.

CONCLUSIONS

Our research so far has shown that the marketing of Cypriot higher education is still sales driven, and that the promotional tools used in order to recruit students do not reflect the students’ communication needs and the recent technological advancements. There is often an awareness of the need to apply a holistic marketing philosophy but these aspirations are restricted by short-termism encouraged by the government’s attitude to private education and the institution’s own financial goals. This is problematic, for the realizations of Cyprus as a centre of excellence is on the shoulders of the private universities. We recommend that, like other European countries, Private Universities apply a fair market mechanism to develop a strong marketing strategy. By not developing effective communication tools this will ensure failure to match its goals, increasingly waste its marketing resources and, we predict, lead to decline in the number of students attending Cypriot institutions.

REFERENCES: Available on Request
Abstract
A single classroom provides a place in which individuals from different cultural backgrounds have the potential for sharing a rich place of learning in ways that embrace and celebrate individual differences, foster the development of a positive self-concept, and provide meaningful and relevant learning experiences for each student. Facilitating this kind of learning environment is the result of practicing culturally responsive pedagogy, beyond simply having an attitude of acceptance of cultural diversity. A culturally responsive teacher acts on knowledge about cultural differences, and implements, as habit, pedagogical skills that foster a meaningful and relevant education for all of her/his learners. The call for cultural responsiveness extends to all dimensions of the school experience, including physical education. Physical education presents unique needs and opportunities to practice cultural responsiveness. Where teaching and learning heavily exist in the psychomotor domain, issues such as body language, personal space, physical contact, and dress become particularly important factors to consider. Additionally, physical education provides a unique stage from which diversity can be incorporated into the curriculum, with opportunities for learning a variety of activities, contextualized in their cultural and historical roots, from around the world. An overview of culturally responsive pedagogy will be presented, with suggestions for implementation in the physical education setting.
Developing A Mechanism for Increasing Communication Skills, Critical Thinking and Reflective Practice:
The Tuning Protocol

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Abstract

This project was designed to improve teaching and student learning in undergraduate classes at a major public institution of higher learning. In an effort to improve faculty instruction and student learning, the researchers began an innovative project based on the Scholarship of Teaching and Learning (SoTL) philosophy of discovery through basic research and integration and application of knowledge (Boyer, 1990). SoTL encourages and promotes improving teaching and learning through reflection and inquiry in a constructivist educational setting. Knowledge gained through this process is then made available to peers in the profession. This project was undertaken as a means to improve college students’ reflective practice, higher-level critical thinking and communication skills. It was also designed to improve peer engagement for millennial students, as well as those who are ethnically, culturally and linguistically diverse, in academic and educational environments.

The project centered around the use of a Tuning Protocol, a structured format for peers to provide constructive feedback about each other’s work in meaningful ways. It offered participants in this study a systematic approach to reflect on, assess, evaluate and discuss written assignments in peer groups. This research project introduced undergraduate teacher education students (Foundations of Education and Health Education) with the Tuning Protocol and provided participants with opportunities to become reflective practitioners, effective communicators and critical thinkers (Gerena, Glaser & Keiler, 2010; Gerena, Keiler, & Glaser, 2009). A literature search on the Tuning Protocol found that, while it has been implemented and incorporated into instruction in a variety of settings, meaningful research on its effectiveness in improving communication skills, reflective practice, or critical thinking skills is critically lacking. This project was an attempt to provide the academic community with research-based results on the effectiveness of the Tuning Protocol in these areas of student development and engagement.

This project was aligned to the General Education framework of the institution of Higher learning where it was implemented. Imperatives to shape the future of education at that institution included increasing reading, writing, and critical thinking across the curriculum and advancing other literacies, including communication skills. It was also in alignment with strategies that are necessary to engage diverse student needs. As student populations become more ethnically, culturally and linguistically diverse, professors need to restructure their teaching methodology to allow for meaningful interaction where student can be more engaged and involved in their own learning (Huber & Hutchings, 2005; Hutchings & Shulman, 1999). In 2007, more than two thirds of the undergraduate student population at this institution self identified as diverse ethnicity and almost one third self identified as second language learners. Demographic data indicated that students originated from over 120 countries with more than 86 languages represented from among the student body (York, CUNY Fact Book Highlights, 2009).

BACKGROUND
The Tuning Protocol was developed by David Allen and Joe McDonald of the Coalition of Essential Schools. The original function of the Tuning Protocol was for teachers to examine student work (McDonald & Allen, 1991; Allen & McDonald, 2003). In this study, it was used to instruct students on how to reflect on their own learning as well as that of their peers, to work collaboratively, to improve student communication and to develop higher order critical thinking skills. Participating students were afforded the opportunity to think critically about their own learning and to respond to their peers’ reflections in a supportive, non-confrontational community of learners.

Use of the Tuning Protocol at the university level also addressed the learning preferences of the millennial students...
who are characteristically team-oriented and favor group settings (Mastrodicasa, 2007). As a student centered, collaborative and interactive teaching approach, it focused on student preferences for interaction with the instructor as a facilitator of learning (Monaco & Martin, 2007). Other research studies have suggested that college students need to develop communicative and reflective skills to manage their daily lives and to explore the meaning and purpose of life’s activities (Newton, 2000). Millennial students need to increase critical thinking and decision-making skills (Monaco & Martin, 2007), and are interested in information strategies that go beyond the written word (Coomes & DeBard, 2004). Using the Tuning Protocol provided the participating students in this study with opportunities to develop these fundamental skills.

METHODOLOGY

Participants
The Tuning Protocol was implemented in two separate academic settings at the beginning of the semester. One of the settings was a Teacher Education Foundation level class. One of the goals of introducing the Tuning Protocol in this context was to provide pre service teachers with an effective teaching strategy. Another goal was to help potential educators become familiar with a strategy that will useful to them as a teaching and assessment tool with their future students. There were fifteen pre-service teaching students in this class, and twelve agreed to participate in the study.

The Tuning Protocol was also used in a mid-level Health Education elective course. A main behavioral objective of the Health Education course was to help students improve their written and spoken communication skills. The Tuning Protocol was used to improve both written and oral communication skills. Participants were given ample opportunities to practice their communication skills using the Tuning Protocol as a novel strategy. This strategy was presented as useful and effective tool to use when planning workshops to bolster communication and health behaviors in community settings.

Study Design
This was a pilot study that used both qualitative and quantitative methods to collect and analyze data. It included a pre and post survey to measure participants’ attitudes towards engaging with peers to improve communication skills, reflective practice, and critical thinking skills. The study was conducted over a four-month period, from February to May 2010. The instruments used to collect data at six points in time included the pre and post attitudes surveys, group member reflection response logs, and students’ post Tuning Protocol written reflection worksheets. Data collection point one (T1) was during the third week of the semester and collection point six (T6) was during the final week of the semester. All data collection instruments were designed specifically for this project and were original in design and development.

Instruments
Since there was no existing instrument to measure participants’ attitudes towards engaging with peers to improve communication skills, reflective practice, engagement and critical thinking skills, an original survey was developed (Appendix A). There were 15 Likert style statements with responses ranging from strongly agree to strongly disagree. Participants were instructed to indicate if they agreed or disagreed with each statement. The scale values were as follows: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. For example, the first item on the measure was, “I think getting feedback from my peers will help me improve my work.” Participants were instructed to select a response ranging from 1 to 5 with the higher numbers indicating greater levels of agreement and the lower numbers indicating lower levels of agreement.

For analysis purposes, the 15 statements were divided into three sub groups representing the three major dependent variables of the study: communication skills, thinking skills, and reflective practice skills. There were five statements that addressed communications skills (#1, 2, 3, 5, 9), seven items that addressed thinking skills (6, 7, 10, 11, 12, 13, 14) and two items that addressed reflective skills (#4, 8). There was a final question asking students to rate their knowledge of the tuning Protocol overall (#15). The statements are included here for reader ease. The full survey, as indicated above, can be found in Appendix A.

1. I think getting feedback from my peers will help me improve my work.
2. I am comfortable giving feedback to my peers.
3. I am comfortable receiving feedback from my peers.
4. Engaging in self and peer assessment can facilitate the process of learning.
5. Working in a group setting will help me improve my spoken communication skills.
6. Working in a group setting will help me develop higher order critical thinking skills.
7. Working in a group setting will help me develop analytical thinking skills.
8. Working in a group setting will help me improve my reflection skills.
9. Working in a group setting will help me learn to express an opinion or clarify information.
10. Working in a group setting will help me think about and critique my own personal work.
11. Working in a group setting will help me think about and critique the work of a peer.
12. Working in a group setting will help me develop questioning skills.
13. Working in a group setting will help me develop the ability to expand logical thought patterns.
14. Working in a group setting will help me learn to synthesize information.
15. I understand what a Tuning Protocol is and how it helps to improve communication, thinking and reflective skills.

Data Collection
This was a mixed measures/repeat measures study. Data was collected at six points in time using the Tuning Protocol pre/post survey and the Tuning Protocol process logs and reflection worksheets. The initial attitudes pre survey was collected at point 1. This occurred approximately three weeks into the semester. Over the course of the semester, the Tuning Protocol (Appendix B) was used four separate times (T2-T5), usually at two-week intervals. After each experience with the Tuning Protocol, all participants, presenter and group members, were asked to reflect on the process of using the Tuning Protocol by completing the “Presenter and Group Member Reflection Response Logs” (Appendix C). Participants were also asked to reflect on their personal learning and communication, critical thinking and reflective skills by completing the “Post-Tuning Protocol Reflection Worksheet” (Appendix D). In each class, assignments were specifically designed for students to use with the Tuning Protocol. Samples of these assignments that were used in the teacher education and in the health education are included in Appendix E. The post attitude survey was administered the last week of the semester (T6). Table 1 illustrates the administration points of each of these data collection instruments.

Data Collection Schedule

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Collection Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP Survey</td>
<td>T1</td>
</tr>
<tr>
<td>TP Reflection Worksheets and Reflection Response Logs</td>
<td>X</td>
</tr>
</tbody>
</table>

\[X = \text{Instrument administered}\]

DATA ANALYSIS

Quantitative: Pre-Post Survey Results
The first step that was taken was to code the 15 statements on the survey. The five statements that addressed communication skills were coded as “C”, the seven statements for critical thinking skills were coded as “T” and the two statements that addressed reflective practice were coded as “R”. The final question was coded as “KTP” or Knowledge of the Tuning Protocol. This allowed the researchers to cluster the questions into sub groups in order to run data analysis on particular group of questions or variables.

In all, there were 34 participants in this study (N = 34), twelve from the Teacher Education (n = 12) class and 22 participants (n = 22) from the Health Education class. Participants were also coded as Teacher Education (T) or Health Education (H). All responses to the pre-participation survey were coded with the letter “A” (“Q1A, Q2A, etc) and for the post-participation survey all responses were coded with a B (i.e. Q1B, Q2B, etc).

FINDINGS

Quantitative: Pre-Post Survey Reliability
Since the attitude survey was an original survey, the first statistical analysis was to establish the reliability of the
instrument. To accomplish this, a Cronbach Alpha reliability coefficient was determined using SPSS statistical analysis software. The Cronbach Alpha reliability coefficient for the pre survey was .88 and for the post survey it was .92. These results indicated that both surveys were reliable for the purposes of this study. The reliability results are shown in Tables 2 and 3 below.

**Table 2**

<table>
<thead>
<tr>
<th>Scale: Pre Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>Cronbach's Alpha Based on Standardized Items</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Table 3**

<table>
<thead>
<tr>
<th>Scale: Post Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>Cronbach's Alpha Based on Standardized Items</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

**Descriptive Results**

After the reliabilities of the instruments were established, an Inter-Item correlation matrix analysis was conducted to verify that each item on the survey was independently strong and that all items were asking different questions. No two items were correlated above .8. This result indicated that each survey question was independent of all other questions and that redundancy was not an internal flaw of the instrument. The inter-item correlation results are shown below in Table 4:

**Table 4**

<table>
<thead>
<tr>
<th>Inter-Item Correlation Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
</tr>
<tr>
<td>C2</td>
</tr>
<tr>
<td>C3</td>
</tr>
<tr>
<td>R4</td>
</tr>
<tr>
<td>C5</td>
</tr>
<tr>
<td>T6</td>
</tr>
<tr>
<td>T7</td>
</tr>
<tr>
<td>R8</td>
</tr>
<tr>
<td>C9</td>
</tr>
<tr>
<td>T10</td>
</tr>
<tr>
<td>T11</td>
</tr>
<tr>
<td>T12</td>
</tr>
<tr>
<td>T13</td>
</tr>
<tr>
<td>T14</td>
</tr>
</tbody>
</table>

Descriptive analysis continued with an analysis of the main variables of the pre and post surveys. Means for all items in the pre attitude survey were above 4.00. The range of means for the pre attitude survey was 4.09- 4.35 as indicated in Table 5:

**Table 5**

<table>
<thead>
<tr>
<th>Descriptives: Main Variables Pre Attitudes Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Question</td>
</tr>
</tbody>
</table>
Means for all items in the post attitude survey were also above 4.00. The range of means for the post attitude survey was 4.24-4.68 as indicated in Table 6 below:

**Table 6**

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Code</th>
<th>N</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Code Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Q1B C1</td>
<td>34</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4.41</td>
<td>.743</td>
<td>-1.325</td>
<td>.403</td>
</tr>
<tr>
<td>Q2B C2</td>
<td>34</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4.32</td>
<td>.865</td>
<td>-1.482</td>
<td>.403</td>
</tr>
<tr>
<td>Q3B C3</td>
<td>34</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4.35</td>
<td>.849</td>
<td>-1.221</td>
<td>.403</td>
</tr>
<tr>
<td>Q4B R4</td>
<td>34</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4.35</td>
<td>.790</td>
<td>-1.175</td>
<td>.403</td>
</tr>
<tr>
<td>Q5B C5</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4.41</td>
<td>.843</td>
<td>-1.117</td>
<td>.403</td>
</tr>
<tr>
<td>Q6B T6</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4.41</td>
<td>.843</td>
<td>-1.117</td>
<td>.403</td>
</tr>
<tr>
<td>Q7B T7</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4.41</td>
<td>.843</td>
<td>-1.117</td>
<td>.403</td>
</tr>
<tr>
<td>Q8B R8</td>
<td>34</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4.32</td>
<td>.865</td>
<td>-1.482</td>
<td>.403</td>
</tr>
<tr>
<td>Q9B C9</td>
<td>34</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4.35</td>
<td>.691</td>
<td>-1.003</td>
<td>.403</td>
</tr>
<tr>
<td>Q10B T10</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4.38</td>
<td>.888</td>
<td>-1.965</td>
<td>.403</td>
</tr>
<tr>
<td>Q11B T11</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4.32</td>
<td>.878</td>
<td>-1.848</td>
<td>.403</td>
</tr>
<tr>
<td>Q12B T12</td>
<td>34</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4.29</td>
<td>.836</td>
<td>-1.949</td>
<td>.403</td>
</tr>
<tr>
<td>Q13B T13</td>
<td>34</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>4.47</td>
<td>.896</td>
<td>-2.192</td>
<td>.403</td>
</tr>
<tr>
<td>Q14B T14</td>
<td>34</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4.24</td>
<td>.890</td>
<td>-1.046</td>
<td>.403</td>
</tr>
<tr>
<td>Q15B KTP15</td>
<td>34</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4.53</td>
<td>.615</td>
<td>-.950</td>
<td>.403</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>34</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4.41</td>
<td>.743</td>
<td>-1.325</td>
<td>.403</td>
</tr>
</tbody>
</table>

In all, the findings indicated that there were positive changes in attitudes in this survey. When the means were visually compared, positive increases to the mean scores for ten questions were noted: #1(C), 3(C), 5(C), 6 (T), 8 (R), 11(T), 12 (T), 13 (T), 14 (T), 15(KTP).

However, the means of two items decreased slightly:
• #7 (T) “Working in a group setting will help me develop analytical thinking skills”
• #11(T) “Working in a group will help me think about and critique the work of a peer”

Additionally there was no change of attitude for Q# 4 (R), #9 (C), and #10 (T).
• #4 “Engaging in self and peer assessment can facilitate the process of learning.”
• #9 “Working in a group setting will help me learn to express an opinion or clarify information.”
• #10 “Working in a group setting will help me think about and critique my own personal work.”

T-Test Analysis
A majority of the attitudes demonstrated positive increases while two attitudes decreased between the pre and the post attitude surveys. In order to ascertain if the two decreases and the ten increases in mean scores were statistically significant, a paired sample T-Test was conducted. The results indicated that one item registered a statistically significant positive change in attitude: Q#3 “I am comfortable receiving feedback from my peers”. The T-Test results are shown below in Table 7.

<table>
<thead>
<tr>
<th>Table 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>T Test Results</td>
</tr>
<tr>
<td>Paired Samples Test</td>
</tr>
<tr>
<td>Paired Differences</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>mean</td>
</tr>
<tr>
<td>t</td>
</tr>
</tbody>
</table>

| Pair 1 | C1 - C1 | -0.294 | 0.938 | 0.161 | -0.622 | 0.033 | -1.828 | 33 | 0.077 |
| Pair 2 | C2 - C2 | -0.176 | 0.968 | 0.166 | -0.514 | 0.161 | -1.063 | 33 | 0.296 |
| Pair 3 | C3 - C3 | -0.500 | 0.896 | 0.154 | -0.813 | -0.187 | -3.253 | 33 | 0.003 |
| Pair 4 | R4 - R4 | -0.000 | 0.816 | 0.140 | -0.285 | 0.285 | 0.000 | 33 | 1.000 |
| Pair 5 | C5 - C5 | -0.294 | 1.115 | 0.191 | -0.683 | 0.095 | -1.537 | 33 | 0.134 |
| Pair 6 | T6 - T6 | -0.324 | 1.173 | 0.201 | -0.733 | 0.086 | -1.608 | 33 | 0.117 |
| Pair 7 | T7 - T7 | 0.147 | 1.077 | 0.185 | -0.229 | 0.523 | 0.796 | 33 | 0.432 |
| Pair 8 | R8 - R8 | 0.029 | 1.114 | 0.191 | -0.418 | 0.359 | -0.154 | 33 | 0.879 |
| Pair 9 | C9 - C9 | 0.000 | 0.778 | 0.134 | -0.272 | 0.272 | 0.000 | 33 | 1.000 |
| Pair 10 | T10 - T10 | 0.000 | 1.101 | 0.189 | -0.384 | 0.384 | 0.000 | 33 | 1.000 |
| Pair 11 | T11 - T11 | -0.059 | 1.013 | 0.174 | -0.295 | 0.412 | -0.339 | 33 | 0.737 |
| Pair 12 | T12 - T12 | -0.059 | 0.952 | 0.163 | -0.391 | 0.273 | -0.360 | 33 | 0.721 |
| Pair 13 | T13 - T13 | -0.147 | 0.989 | 0.170 | -0.492 | 0.198 | -0.867 | 33 | 0.392 |
| Pair 14 | T14 - T14 | -0.029 | 1.141 | 0.196 | -0.428 | 0.369 | -0.150 | 33 | 0.881 |
| Pair 15 | KTP15 - KTP15 | -0.059 | 0.814 | 0.140 | -0.343 | 0.225 | -0.421 | 33 | 0.676 |

DISCUSSION

Implications and Future Research
This study illustrated that the Tuning Protocol can be used across disciplines to provide student-centered instruction and foster experiential learning. Both the Teacher Education and the Health Education students appeared to benefit from participating in this study. A logical progression for future research would be to explore if there are differences between the Teacher Education and Health Education students. Also, it is hoped that an analysis of the reflection response logs and the reflection worksheets will shed some light on the reasons why some of the attitudes decreased or showed no increases or improvements. Detailed analysis of the qualitative data that was gathered in the presenter and group member reflection response logs and the post Tuning Protocol reflection worksheets will provide more insights into students’ responses and personal reflective thoughts. This written feedback will be studied for themes and core beliefs following established qualitative research methodology, as recommended by Krueger & Casey (2009), Yin (2009) and Cohen (2000). This project will be repeated in the upcoming semester to attempt to replicate the findings and gain further insights into how students can improve their communication, critical thinking and reflective practice skills by participating in peer assessment using the Tuning Protocol.
An analysis of the post attitude survey will also be conducted to decide if the language of the survey could be clarified. Specifically, the researchers wonder whether or not constructing the questions in the post survey using the past tense would have yielded different responses from the participants. Also, a redistribution of the attitudes may be considered. Specifically, there were only two attitude statements on reflective practice, while there were five for communication skills and seven for critical thinking skills. However, if the survey is altered, a new reliability coefficient will need to be determined. In addition, a revised survey may affect the researchers’ ability to compare the results with future studies, which could pose a considerable conundrum.

Conclusions
This study explored whether using a Tuning Protocol can improve student reflection, higher order thinking skills, communication skills, engagement, and active participation in higher education contexts. Preliminary findings indicated that the Tuning Protocol could be an effective strategy or tool to improve reflection, critical thinking skills and communication skills. The area of communication skills registered the greatest gains, along with the significant gain in students feeling comfortable receiving feedback from their peers. The Tuning Protocol can be used in a variety of settings and across curricula areas and can be effective in a range of academic contexts. More research is needed to determine how peer engagement using a Tuning Protocol may help to enhance reflective practice skills, communication skills and critical thinking skills.
Appendix A

Tuning Protocol Attitude and Behavioral Survey: Pre-Participation

5 = Strongly Agree, 4 = Somewhat Agree, 3 = Not Sure, 2 = Somewhat Disagree, 1 = Strongly Disagree

Directions: Circle the number that represents your response

1. I think getting feedback from my peers will help me improve my work. 5 4 3 2 1
2. I am comfortable giving feedback to my peers. 5 4 3 2 1
3. I am comfortable receiving feedback from my peers. 5 4 3 2 1
4. Engaging in self and peer assessment can facilitate the process of learning. 5 4 3 2 1
5. Working in a group setting will help me improve my spoken communication skills. 5 4 3 2 1
6. Working in a group setting will help me develop higher order critical thinking skills. 5 4 3 2 1
7. Working in a group setting will help me develop analytical thinking skills. 5 4 3 2 1
8. Working in a group setting will help me improve my reflection skills. 5 4 3 2 1
9. Working in a group setting will help me learn to express an opinion or clarify information. 5 4 3 2 1
10. Working in a group setting will help me think about and critique my own personal work. 5 4 3 2 1
11. Working in a group setting will help me think about and critique the work of a peer. 5 4 3 2 1
12. Working in a group setting will help me develop questioning skills. 5 4 3 2 1
13. Working in a group setting will help me develop the ability to expand logical thought patterns. 5 4 3 2 1
14. Working in a group setting will help me learn to synthesize information. 5 4 3 2 1
15. I understand what a Tuning Protocol is and how it helps to improve communication, thinking and reflective skills. 5 4 3 2 1

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Appendix B

Tuning Protocol Instructions

1. You are in groups of 3-4. Each person in the group will have a chance to present his/her assignment.

2. As each student presents his/her assignment, the other members of the group listen without responding or questioning. They should take notes to refer to later on (8-10 minutes).

3. Immediately after the presentation, group members may ask the presenter clarifying questions (5 minutes).

4. Members of the group think about "warm" and "cool" comments (warm is positive, cool is critical, not cruel feedback) and questions to ask. Presenter is writing a personal reflection. (5 minutes).

5. Group members offer the presenter “warm” feedback. The presenter takes notes and does not respond (5 minutes).

6. Group members offer the presenter “cool” feedback. The presenter takes notes and does not respond (5 minutes).

7. The presenter discusses what he/she has heard from the group members and responds to cool and warm comments. The presenter may also offer warm and cool comments to the group. Presenter and group engage in conversation (5 minutes).

Each “Protocol” should take approximately 20 to 40 minutes
Appendix C:
Presenter and Group Member Reflection Response Logs

**Tuning Protocol Notes: Presenter**

Personal Reflection

List warm feedback received from group members:

List cool feedback received from group members:

**Tuning Protocol Notes: Group Member**

**Presenter #**

*Warm Feedback Given*

*Cool Feedback Given*

*Questions Asked*
Appendix D
Post Tuning Protocol Reflection Worksheet

Name: _____________________________    Date: ________________

**Directions:** Type your responses into the following worksheet. Handwritten assignments will not be accepted.

1. Do you think the Tuning Protocol experience improved your written communication skills? Why? How?

2. Do you think the Tuning Protocol experience improved your oral communication skills? Why? How?

3. Do you think the Tuning Protocol experience improved your critical thinking skills such as analyzing complex issues, evaluating ideas, and synthesizing information? Why? How?

4. What were the cool/warm comments about your paper?

5. How did you react to the warm and cool comments?

6. What changes did you make to your draft paper as a result of the Tuning Protocol experience?

7. What did you learn about your writing and oral communication that you can apply to future assignments?

*This reflection will be evaluated as follows:*

3 = Superior demonstration of skill; Responded to all prompts, gave in-depth and thoughtful answers with examples
2 = Acceptable demonstration of skill; Responded to all prompts superficially, did not provide thoughtful answers and/or examples
1 = Unacceptable demonstration; Skill did not respond to all prompts, worksheet is incomplete
0 = Did not demonstrate skill; Did not submit reflection
Appendix E

Sample Assignment for use with Tuning Protocol

Guidelines for Writing a Good Thought Paper

- Approximately 1-page, typed, single-spaced, name and course on top.
- Draft papers are due at the beginning of Tuning Protocol participation class.
- Only hard copies of the draft will be accepted for Tuning Protocol experience.
- Email or Black Board Final versions (text documents in Word) on or before the final due date.
- Proofread your work! Spelling, grammar, and format are important.

No hand written or late papers will be accepted

- Discuss your thoughts in writing in relation to the topic covered.
- You are graded for your thoughts --do not just write a complete summary of the medium (e.g., article, film, or exercise). Spend 2-3 sentences categorizing the topic at the beginning.
- You will not be graded for your opinion-any opinion is acceptable-but you must explain why you have that opinion. Do not simply state an opinion. Back it up with examples.
- Keep in mind class discussions, other readings on the topic—you may want to discuss the topic in relation to other areas we have covered. Please do not regurgitate some else’s opinion. Remember, I want to know that you are thinking about issues and challenging major ideas related to family and social health.
- Take time to really reflect on the topic (e.g., challenge yourself to think in completely opposite terms, consider what assumptions you hold, ponder what you don’t believe to be true) before sitting down at your computer to write a response.

Thought Papers will be graded out of 20 points.

Assignment # 1

Draft Due: March 2nd

Final Paper Due: March 9th (With draft & notes from the Tuning Protocol attached.)

Health Education
For this assignment, find an advertisement depicting a family or a family health related topic in some way. You can explore magazines, newspapers, websites, or other material (i.e., television and radio ads) to find several different examples of diverse representations of families in advertisements (e.g., interracial, gay/lesbian, single parent etc.). If the ad is in print, photocopy or print out a copy of the ad to submit as part of your assignment. Briefly describe what you found. How do you think these representations of families influence societal expectations? How have the societal expectations of families created by the media influenced the mental or physical health of individuals within families?

(HELPFUL HINT FOR YOUR SCRAPBOOK: You may like to think about looking at and collecting some advertisements of families for your scrapbook. If you are interested in history, you can find vintage ads online and in the library too.)

Teacher Education (Childhood Education)

The Role of Family and Culture in Education:
For this assignment, select one of the scholarly reading articles that have been provided for this assignment or find one from a scholarly journal (not a magazine or newspaper article. Be sure to get it approved first). After reading the article, write a summary/reflection paper. First, summarize the article and give a brief synopsis of what the author is saying. Then, reflect on how the role of the family and culture affect child and adolescent development. Based on the article that you read, discuss how one of more of these factors affect childhood and adolescent development: ethnic, cultural, linguistic, social, economic and political factors.
REFERENCES


Supporting ELL students’ learning of biology:
Vital skills for peer instructors in the secondary science classroom

Dr. Leslie Keiler and Dr. Linda Gerena
York College, The City University of New York
Department of Teacher Education

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Grant # 40560-0001.
Abstract

Research Objectives

English Language Learners (ELLs) are the fastest growing demographic population in US schools (Hoffman & Sable, 2006), and according to the census data in 2004-2005 approximately 5.1 million or 10.5 percent of the U.S. student population are English Language Learners, or ELLs (Short & Fitzsimmons, 2007; Boyson & Short, 2003; Kindler, 2002). According to a study published in 2009 by the American Institutes for Research (AIR) and WestEd, during the 2004-05 school year, there were over 5 million ELLs in our nation’s schools, an increase of 65% from the 1993–94 school year (Parrish et al., 2006). Spanish was the most common primary language spoken by ELLs, and about 70% percent of ELLs were native Spanish speakers (Capps et al., 2005). The New York City (NYC) Department of Education has reported the following statistics on the number of ELLs in NYC public schools (Office of English Language Learners, 2008, 2009; Acompore, 2008).

- In 2008, both ELL and former ELLs accounted for 26% (n=1,190,186) of the student population in New York City public schools.
- In the 2007-2008 there were 129,004 General Education ELLs along with 19,397 special education ELLs. These students accounted for 14.1% of the total student population.
- During this time period 41,061 ELLs were enrolled in grades 9-12 (28%).
- Long-Term ELLs (LTEs) accounted for 14% of all ELLs. LTEs are those students who have completed at least six years of ELL services in NYC schools. The majority of LTEs (56%) are enrolled in grades 9-12. Most LTEs speak Spanish (83%). ELL Students with Interrupted Formal Education (SIFE) accounted for 10.5% of all ELLs. Of the new SIFE students, the highest number and percentage (1320 or 38%) entered in grades 9 and 10 with a majority speaking Spanish (56.6). Half of all Spanish dominant SIFE ELLs are from the Dominican Republic.

These statistics demonstrate the prevalence of ELLs in US schools, particularly in urban centers. However, high school graduation rates and college entrance lag significantly for most ELLs (Cadiero-Kaplan, 2004, Callahan & Gándara, 2004). In New York City, ELL graduation rates were 31.6% in 2003 and 30.8% in 2007 (Office of English Language Learners, 2009). Low level academic literacy is revealed in annual scores from the National Assessment for Educational Progress (NAEP). In 2005, only 4% of eighth-grade ELLs and 20% of students classified as ‘formerly ELL’ scored at the proficient or advanced levels on the reading portion (Perie, Grigg, & Donahue, 2005). In 2008, 42% of NYC 8th grade ELLs passed their state Math exam. Of this 42%, the lowest percentage of pass rate by language spoken was that of Spanish speakers at 33% (Office of English Language Learners, 2009, p 18). However, when the data is disaggregated for special needs or SIFE, the overall pass rate on the 8th grade state math exam for general education ELL students was 53% (Office of English Language Learners, 2009, p 19). Either way, ELLs are entering high school with significantly lower academic performance levels than are their native English counterparts. As a result, to help ELLs process the complex, academically challenging materials of secondary school, cognitive and metacognitive strategies must be explicitly taught in the content classroom. In order to meet these demonstrated needs, the NYC Office of English Language Learners has developed a range of recommendations for
high schools serving ELLs including professional development for content teachers, small group work during content classes, and imbedding literacy strategies into content courses, particularly focusing on vocabulary development (Office of English Language Learners, 2008).

The research objectives of this study are to explore ways to help ELLs process the complex, academically challenging materials of secondary school, using cognitive and metacognitive strategies in the content classroom. This study is being conducted within a larger project that fundamentally alters the traditional, teacher-centered learning environment prevalent in urban classroom across the nation. The central learning experience in participating classrooms consists of small group learning experiences led by peer instructors. Growing out of a pilot study in the spring of 2009, the current study examines this program’s potential to maximize ELL content learning. The research questions are:

- What must peer instructors know in order to be successful at helping other students learn?
- How can peer instructors effectively support the learning of ELL students?

Background

Funded through a Mathematics and Science Partnership grant from the National Science Foundation, science and education faculty, teachers and high school students in New York City have collaborated to develop a highly successful instructional model for mathematics and science classrooms serving at risk students. In the Peer Enabled Restructured Classroom (PERC) students work in groups lead by a Teaching Assistant Scholar (TA Scholar) who guides the group activity, scaffolds learning of new concepts, and assesses student understanding. The TA Scholars must have passed the course and the state Regents exam in the relevant subject area, but do not need to have achieved an advanced score or be eligible for honors classes. The model initially was developed in a summer school for students who had not passed their state Regents exam during the academic year. Both test scores and qualitative studies of student and TA Scholar affective responses to the program suggest a highly successful model (Gerena & Keiler, 2009a; Gerena & Keiler, 2009b; Keiler, 2010). The extremely high pass rates for this program, two to twelve time standard city summer school pass rates, led to the adoption of the model for the academic year. In 2008-2009, participating classes had exam pass rates 20 percentage points higher than control classrooms. While these results have showed great promise for extending the model to additional schools and classrooms, the research team continues to explore ways to improve its application and explore ways teachers and peer instructors need to be supported during its implementation.

This study grew out of pilot work and preliminary observations during the summer of 2008 and the 2008-2009 academic year. Transitioning the PERC model from a summer revision program to a school year initial experience offered many challenges and opportunities during this period. These included the requirement of using high school students as TA Scholars, rather than college students. This decision was made in order ensure daily support in the classrooms, which was not feasible for college students’ schedules. The model of using high school students as the TA Scholars allowed for creation of a separate course to facilitate their experience. During the summer of 2008, three Living Environment (LE = biology) teachers worked together to develop this course for the peer instructors, creating a set of lesson plans for the year. The course introduced some pedagogical skills in the first segment, but quickly moved away from this focus to enriching the students’ understanding of biological content. The TA Scholars were earning a science credit for the course, making it seem important to spend the majority of the students’
time learning new content. However, observations of this 2008-2009 inaugural peer instructor course suggested that most class time was spent on immediate preparation for the next PERC lesson, which was confirmed in teacher interviews. When asked about the differences between the high school TA Scholars during the school year and the college students who staffed the summer programs, teachers immediately spoke of the difference in content knowledge expertise and confidence. This perception led teachers to estimate that they spent 60-90% of their TA Scholars class on reviewing and preparing the content for the PERC class. This was far from the original plan of the TA Scholars course and left the teachers wishing that they could achieve a broader range of pedagogical objectives with their peer instructors.

Previous studies of the PERC program have documented the lack of awareness of which students in the program were ELL or Former ELL (F-ELL) students (Gerena & Keiler, 2009a; Gerena & Keiler; Keiler, 2010) let alone what kinds of supports were required by these students. During interviews and surveys, teachers expressed a desire to provide their peer instructors with more targeted pedagogical tools to support the PERC students, particularly ELLs. During a feedback session, TA Scholars reported that one of their most significant frustrations involved working with ELL students who did not speak the TA Scholar’s native language. In response, Dr. Gerena began teaching research-based literacy interventions to a group of TA Scholars with one LE teacher during spring of 2009. This teacher reported that the TA Scholars and PERC students were successful using vocabulary-based tools and reading comprehension strategies during the PERC classes. During a TA Scholars class observation by Dr. Keiler, she noticed a negotiation between the teacher and TA Scholars resulting in an effective modification of one vocabulary tool based upon TA Scholars’ observations from the previous day. The conversation appeared to deepen the TA Scholars’ understanding of the concept being studied, provide feedback about student understanding to the teacher, and prepare both teacher and TA Scholars for the up-coming lesson, achieving many goals of the TA Scholars class. Dr. Gerena, in questioning the TA Scholars during their collaborative class with the teacher, found that the graphic organizer strategy that had been implemented the previous two weeks was generally considered by the TA Scholars to be an effective learning tool, especially with the ELL students. TA Scholars stated that the PERC students learned the vocabulary better, and that it was not time consuming to use the graphic organizer. Statements from TA Scholars included: “They (vocabulary maps) help explain the words they (the PERC students) have to learn” and “It is helpful for them to see words and meanings.” On the time issue it was stated that, “It only took a few minutes once they (the PERC students) understood what to do.” However, the teacher reported that not all TA Scholars used the tools regularly with their students, raising the questions of who should be making such implementation decisions. What was learned from this pilot study and research about other aspects of the program (Gerena & Keiler, 2009a; Gerena & Keiler, 2009b; Keiler, 2010) shaped the current exploration of peer instructors and ELL students.

**Literature Review**

Second language acquisition is a complex process that encompasses social or conversational language (Basic Interpersonal Communication Skills, or BICS) and academic language proficiency (Cognitive Academic Language Proficiency, or CALP) (Cummins, 1994, 1981). ELLs initially develop social language through daily interactions with English speakers. While ELL adolescents may use conversational language fluently, even incorporating idiomatic expressions effectively, social language is easier to master and is acquired through interaction with peers and adults, both in and out of school. It is developed using face-to-face interaction and
concrete contextualization in social settings. However, social language is not sufficient to process challenging content in an academic setting.

The language of academic proficiency is developed over many years of academically challenging grade level content instruction and is difficult to master. It is the language of school and usually tied to abstract concepts, de-contextualized thought processes, and abstract language skills. In the classic literature of social language versus cognitive academic language proficiency, experts in the field of second language acquisition argue that social language is simply the language of everyday conversations supported with contextual clues while academic language is the language of school and is usually developed through literacy (Balderrama & Diaz-Rico, 2006; Chamot, 2009; Chamot, & O'Malley, 1994; Cummins, 1981, 1994; Curtin, 2009; Echevarria, Short, & Vogt, 2008; Faltis & Coulter, 2008; Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Reiss, 2008; Thomas & Collier, 2002). Development of academic language for ELL/F-ELLs in challenging content takes considerably longer than social language to fully develop and is dependent on a student’s previous schooling and literacy development (Cummins, 1994, 1981).

Both aspects of language are necessary for social and academic success but without the development of cognitive academic language, success in school will be limited. Students who have mastered social but not academic language may seem fluent but will have difficulty with dense subject matter. Many times LT-ELLs and newly reclassified F-ELLs may appear to be fluent in English because of their well-developed social language, and are mistakenly thought of as having mastered the complex language of cognitive thought. However, they may still struggle with complex academic material since they do not have grade appropriate academic language. This struggle is often misunderstood as a lack of interest or ability. Lack of academic language skills can lead to course failure, poor performance on exams, and acts as a de facto barrier to academic success and high school graduation. Academic language is not usually developed outside of the educational context and so it is imperative that students who have mastered social language are not left unsupported when trying to negotiate the language of learning.

Learning from peers

While the in-class peer instructor model is a novel approach to classroom instruction, research on the experiences of more traditional tutoring relationships is relevant to the current study. For example, research has shown that both tutors and tutees in experimental groups exhibit higher critical thinking (Shamir, Zion, & Ornit-Spector, 2008). It also reveals that learning from “near-peers” (Lockspeiser, O’Sullivan, Teherani & Muller, 2008) is valuable since the tutors have recently studied the material and have struggled with it themselves. Roscoe and Chi (2008) report that peer tutoring has found that students sometimes benefit academically from tutoring other students. Additionally, peer tutoring programs in math have demonstrated that peer tutoring can be effective for African American, other minority students and White students who participate as tutors, as tutees, or both (Robinson, Schofield & Steers-Wentzell, 2005). Stoddart, Pinal, Latzke, and Canaday (2002) go further to state that: “The integration of authentic hands-on inquiry with linguistic and metacognitive analysis serves to promote the development of higher order thinking skills.”

Literacy Strategies

A review of the literature and a review of research findings have shown that ELLs need to develop specific literacy skills in order to be successful in content area learning. Out of this
grows the conceptual framework that ELLs must be given explicit training and teaching in cognitive and metacognitive strategies to help them process complex, academically challenging materials while they are acquiring a second language (Balderrama, & Diaz-Rico, 2006; Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively, & White, 2004; Chamot, 2009; Cummins, 1994, 1981; Curtin, 2009; Echevarria, Vogt & Short, 2004; Faltis, & Coulter, 2008; Fradd & Lee, 1999; Genesee, Lindholm-Leary, Saunders, &, Christian, 2006; Hart & Okhee, 2003; Reiss, 2008; Thomas, & Collier, 2002.) In fact, Meltzer and Hamann (2005) state that “If, as student outcome data suggest, traditional approaches to content-area teaching and learning are not meeting the needs of many students, serious changes are in order” (p.61). Francis, Rivera, Lesaux, Kieffer and Rivera (2006) continue to make a clear case for the need to develop academic language in ELLs:

Unfortunately, ELLs often lack the academic language necessary for success in school. This lack of proficiency in academic language affects ELLs’ ability to comprehend and analyze texts in middle and high school, limits their ability to write and express themselves effectively, and can hinder their acquisition of academic content in all academic areas, including mathematics.

It is important to distinguish academic from conversational language skills, as many ELLs who struggle academically have well-developed conversational English skills. To be successful academically, students need to develop the specialized language of academic discourse that is distinct from conversational language (p. 7).

Torgesen, Houston, Rissman, Decker, Roberts, Vaughn, Wexler, Francis, Rivera and Lesaux (2007), Metzer and Hammon (2005), and The National Reading Panel (August & Shanahan, 2006) state that literacy strategies are key to ELLs’ access to content area knowledge. ELLs need “direct and explicit” instruction (Torgesen., et al. p 97) to develop academic language, word learning skills (use of cognates, word roots, base words), vocabulary, comprehension, thinking skills. They need expressly to be taught strategies and approaches to process text and sophisticated higher order thinking skills, such as questioning, clarifying, predicting, and summarizing. Even students who come to the content class with well developed literacy skills in their first language will need direct and purposeful instruction to access these skills. Those who come with low levels of first language literacy will struggle even more. Approaches are needed that will allow students to process both language and content, develop comprehension skills and provide systematic opportunities for peer interaction.

Content teacher pedagogy must include using specific cognitive, metacognitive and social interactive strategies to help second language learners become more scientifically and mathematically literate and to develop and expand the specific skills needed to be successful in the math and science classrooms. The development of cognitive skills can help the learner develop an active role in organizing the information to be learned, including note taking, visualizing, drawing, illustrating, predicting, guessing, rereading or re-listening. Metacognitive strategies help the learner take steps towards self-monitoring or self-assessing, by planning strategies, such as previewing materials, thinking while reading or speaking, reflecting and maintaining journals or logs. Social affective strategies help learners practice communication and social skills in conjunction with others who are also learning the material (Chamot, 2009; Corder, 2007; Curtain, 2009; Echeverria, Short & Vogt, 2008; Peregoy & Boyle, 2008).
ELLs and struggling F-ELLs in the content classroom must have a full linguistic portfolio to be able to access the academically challenging content and language of the subject matter. These skills are expressly acquired through literacy and literacy related skills. They are developed through reading comprehension and writing, and they promote the development of higher level thinking skills. To help ELLs and struggling F-ELLs process the complex, academically challenging materials of secondary school, cognitive and metacognitive strategies must be explicitly taught in the content classroom. In order to meet these demonstrated needs, the NYC Office of English Language Learners has developed a range of recommendations for high schools serving ELLs including professional development for content teachers, small group work during content classes, and embedding literacy strategies into content courses, particularly focusing on vocabulary development (NYC DOE Office of English Language Learners, 2008). However, although these recommendations have been made and there have been a central office calls for organizational support, there is no consistent evidence that these strategies are being implemented in the classroom. ELLs are still falling behind.

Also it is not sufficient to simply use literacy interventions and strategies that have proven useful to or successful with native English speakers. Strategies must be targeted and tailored to the specific needs of the ELL and struggling F-ELL students to maximize their effectiveness. The need to develop vocabulary, oral language, and background schema are more pronounced in ELLs than native English speakers (Short & Fitzsimmons, 2007). August and Shanahan (2006) report in the Executive Summary of the National Literacy Panel that the experts agree that:

Instructional approaches found to be successful with native English speakers do not have as positive a learning impact on language-minority students. It is not enough to teach language-minority students reading skills alone. Extensive oral English development must be incorporated into successful literacy instruction. The most promising instructional practices for language-minority students bear out this point: Literacy programs that provide instructional support of oral language development in English, aligned with high-quality literacy instruction are the most successful (p 4).

Highly developed literacy strategies in an academically challenging subject such as biology are critical to student success. We have seen how Cognitive Academic Language Proficiency (CALP) skills are requisite for students to be able to read and process information (Cummins, 1981, 1994). Student literacy levels must be developed in the content area to assure access to the conceptual and analytical skills required to achieve at a high level in the content classroom. Unfortunately ELL students lag far behind native English speakers in their development of literacy skills and the gap between ELLs and non-ELLs has been a consistent cause for concern (Koelsch, 2006, Ruiz-de-Velasco & Fix, 2000; Snow, 2002; Snow & Biancarosa, 2003). While this may be cause for concern for all ELLs, the Hispanic ELLs are the least prepared in literacy and have the lowest high school graduation rates of all ELLs (Ruiz-de-Velasco & Fix, 2000). As researchers seek information on the causes of and remedies to these dismal statistics, several areas of intervention have been recommended. Content area teachers must infuse literacy skills into the content curriculum by tapping into students’ prior knowledge, modeling and demonstrating how to make inferences, and develop text level literacy skills, and integrate metacognitive skills and cognitive skills to develop both vocabulary and expository text awareness (Lesaux et al., 2006). It is believed that providing ELLs with rich literacy skills and strategies will improve educational outcomes, and increase high school graduation rates (Lesaux
& Geva, 2006). In fact, more successful high schools have been identified as those where teachers work collaboratively, meet regularly and engage their students in high level literacy activities. Teachers in these schools appreciate the importance of professional development and search for connections across curriculum lines (Langer 2009). In a report prepared by the national High School Center (2009) it was revealed “high schools that emphasized literacy across the curriculum areas were identified as having higher achievement levels and ‘better-than-average performance among ELLs.’” (p5).

The ability to impact student learning must come from a better prepared educational community. Teachers must infuse these literacy skills in their content classrooms and to do so successfully they must receive quality ongoing professional development to improve literacy skills in their ELL student population (Walqui, 2001; Walqui, van Lier, & Koelsch, forthcoming). Heller and Greenleaf (2007) state it succinctly and unconditionally: “Perhaps the greatest challenge of all has to do with the scarcity of ongoing high quality professional development for teachers. In spite of the many workshops and textbooks dedicated to literacy across the curriculum, and in spite of the single pre-service course required in most states, few of the nations secondary school teachers have had meaningful opportunities to learn about the reading and writing practices that go on in their own content areas” (p18).

Strategy development to improve literacy among adolescent ELLS has been identified as a critical area of need and a precursor to improved educational outcomes. In grades 6-12 students must be able to read, discuss and write in the subject area they are studying. High school teachers must therefore become literacy teachers; in effect they must provide their student with strategies to negotiate the content reading material. This may be a new role for high school teachers who traditionally see themselves as experts in the content and not in reading. As a result, teachers need to be retrained to understand the value of literacy strategies and to provide students with opportunities to use strategies in the content classroom. Content areas teachers must take on the role of literacy teachers because increasing literacy skills will improve ELLs academic success (Koelsch, 2006; Leasaux, & Geva, 2006; Walqui, 2001, 2000).

What then should high school biology teachers and tutors focus on to provide ELLs with literacy skills? Short and Fitzsimmons (2007) describe the challenges and solutions of providing literacy skills to adolescent ELLs. They report on a successful high school that incorporated a variety of literacy strategies such as anticipatory activities, shared reading or read-aloud activities, structured note-taking, graphic organizers, vocabulary instruction, writing to learn prompts, and reciprocal teaching addition to questioning techniques as part of the overall classroom structure to help improve ELL literacy skills.

Approaches to improve literacy in ELLs includes explicitly teaching reading comprehension strategies, such as making inferences, predicting, summarizing,previewing, reviewing, comparing contrasting, analyzing, note taking, clarifying, interpreting, understanding relationships, identifying main idea, connecting themes, ideas and concepts, and linking to previous knowledge (Denti & Guerin, 2004; Garcia & Godina, 2004; Bernhardt, 2005). If students are literate in their home language, these strategies may not have to be explicitly re-taught as it is widely held that comprehension and literacy skills may be transferred from the first language to English reading with guidance from a skilled literacy teacher (August, 2002; Riches & Genesee, 2006). But if students are not fluent readers in their home language, these strategies will have to be explicitly taught in the second language and applied consistently.

Another area that needs to be explicitly developed in ELLS is vocabulary. In order for high school students to access the high level content they must have approximately a vocabulary
of 50,000 words (Graves, 2006). ELLs are under increasing pressure to acquire this vocabulary knowledge in a relatively short amount of time. Strategies to increase vocabulary include a wide variety of graphic organizers, use of visuals and demonstrations, use of cognates, use of affixes and prefixes for word identification and meaning, use of context clues, understanding words with multiple meanings, idiomatic and metaphorical expressions, and specific content related words. This vocabulary growth must be expressly and explicitly taught to ELLs in the content area classroom as well as the English classroom (August, 2003; Echevarria, Vogt, & Short, 2004; Graves, 2006).

**Methodology:**

This study examines the process and impacts of an intervention to improve content learning by ELL students through enhanced literacy skills. A university faculty member who is an expert in Living Environment curriculum (Dr. Keiler) is working with and supporting the teacher and the TA Scholars in the academic content. A university faculty member who is an expert in English Language Learner (ELL) development (Dr. Gerena) is a co-investigator in the project to assure that ELL pedagogy and linguistic needs are met. Workshops, seminars and weekly visits from the university faculty members are providing pedagogical, linguistic, instructional and academic support to the teachers and the TA Scholars. Both researchers focus on delivering the strategies and learning tools to help TA Scholars be successful at helping other students learn and effectively support the learning of ELL students in addition to their role as researchers in the project.

**Pilot Study**

During the pilot study phase (spring 2009) of the project the researchers worked with the teacher and the TA Scholars in the PERC classroom and offered assistance in planning lessons for at risk students in the class, both mainstream and ELL, with the focus on instructing tutors in content and pedagogy. The teacher could not assume that the TA Scholars had the knowledge, skills and dispositions to teach high level, complex content. The TA Scholars, who were high school students themselves, needed to be carefully monitored to assure that the learning environment remained focused and in control, on task, pedagogically sound and content accurate. Teacher not only pretaught and pre-assessed the content that the TA Scholars would be covering in class, but they also trained the TA Scholars in effective teaching pedagogy, strategies and ways of learning. This was especially true for at risk English Language Learner.

The various data sets, including interviews, focus groups, classroom observations, were analyzed and interpreted to develop findings, themes, and suggestions, following Kruger and Casey (2009) and Yin (2009). Thorough reiterative readings, patterns emerged from the data sets that provided insights about the processes occurring the classroom (Huberman & Miles, 1994).

During the pilot study, the teacher and TA Scholars focused on developing targeted pedagogical tools to support their students, particularly with ELL students. As a result, Dr. Gerena began to teach research-based literacy interventions to a group of peer instructors with one LE teacher. Strategies included concept definition maps, vocabulary graphic organizers and a text deconstruction strategy known as Questions Answer Response (QAR).

**Continuing Research**

During the 2009-2010 academic year, the researchers worked with a Living Environment teacher in a science-themed urban high school serving struggling, at risk students, both
mainstream and ELLs. The teacher has two PERC classes and one TA Scholars class, plus other classes not related to the program.

A preliminary survey was developed and implemented at the first teacher and TA Scholars meeting in order to determine both the teachers’ and TA Scholars’ experience and expertise in working with ELL students and literacy strategies, as well as their own language backgrounds, (see Appendix A). Data was collected from all the teachers and TA Scholars participating in the PERC program during the 2009-2010 academic year in order to contextualize the data from the study participants. Schools not participating in this literacy intervention will be used as controls throughout the study.

Each week we met with the teacher and his TA Scholars during their class to provide professional development concerning using literacy strategies to enhance content learning, particularly by ELL students. Each month a different area of literacy was the focus of the professional development. The eight strategy areas are: 1) vocabulary building/concept definition mapping, 2) pre-viewing/reviewing text, 3) summarizing, 4) comprehension/inferring/analyzing, 5) main idea/predicting/visualizing, 6) reciprocal teaching, 7) learning logs and self assessments, and 8) graphic organizers. During planning periods, the teacher was introduced to multiple specific strategies within each area so that he could develop a complete literacy ‘tool kit’ to implement throughout his career. In collaboration with Dr. Keiler, the teacher evaluated the literacy strategies for appropriate matches with the content being taught each month. Dr. Gerena and the teacher then trained the TA Scholars in using the selected strategies, with particular attention to how to use the strategies with ELL students. Based upon feedback from the pilot study teacher about minimizing the number of specific strategies in order to enable the TA Scholars to master implementation, new strategies were introduced when the TA Scholars are proficient in using the previous strategy.

During PERC classes each week, data was collected through classroom observations and collection of students work samples. Additionally, the teacher and TA Scholars, as well as their students, were interviewed to ascertain their perceptions of the success of the literacy strategy implementation program. Ultimately, the impact of the program was measured based upon the performance of the ELLs and other students in their coursework and state Regents exam. All participants were assigned pseudonyms.

Findings:

Experience with literacy strategies prior to the study

Integral to this project is the introduction and teaching of cognitive and metacognitive learning strategies to Teaching Assistant Scholars and PERC students, and by extension, the participating teachers. During the pilot, literacy strategies were incorporated into the content teaching. These strategies were introduced, modeled, demonstrated, monitored and observed by both investigators. Observational and qualitative data was collected during the pilot study through field observations and weekly meetings with teacher and TA Scholars. Quantitative data was collected through surveys of the teacher, TA Scholars and students, as well as test scores and grades. Preliminary findings suggest potential for the literacy interventions to have a positive impact on student content learning as well as raising questions for further exploration. Use of the concept definition map and the QAR literacy strategy were in the beginning stages when the pilot study was terminated at the end of the academic semester. The teacher and the TA Scholars reported that these strategies were beginning to show effective student outcomes, such as greater ability to read questions and the ability to organize high-level content material.
Ten of the 12 Living Environment TA Scholars who completed the survey indicated that they grew up speaking a language other than English, with seven claiming oral and written literacy skills in that other language. Eight TA Scholars indicated Spanish as their primary language, one Albanian, and one Urdu.

On this preliminary survey, the TA Scholars were asked about their experiences, beliefs and comfort levels concerning learning math and science with literacy pedagogies and ELL students. All but two of the TA Scholars indicated some experience using reading skills to learn math and science themselves, and all claimed to believe that reading would help their students learn content. However, only four of these respondents indicated that at this point they were comfortable using literacy to teach math and science, the lowest level of agreement for all the statements. While all but one TA Scholar believed that they were capable of working with ELL students, four did not believe that their students would be successful passing the state exam. This data suggests that the TA Scholars, based upon their experiences and attitudes, need to and are prepared to learn literacy-based pedagogy to help their ELL students to master science content.

**Experiences and Attitudes**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have experience using reading skills to learn math and science.</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Reading skills will help the students in my group learn math and science.</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I am comfortable teaching reading skills to my English Language Learners in my content area teaching.</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I am comfortable in my ability to teach science and math to English Language Learners.</td>
<td>2</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>My English Language Learner students can pass the Regents Exam at the minimum score of 65.</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

On the preliminary survey, the TA Scholars reported widely varying experience with the different areas of literacy strategies. Most or all TA Scholars reported that they have used previewing, summarizing, inferring, and predicting. Approximately half the TA Scholars reported having used reciprocal teaching and graphic organizers, while only one third had used mapping techniques or learning logs. This data about the TA Scholar’s experiences will help shape the professional development for the tutors.

**Experience with Literacy Strategies**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Vocab/Content Definition Maps</th>
<th>Pre-viewing</th>
<th>Summarizing</th>
<th>Inferring</th>
<th>Predicting</th>
<th>Reciprocal Teaching</th>
<th>Graphic Organizers</th>
<th>Learning Logs</th>
</tr>
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<tr>
<td># TAS used</td>
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<td>12</td>
<td>11</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELL Student and TA Scholar perspectives on literacy strategies**

**Responses to literacy strategies**

When asked about the most important thing she had taught her students this year, TA Scholar Susan answered, “Probably GIST, things like strategies...because it helps them
minimize the question or a paragraph into something they will understand better.” Susan claimed that her students had a range of responses to the strategies such as GIST. For example when asked if students used strategies on their own, she explained, “Francesca, she hate uses GIST, which is why I like to use GIST so she’ll get accustomed to it. That’s why she was sarcastic today. Yeah, they use it and then they put it into smaller words.” This TA Scholar perceived that some students were able to appreciate the importance of the literacy strategies while others had to be encouraged to persist with the tasks.

Literacy and test-taking

Both ELL students and their TA Scholars claimed that the literacy strategies helped students with high stakes tests. David and Jose, ELL students in the PERC class, claimed that their TA Scholar helped them to approach test questions effectively. Danny started describing what they were taught, “Every time your going to do an outline, or a question, or multiple choice, read the question. Read the questions before any passages; try to break it down in different ways so you can understand it.” Jose added, “To like really read the question over. Sometimes you may slip up.” And David concluded, “So you can get the point of the question.” These students suggested that the strategies helped them make sense of test passages and questions, leading to success in answering these literacy-based science questions.

The TA Scholars talked about the ways in which literacy strategies helped the students persist with difficulty questions. For example, Nadia described her students’ approach to test questions that require reading a passage before and after literacy intervention:

I think a lot of the test-taking strategies, like mostly when they, when they’re presented with a test they just read through it and if they don’t understand they just keep moving through it. But now they’ve more learned a dissecting a question and seeing what parts they understand and how they can infer what the answer is. Before, “oh, I don’t understand; let me just skip it.”…

When asked for a specific example, she continued,

Like with Michael, before if he didn’t understand something he would just like let it go, and he would just leave the paper there, and now, we were going over a paper, we were going over a test, and he showed me that he was underlining what the question was asking him. Maybe not for all questions, but he tried for some of the questions and it was a big improvement from just throwing the question away.

This persistence is vital if the ELL students are going to succeed on high stakes exams, which are required for graduation and important in college admission.

Transfer of literacy strategies

The ELL students discussed the ways that they used what they learned in Living Environment class to help them succeed with literacy-based tasks in other classes. Anna explained that her TA Scholar had taught her to “take apart a text,” which she used in other classes. In response to a question about using these literacy strategies in other classes, Hugo explained that he used them in, “English or even by my own self. If I’m doing something at home, homework or something…. usually when I don’t understand something, I probably highlight it. That way, the next day, I make sure I ask the teacher what I’m having problems with. And, I get to learn the topic to the full extent.” Maria described an experience with a reading during the evolution unit,
The TAs had to teach us a certain way that you could read it without the information all getting, like thrown at you. So we would summarize the whole first paragraph and then move on to the next one. So now in English that makes it so much more easy than you just reading it and being like, “Oh, what did I just read?”

Maria’s description suggests that the literacy strategies helped her take ownership of reading assignments in multiple classes. David claimed that he used the approach to breaking down questions that his TA Scholar taught him in his other classes, asserting that this raised his grades, resulting in an upward spiral of performance: “you get a better grade, then you start getting things more, you start doing your homework. It’s going to be easier.” David believed that the literacy strategies he was learning in Living Environment improved his learning, performance and attitudes across subject areas.

The TA Scholars also believed that students could and did transfer the literacy strategies they learned in Living Environment class to other courses that did not have TA Scholars. Susan argued that having TA Scholars in Living Environment helped students in other classes because they could transfer literacy skills that the TA Scholars taught to classes such as English and Global History. Matthew claimed that the literacy skills the students developed in Living Environment was important for all classes, providing an example, 

Some students have read books in their English classes and some don’t understand what’s going on in the story. So, sometimes they read one page and on another paper they just write what that page talks about and it just helps them remember things. And, they always ask themselves a question, “What is this passage saying?” in their head, without even writing it down. So, it’s pretty helpful.

Ivonne shared, “I heard one of my students said that they used GIST for English, to review. I guess it was an essay or something like that. And it really helped them.” Amy summarized her discussion of ABC Brainstorming, GIST, and tiered vocabulary by proposing that: “The literacy strategies, they can recycle.”

The literacy strategies also benefitted the TA Scholars in their other classes. Both Susan and Denise claimed that they themselves used the literacy strategies that they were teaching their students in their own classes. Denise explained, “When I have to do my AP US outline, because they’re really long and tedious, so I have to use GIST to write a sentence for each paragraph.” She then shared her wish that she had used the strategy on her SAT exam, believing that it would have improved her English score. Ivonne argued that being TA Scholars helped them be better students because they used study guides, GIST, and concept maps as TA Scholars, which they could then use in other classes. The TA Scholars spontaneously transferred these skills to their own learning experiences, as neither the teacher nor the researchers suggested that they do so.

**Modifying literacy strategies**

While the TA Scholars appreciated many of the strategies, they emphasized the need to prioritize the students when making instructional decisions. Nadia recommended, “I think adapt the strategies to the kids. Not adapt the kids to the strategies, but the strategies to the kids.” When asked to expand on this she explained, 

a lot of the strategies is with an ideal type of student in mind. It’d be better if we saw a group of students that learn the same and see how, what they do that helps them. And then modify it and create a strategy rather than get a strategy and see how it works on your kids. It should be from them up, not from like the other way around.

This approach to strategy develop holds promise for future research.
Educational or Scientific Importance of the Study

Literacy skills and learning strategies must be developed if ELLs are to be successful in the secondary science classroom. While there is general agreement that ELLs share many characteristics with struggling native English readers (Short & Fitzsimmons, 2007; Ruiz-de-Velasco & Fix, 2000), there are language specific areas that impact ELLs in the literacy process. Multiple meanings of academic vocabulary and terminology, lack of culturally acquired prior knowledge, low levels of oral language proficiency which impacts comprehension of the written text, all affect ELLs in the content classroom. Content-area literacy, which includes vocabulary development, activating background knowledge, specific literacy comprehension skills (main idea, prediction, inference, etc), and text awareness (text organization, key concepts, expository text structure, etc) are essential for adolescent ELLs who lack reading strategies in their native language (Short & Fitzsimmons, 2007; Meltzer & Hamann, 2005). This study explores ways that content area teachers can provide language in context, modeling, critical thinking and reasoning activities, exposure to scientific text structures, and active student involvement in processing text. Along with these strategies, active participation and interactive collaborative learning are indispensable if ELLs are to be provided with an equitable and comprehensible education in the secondary content classroom (Jamestown Reading Navigator, 2007; Meltzer & Hamann, 2005, 2004; Peregoy & Boyle, 2008, 2000). Stoddart, Pinal, Latzke, and Canaday (2002, p 683) go further to state that “The integration of authentic hands-on inquiry with linguistic and metacognitive analysis serves to promote the development of higher order thinking skills.” These types of learning experiences are imbedded in the structure of the PERC classroom, and this study demonstrates ways that a focus on literacy can be integrated into such active learning experiences.
References


Office of English Language Learners (2008). *Designing Better High Schools for ELLs: Research Summary*. New York: Department of Education. Downloaded August 12, 2009 from...


Teacher Survey- October 3rd

Name: 
School: 
Subject Teaching: Math or Science

What training and/or experience do you have working with ELL students?

Circle the answer that best shows your level of agreement with each statement.

1. Using literacy strategies with my students is a focus of my instruction.
   Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

2. Reading skills will help the students in my group learn math and science.
   Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

3. I am comfortable using literacy strategies for my English Language Learners in my content area teaching.
   Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

4. I am comfortable in my ability to teach science and math to English Language Learners.
   Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

5. My English Language Learner students can pass the Regents Exam at the minimum score of 65.
   Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

Rate your confidence level in using each of the literacy strategies below

<table>
<thead>
<tr>
<th>Strategy</th>
<th>I am aware of this strategy</th>
<th>Use frequently</th>
<th>Use occasionally</th>
<th>Use rarely</th>
<th>Never used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary Building/Concept Definition Mapping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-viewing/Reviewing Text Structures (skimming, scanning, selective attention, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summarizing (GIST, Post-its, 2 column notes, Notes in the margin, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension (QAR, SQ3R, SQRC, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea (CLOZE, PAR, RRCS, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Organizers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reciprocal Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning/Student Self Assessment Logs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you!!!
Teacher Assistant Scholars Survey- October 3rd

My Teacher’s Name:         My School:

Subject Area: Math  or  Science

Did you grow up speaking a language other than English?  Yes  No
   If you answered Yes, which language? ___________________________
   Do you read and/or write this language? ___________________________

Were you ever in a school ELL or ESL program?  Yes  No
   If Yes, how many years? __________
   Which years in schools? (e.g. 2nd & 3rd grade) __________

Circle the answer that best shows your level of agreement with each statement.

6. I have experience using reading skills to learn math and science.
   Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

7. Reading skills will help the students in my group learn math and science.
   Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

8. I am comfortable teaching reading skills to my English Language Learners in my content area teaching.
   Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

9. I am comfortable in my ability to teach science and math to English Language Learners.
   Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

10. My English Language Learner students can pass the Regents Exam at the minimum score of 65.
   Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

11. Check each of the following reading skills that you have used or would like to use.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>✓ I have used this strategy</th>
<th>✓ I think I would want to use this strategy in tutoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary Maps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept Definition Mapping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-viewing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summarizing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inferring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reciprocal Teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Organizers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Logs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank You!!!!!
Title of the submission
The Use of Politeness Strategies on Cross-Cultural Videoconferencing Communication Between Taiwanese and Japanese University Students

Topic area of the submission
Distance Education

Presentation format (Paper Session, Workshop, Panel Session, or Poster Session)
Paper Session

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The Use of Politeness Strategies on Cross-Cultural Videoconferencing Communication Between Taiwanese and Japanese University Students

Yu-Jung Chen                      Ming-Lung Yang
Chinese Culture University             Southern Taiwan University

Purpose

With the economic globalization and the rapid innovation of telecommunication technology, the means of communication have evolved from face-to-face meetings, text-based communication, either synchronous or asynchronous, to long-distance videoconferencing. While many researchers and educators encourage cross-cultural videoconferencing communication in foreign language instruction (e.g., Coverdale-Jones, 2000; Glisaan, et al., 1998; Morand, & Ocker, 2003; Shi, 2005), few empirical studies have been conducted specifically to investigate the learning process itself, particularly, the use of politeness strategies (Brown & Levinson, 1987), which has previously been found not only to create a comfort zone for discussion but also to interfere with students’ negotiation of meaning in asynchronous computer-mediated discussions (Yang, et al., 2006). This pilot study was designed to continue this line of research and investigate how politeness strategies were used in a Cross-Cultural Distance Learning Project, in which university students in Taiwan communicate with students in Japan on regular bases in one semester.

Theoretical Framework

Recently, due to the development of technology and Internet services, video-conferencing starts to receive much attention from language educators and researchers. Glisaan, Dudy, and Howe (1998) explored the use of distance learning on secondary school students who were learning Spanish and found that video-conferencing improved their listening comprehension skills. Meanwhile, investigating students’ perceptions between students learning German and native German speakers, Coverdale-Jones (2000) reported that videoconferencing communication provide more and better opportunities for the communication and interactions between people across different countries than other modes of online communication. In Shi’s (2005) study, her students reported that communicating with students from other countries, even with those non-native English speakers, via videoconferencing was beneficial and more authentic than text-based communication. Nevertheless, most previous results were mainly based on students’ perceptions, but few analyzed the actual process of the communication. This study intended to explore further on this issue in terms of what strategies, namely politeness strategies, used in the videoconferencing communication and how these strategies may affect the process of the negotiation of meaning.

Politeness in discourse was first introduced by Lakoff (1973) and further defined by Brown and Levinson (1987). They proposed that when individuals try to address their ideas towards certain issues, they tend to express their thoughts in an appropriate manner, taking their listeners’ feeling into consideration. In Brown and Levinson’s view, the core of politeness strategies is the concept of
saving-face, in another word, how to “communicate politely to maintain each other’s face” (Carlo & Yoo, 2007, p. 198). Three types of politeness strategies were proposed: a) positive politeness, with which the speaker presents his/her gratitude in the way that his/her hearers would like to hear, tending to save the speaker’s face by “minimize[ing] social distance with the hearer” (Carlo & Yoo, 2007, p. 199); b) negative politeness, with which the speaker tends to decrease any obligation or threat that he/she wants his/her hearers to consider or follow, trying to save the hearers’ face by “increase[ing] social distance and not impose[ing] upon the hearer” (Carlo & Yoo, 2007, p. 199); and c) off-record, with which the user attempts to make a statement that is open to his/her hearers to decide it is obligatory to them. Briefly speaking, positive politeness strategies address saving hearers or readers’ face, whereas negative politeness strategies address saving the speakers or writers’ face by presenting social “distance and impersonality” (Vinagre, 2008, p. 1025).

In recent years, several researchers explore politeness strategies in computer-mediated or computer-supported educational environments. Vinagre (2008) examined how students from two countries, Spain and U.S., employed politeness strategies to reduce face threatening in collaborative email exchanges and found that students at both sides used both positive and negative politeness strategies; however, Spanish students used more positive politeness strategies (218, about 57%) than U.S. students (165, about 43%). The positive politeness strategies mostly used in this email exchanges were “claiming common ground,” “assuming or asserting reciprocity,” and “conveying cooperation.”

Through literacy activities in asynchronous online discussions, Yang et al. (2006) emphasized the importance of taking politeness into consideration by stating that “a concern with politeness in discourse is more than simply an additional veneer added to make one’s words ‘nicer’ but instead, seems to be at the core of reflecting how words enact or reflect the relationship between interlocutors in any discourse event” (p.342). In the asynchronous online collaborative learning, the 32 graduate students seemed to apply positive politeness strategies almost two times more than negative politeness strategies because the students were equally competent, and tried to negotiate meaning and learn the constructs in scholarly papers. In addition, using positive politeness strategies in their comments seemed to reduce negative feelings, like feeling isolated, and further increase their learning and participation, or refining their words and thoughts. However, being too polite to each other due to fulfilling the needs of the interlocutors hindered their willingness to negotiate more deeply for learning the new constructs.

This study intended to extend the exploration on politeness strategies to the communication in videoconferencing environment, focusing on students’ use of politeness strategies in a cross-cultural communication project, where students at universities in Taiwan and Japan discuss online via video-conferencing in small groups, with only two to four students from each university in one discussion group. The purposes of this study were to find out what politeness strategies students in both universities used in videoconferencing communication and uncovered what kind of strategies, positive or negative strategies, were most frequently used. Moreover, this study explored the role of politeness strategies in the communication process.
Method

Though the participants were 43 university students (25 from Taiwan, 18 from Japan), the main focus in this study was on the Taiwanese students. The course at the university in Taiwan was elective for EFL majors, but was a free and open course for any majors at the Japanese university. The students were divided into small groups, with two to three students from each school. There were four topics for this course, two weeks for each topic, from 1) Introduction, 2) Advertising, 3) Front Page, and 4) Country Images. Within each topic, the students have one class with the classmates in their own university, and one joint class with the other university students. There were tasks assigned in each topic in the textbook, such as creating a catchy phrase or advertisement slogan for an international cellphone company, for the students to complete via the videoconferencing communication with those from the other university. Due to the constraint of the technical issues, for each online discussion, three groups were chosen to be recorded and later transcribed verbatim. The reflection papers that the students were required to turn in for each topic were also collected as part of the data.

Transcripts of the discussions were analyzed through discourse analysis based on Brown and Levinson’s (1987) definition of the politeness strategies. We first carefully established a coding scheme for each strategy based on the theory and then coded the transcripts accordingly to identify the politeness strategies used in the cross-cultural video-conferencing discussion. Each complete idea, usually a complete sentence, was given one code, if a politeness strategy was revealed; however, we did not double code each unit. Peer-debriefing was conducted and the differences of interpretation were resolved by discussions. Content analysis and qualitative coding procedures (Lincoln & Guba, 1985) were applied to analyze the reflection papers to determine how politeness strategies facilitate or hinder students’ negotiation of meanings.

Results

In the following, we presented the major results found in this study and related discussions. They are politeness strategy use, including positive and negative strategies, and the role of politeness strategies in the communication.

Politeness Strategy Use

Table 1 and 2 present the 15 positive politeness strategies and 10 negative strategies respectively, with a brief definition of each strategy modified from Brown and Levinson’s (1987), the total number of times that we observed the strategy in the transcripts, and at least one typical example for each strategy. Among the strategies, Positive Strategy #1, “notice and attend to H” needs further explanation. Although each response to the group members may be considered as giving notice or attention to the hearer, only the utterance that was explicitly stating the matter was coded. Moreover, because the students were communicating using a foreign language, i.e., English, and their language proficiency was not high, some of the strategies that may require higher language proficiency to express, such as Positive Strategy #9, “assert or presuppose S’s knowledge of and concern for H’s wants,” Positive Strategy #14 “assume or assert reciprocity,” Negative
<table>
<thead>
<tr>
<th>Positive Politeness Strategies</th>
<th>Total</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P1</strong> Notice and attend to H</td>
<td></td>
<td>Cindy: So Korea’s man are very gentleman. Takashi: I think. Very romantic. Cindy: Takashi, you look so happy. [D3G3]</td>
</tr>
<tr>
<td>Pay attention to any aspects of H’s condition</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Exaggerate (interest, approval, sympathy with H)</td>
<td></td>
<td>Beniko: Yes, one of [them] is from Taiwan. It’s high school. The title in Taiwan is … maybe… [Beniko typed out “F4.”] Olivia: Oh~~~! We know, we know. It’s very famous! [D3G1]</td>
</tr>
<tr>
<td>Response with exaggerated intonation, stress, and intensifying modifiers.</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Intensify interest to H</td>
<td></td>
<td>Cherry: Elementary school students they only have the…you know…just the toy. Do you know cell phone toy? They look like real cell phone, but it’s not a real cell phone. It’s a cell phone that has music. [D1G8]</td>
</tr>
<tr>
<td>Intensify H’s interest and draw H as a participant into the conversation with direct expressions.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Use in-group identity markers</td>
<td></td>
<td>Tomo: I have a very good time to meet with you. I will miss you. Cherry: We nice to meet you guys. [D3G8]</td>
</tr>
<tr>
<td>Use address forms, language or slang to convey in-group membership</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Seek agreement</td>
<td></td>
<td>Mutuo: And she [the first lady in Taiwan] is very popular now. Bella: She is kind of popular… Mutuo: kind of popular? Bella: Yeah, kind of… Mutuo: Really?..She is funny, I think. [D3G1]</td>
</tr>
<tr>
<td>Choose safe topics or use repetition to make it possible to agree with H</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Avoid disagreement</td>
<td></td>
<td>Bella: Even though the appearance is my opinion, but now I think price may be better. [D1G1]</td>
</tr>
<tr>
<td>Show token agreement, use white lies, or make the opinions safely vague to agree or appear to agree with H</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Presuppose/raise/assert common ground</td>
<td></td>
<td>Cherry: Oh, yeah. Ok. And the price, you know, must be very available to these graduates. You know, just like Momoko said, and they just graduate, so they don’t have enough money to buy the low price mobile phone. [D1G8]</td>
</tr>
<tr>
<td>Talk about general unrelated topics, use small talks or previously agreed ideas to show something is mutually assumed.</td>
<td>19</td>
<td>Cherry: In Japan, you know Japan is a fashion city. [D3G8]</td>
</tr>
</tbody>
</table>
| P8 | Joke | Beniko: Do you know Taiwan F4?  
Mutsuo: I don’t know.  
Olivia/Bella/Beniko: Flower four.  
Olivia: There are many flowers in this country. [D3G1] |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P9</td>
<td>Assert or presuppose S’s knowledge of and concern for H’s wants</td>
<td>0</td>
</tr>
</tbody>
</table>
| P10 | Offer, promise | Beniko: Who are the people in that program?  
Ordinary people or…?  
Tim: Ok, I’ll find. [D3G1] |
| P11 | Be optimistic | Mutsuo: Olivia, you’re a very good facilitator, don’t you? [D1G1] |
| P12 | Include both S and H in the activity | Cherry: So…let’s talk about the next advertising strategies segment. [D1G8]  
Beniko: Should we think [choose the] English one or we have to do something else. [D2G1] |
| P13 | Give or ask for reasons | Tomo: So why don’t we name Wowow TV channel between it? [D3G8] |
| P14 | Assume or assert reciprocity | 0 |
| P15 | Give gifts to H | Mutu: Everybody has good opinion.[D1G1]  
Cherry: I think you really can be a good reporter.  
Momoko: Thank you. [D2G8] |
| | Show sympathy, understanding, to satisfying H’s wants such as being liked, admired, and cared about, and so on. | Cindy: Bruce, do you have any opinion about this?  
Bruce: It’s hard to…  
Cindy: That’s ok. You can say anything you want to say. [D3G3] |
| Total | 659 | |
Table 2
Negative Politeness Strategies

<table>
<thead>
<tr>
<th>Negative Politeness Strategies</th>
<th>Example</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Be conventionally indirect</strong></td>
<td>Olivia: Bella, could you write down it [write it down]?</td>
<td>41</td>
</tr>
<tr>
<td>N1 Use conventionally indirect expressions to ease the tension</td>
<td>Tomo: Please look at that whiteboard…</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Takashi: Maybe you can include the …huh…battery one and material one in the function, I think.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mutsuo: It’s interesting because opinion of outsider is interesting, I think. So…hum..it’s my opinion.</td>
<td></td>
</tr>
<tr>
<td><strong>Question, hedge</strong></td>
<td>Olivia: …</td>
<td>341</td>
</tr>
<tr>
<td>N2 Use question or hedge to show the want not to presume or force H</td>
<td>Beniko: A little more text? Olivia: A little.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cindy: Hmm…I said that was a little impolite because [but] in Taiwan most people think Japanese men are short. They are not tall.</td>
<td></td>
</tr>
<tr>
<td><strong>Be pessimistic</strong></td>
<td>Olivia: I think…I prefer text…more little.</td>
<td>11</td>
</tr>
<tr>
<td>N3 Insert negative wordings to show little probability has been assumed so as to reduce the imposition</td>
<td>Beniko: Can I have my opinion?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cindy: Hm…I said that was a little impolite because [but] in Taiwan most people think Japanese men are short. They are not tall.</td>
<td></td>
</tr>
<tr>
<td><strong>Minimize the imposition</strong></td>
<td>Olivia: I think…I prefer text…more little. Beniko: A little more text? Olivia: A little.</td>
<td></td>
</tr>
<tr>
<td>N4 Use euphemism or expressions to minimize the imposition, such as a little, tiny bit, and so on</td>
<td>Cindy: Hm…I said that was a little impolite because [but] in Taiwan most people think Japanese men are short. They are not tall.</td>
<td></td>
</tr>
<tr>
<td><strong>Give deference</strong></td>
<td>Beniko: Can I have my opinion?</td>
<td>5</td>
</tr>
<tr>
<td>N5 Give higher social status to H by being humble or raise H</td>
<td>Tomo: Sorry, sorry, interrupt. What sports is famous in Taiwan?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mutsuo: Hum? Sorry, Bella, could you say that again?</td>
<td></td>
</tr>
<tr>
<td><strong>Apologize</strong></td>
<td>Tomo: Sorry, sorry, interrupt. What sports is famous in Taiwan?</td>
<td>49</td>
</tr>
<tr>
<td>N6 Indicate the reluctance to impinge on H’s negative face by giving an apology</td>
<td>Mutsuo: Hum? Sorry, Bella, could you say that again?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cindy: I think Japanese life style is more interesting us, because in Taiwan we think Japanese they are very creative.</td>
<td></td>
</tr>
<tr>
<td><strong>Impersonalize S and H</strong></td>
<td>Cindy: I think Japanese life style is more interesting us, because in Taiwan we think Japanese they are very creative.</td>
<td>75</td>
</tr>
<tr>
<td>N7 Avoiding the pronouns ‘I’ and ‘you’ by using pluralization</td>
<td>Tomo: It seems give us bad image to North Korea.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beniko: I choose the high context. The reading in the textbook tells us in Asia the high context advertisement is popular…</td>
<td></td>
</tr>
<tr>
<td><strong>State the FTA as a general rule</strong></td>
<td>Beniko: I choose the high context. The reading in the textbook tells us in Asia the high context advertisement is popular…</td>
<td>3</td>
</tr>
<tr>
<td>N8 State the imposition as an instance of some general social rule, regulation, or obligation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nominalize
Remove the active ‘doing’ part of an expression to reduce the danger of losing face
0

Go on record as incurring a debt, or as not indebting H
Disclaim the indebtedness of H
0

Total 525

Strategy #3 “Be pessimistic,” Negative Strategy #9 “nominalize,” and Negative Strategy #10 “Go on record as incurring a debt, or as not indebting H,” were not found in the results.

The results showed that the students used positive strategies more frequently (659) than negative strategies (525). As positive strategies are used to fulfill one’s desire to be liked and admired to others (Brown & Levinson, 1987), it seems that in this intercultural exchange, the students made efforts consciously or unconsciously to give face to the interlocutors so that the conversation could go smoothly. One Taiwanese student, Wendy reflected a similar concern in the paper and stated that

We should learn to respect the person who is talking, and try to understand their thinking then reply in right way….It is important to know that taking seriously when others are talking.

There are something we should notice. I think be polite is the necessary.

Another student, Ben also described how Japanese students behaved in his reflection as he wrote, “Japanese students do carefully listen to what others are saying, and answer the questions earnestly.” These reflections may explain students’ frequent use of positive strategies.

The most often used positive strategies were Positive Strategy #2 “exaggerate” (152), #12 “Include both S and H in the activity” (191), and #15 “give gifts” (158). Because the students were divided into small groups of four or five students, it seems to be understandable that they would use the term “we” or “let’s” to include and invite everyone into the discussion. Also, they tended to exaggerate their responses by using phrases such as “Oh, wow!” “I really like it” to show their involvement and interests in what the speakers were saying in the conversation. In fact, we only coded the expressions that revealed strong exaggeration in the discussion; otherwise, the number of the codings for this strategy may be even higher. Moreover, as Japanese and Taiwanese people are often taught in their cultures constantly to show the appreciation, to be understanding to people, and to give compliments, which are considered “good manner,” the students in this study quite often used the expressions, such as “Thank you,” “It’s OK,” and “This is a great idea.”

As for the negative strategies, #2 “Question, hedge” (341) was the one that the students used most, followed by #7 “impersonalize S and H” (75), #6 “apologize” (49), and #1 “be conventionally indirect” (41). Because this is an intercultural communication, and the students were not as familiar with the students from the other country as they do with students in the same country, they seem to be very conscious when sharing their opinions. Whenever they wanted to express their ideas, they
tended to add “I think,” or “maybe” in the expression so as not to show too much imposition on others, and in the meantime, save their own face. James, a Taiwanese student, reported his concerns in the reflection paper and stated:

In our preparation class, every one is from the same university, and every one is Taiwanese so we can speak out loud and don’t need to worry about making a mistake. However, in Live On discussion, there may be some cultural difference and language barrier between us. We need to be conscious that our careless behavior may insult those foreigners.

Meanwhile, because these discussions occurred between two countries, and many tasks require the students at both sides to share knowledge about their own culture and information in their country, these Taiwanese students tended to consider themselves representing their country, and often responded using “we” instead of “I,” to save their own face, even when the idea may come from the speaker himself or herself. For example, in Table 2 Strategy #N7, Cindy was trying to talk about her belief that Japanese are very creative, but she stated that “in Taiwan we think Japanese are very creative.” In addition, the students tended to say “sorry” very often. It seems to be common for two people to initiate an utterance at almost the same time because these were group discussions with more than two people. The students were aware of and alert to this situation, and when it happened, they often immediately expressed their apology, and gave the chance for the other person. When they did not understand what others were saying, they also apologized before they asked for clarification.

The Role of Politeness Strategies in the Communication

In the following, we illustrated how politeness strategies were used in the communication with a small excerpt. We present the excerpts in its original content, and there may be grammar mistakes, misspelling, and even incomplete sentences because students were communicate in the foreign language, English. In this first set of excerpts, the group members were trying to complete the task asking them to create an international front page for readers of both of the countries. The facilitator of the day, Beniko, a Japanese student, was asking about the proportion of the text and images in the front page. Before this excerpt, other group member Mutsuo had proposed the percentage to be half and half. Tim, their Taiwanese group member, however, preferred to have more images because it would be easier for the readers to understand.

Beniko: So… Yeah. So Tim thought more images. Hm… Ok. Thank you. How about Bella?
Bella: I think fifty fifty.
Beniko: So why?
Bella: Because if use too more images, it can’t be really tell people what you want to say, I think.
Beniko: Hum.
Bella: Yeah, but too [much] text is not good also because I dare [not] to read. So if we half and half is better.

Here, we observed that the facilitator, Beniko, usually summarized the main point of the previous speaker and then use Positive Strategy 15 “give gifts” to show her appreciation to the group.
members’ contribution. On the other hand, the group members were very careful when expressing their ideas and constantly hedging their opinions by adding “I think” in the statement, Negative Strategy #2 “hedge, question,” so that their opinions would not sound too strong.

Beniko: Ok. Thank you. So how about Olivia?
Olivia: I think…. I prefer text… more little [a little more].
Beniko: A little more text? Oh, ok.
Olivia: A little.
Beniko: Yeah?
Mutsuo: Huh hum.
Olivia: Because….I think image is necessary, but words can tell people what’s happened. More detail about the news. Yes.
Beniko: Yeah. Hum…Yeah, you think… you mean that text is… it will tell detail or information.

Olivia: Hum. Yes, but I think…image is very important.

However, another Taiwanese group member, Olivia had a different opinion. She wanted to have more text in the front page, but she did not want to impose the ideas to the others, so she used the expression, “a little more” to minimize the imposition, Negative Strategy # 4. For one moment, Olivia did not receive a positive response from the group members, so she, using Positive Strategy #6 “avoid disagreement,” partially agreed with Mutsuo and Bella to gave them face before expressing her real opinion, “images is[are] necessary, but words can people what happened.” Interestingly, when Beniko repeated Olivia’s idea, but did not give any positive response to fulfill Olivia’s face want, Olivia responded with a rather confusing statement, “Yes, but I think…image is very important,” which seemed to be confounded her original idea. In this case, the use of politeness strategies may mislead the clarity of ideas, and thus hinder the communication.

In the next excerpt, the group members were trying to create a catchy phrase for their cell phone advertisement. Before this excerpt, the group had agreed that the ideal cell phones should look beautiful but cost little. The catchy phrase proposed had been changed from “make it fashion,” to “give self-confidence by low price.”

Olivia: So, Tim, do you have any kind phrase about appearance and price?
Tim: You can… have it many color… of appearance…It is many color you can choice in the appearance.
Olivia: You mean…Difference colors of cell phone appearance.
Tim: Yes. We can have yellow, black, and you can choice what kind of color. You can work and suit of your dressing.
Olivia: Huh… So what is your catching phrase?

[Tim was typing his idea, and everyone is waiting for Tim’s response.]
Olivia: A little long.
Bella: It’s a good idea too.
Olivia: Yes. Maybe we can….We can consider it. And how about Beniko? Do you have one?

Tim, who had never had opportunity to talk to people from other countries before, was not
confident in speaking English and expressing his ideas. Being called by the facilitator, Olivia, Tim hesitatingly said and wrote his thoughts using Positive Strategy #12 “Include S and H in the activity,” by saying “we can” do something. The group member did not like his idea, but they did not want to make him lose face. Therefore, Olivia used Negative Strategy #4, and used the phrase “a little” to minimize the imposition. Bella even tried to support Tim’s positive face by giving a white lie, Positive Strategy #6, and said “It’s a good idea, too.” Olivia then concluded with a hedge, Negative Strategy #2, and said “maybe we can consider it.” These politeness strategies used seemed to help Tim to be comfortable in the group, and also facilitated the communication.

As presented above, many students were consciously aware that the discussions were in a cross-cultural context, so they were very careful in terms of how to express their ideas without hurting the other group members’ face, and thus used more positive strategies in the conversation. These acts, such as giving attention, exaggerating responses, giving compliments and supports, seemed to result in positive emotions and experience for students in the communication. Wendy reflected her experience in the reflection paper and said, “I felt extremely happy with my LiveOn experience because whenever I proposed some ideas, the other persons agreed with me and responded with support.” Another Taiwanese student Cathy also stated, “At first, I was afraid of making mistakes, so I dared not to say much. However, when I did make some mistakes later, I realized that it did not matter that much.” The support and understanding given by other group members not only satisfied her desire to be accepted and understood, her positive face, but also provided her comfort and relief from her negative emotions.

On the other hand, the students also reported that the topics were switched or discussions were limited due to the concern of saving face. For example, Flora, a Taiwanese student, reported that they chose to discuss more about Japan rather than Taiwan because they did not want to make the Japanese students felt uncomfortable in the discussion.

Japanese students do not know Taiwan a lot….Taiwanese students like to use Japanese issue for the reason we can continue the discussion or if they have no idea of other issue that will be silent, so we choose Japanese one.

The use of politeness strategies and the concern of face, in this case, can affect the communication process. It can, on the one hand, promote the communication and increase the involvement of the group members, but too much concern about saving both of their faces can become a problem and impede the real exchange and knowledge sharing that are both expected in the communication.

Discussions

The results of this study revealed similar results to previous findings that positive strategies are used more in online discussions than negative strategies (e.g. Vinagre, 2008; Yang et al., 2006). As Brown and Levinson (1987) referred that negative politeness behaviors are more elaborate and explicit in western cultures, it seems that for Asian cultures, positive politeness behaviors may be more explicit. Moreover, in this study, politeness strategies were found to be important to continue the conversation and make group members comfortable when participating in the discussion. This result echoed Yang et. al (2006) and further confirmed the importance of instructing students how to
use and respond with politeness strategies when communicating with people from different cultures. Nevertheless, this study also suggested a caution that too much concern about face and overuse of politeness strategies may perplex the communication and even cause misunderstanding between group members, whether in a graduate course in the western world (e.g. Yang et al., 2006) or a cross-cultural distance course in the eastern world, like this study. Although in this study, the Taiwanese students did not learn a wrong concept, as reported in Yang et. al (2006), they did make their own opinion unclear and even gave in the chance to share information about their own country, which should be one of the major goals for the intercultural communication.

One limitation of this pilot study is that only the data produced by Taiwanese students were collected. Future researchers may explore the positive and negative politeness strategies that the students of both universities use in qualitative and quantitative comparisons. It may also be worthy investigating how the students at one side interpret the politeness strategies that the students at the other side employ.

Reference

INFORMATION

TITLE OF SUBMISSION: Assessing the Extent of Communicative Language Teaching (CLT) Approach Implementation in English 1/101 at St. Paul University Dumaguete Towards a Faculty In-service Program.

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ABSTRACT

This study (inspired by Gloria, 2007) assesses the extent of implementation of the Communicative Language Teaching (CLT) approach in English 1/101 at St. Paul University Dumaguete (SPUD), toward the design of an in-service training program. Assessment is done on the following areas: syllabus design, teacher student interaction, lesson content, materials used, activities conducted, lesson presentation, and assessment types and procedures. The respondents include selected teachers and students of English 1/101 at SPUD. Employing both quantitative and qualitative research methodology, the study uses a structured interview guide, classroom observations, and focus group discussions (FGD) to gather data. Classroom observation data analysis focuses on student-teacher interaction; analysis is done using the Communicative Orientation to Language Teaching (COLT) Scheme and the Sinclair and Coulthard Codes and Functions. Findings show that CLT is implemented; however, the teachers practice the weak form of CLT, which emphasizes structure and grammar skills still. The findings support the proposed in-service training program on CLT for the English language teachers at SPUD.
Perfectionism and Intrinsic/Extrinsic Motivation of Taiwanese EFL Undergraduate Students

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ABSTRACT

The concept of perfectionism and motivation represent two important individual difference variables that have received considerable attention. This session presents the results of two questionnaires that asked 400 Taiwanese EFL undergraduate students to identify their perfectionism types and academic motivation. The two instruments used in this study were: (1) the Multidimensional Perfectionism Scale designed by Hewitt and Flett (1991); and (2) the Work Preference Inventory (Students version) created by Amabile (1994). The purpose of this study was to propose and test the role of perfectionism and academic motivation in EFL undergraduate students in Taiwan. Hewitt and Flett (1991) claimed that the type of motivation is associated with multidimensional perfectionism. Therefore, the relationship between perfectionism and English learning motivation were also investigated.

The statistical analyses of the questionnaires indicated that most Taiwanese undergraduate students are self-perfectionism or socially prescribed perfectionism type, and a few are identified as other-oriented perfectionism. In addition, these students tend to have intrinsic motivation toward EFL learning. This shows that most of them learn English due to internal reasons such as setting own goals, enjoying their learning, etc. Furthermore, self-oriented perfectionism was found significantly positively related to extrinsic motivation. Socially prescribed perfectionism has associated positively with extrinsic motivation. However, other-oriented perfectionism is neither related to intrinsic motivation nor extrinsic motivation. Further, the theoretical importance of the findings and the implications for EFL learning were also discussed.

Key words: Perfectionism, Intrinsic / Extrinsic motivation, EFL university students, Taiwan

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Learning Communities in Higher Education

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Learning communities are classes that are linked or clustered during an academic term, often around an interdisciplinary theme, and enroll a common cohort of students. It also includes a variety of learning experiences to build community between students and their teachers, and among faculty members and disciplines. Learning communities may adopt themes or be applied to multiple disciplines.

Findings from a study by Chun-Mei Zhao and George D. Kuh (2003) indicate that participation in a learning community is positively linked to engagement as well as student self-reported outcomes and overall satisfaction with college. Students’ participation in learning communities may lead to: (1) increased opportunity for academic success; (2) increased likelihood to matriculate; (3) formation of collaborations with peers and professors outside of class settings; (4) enhanced interpersonal dialogue; (5) improved experiential learning; and (6) heightened intellectual development.

The implementation of learning communities at Albany State University is part of the 2006-2011 Strategic Plan, Goal 1: Strengthening the Historic Mission, Strategy 4: Implement an effective enrollment management and marketing program to recruit, retain, and graduate students of diverse backgrounds. The strategy to attain this goal is to institutionalize and expand the first and second year experience, and to develop learning communities.

The purpose and benefits of learning communities align well with the mission and goals of teacher training programs in the College of Education at Albany State University. The Teacher Education Department has established learning communities to address the needs and issues of two distinct cohorts of students: those who are declared education majors and those who have progressed to teacher candidate status.

First, declared education majors are invited to become a part of the Adult Non-Traditional (ANTS) Learning Community. The National Center for Education Statistics (NCES) defines a "nontraditional student" as a student with at least one of these seven characteristics:

1. Does not enter college immediately after high school.
2. Attends part time rather than full time.
3. Works 35 hours a week or more.
4. Is financially independent as defined by financial aid criteria.
5. Has dependents other than a spouse.
6. Is a single parent.
7. Lacks a high school diploma but may have a GED or other high school equivalency (NCES, 2005 as cited by Croix, 2007).
The mission of the “ANTS” (Adult Non-Traditional Students) is to encourage and coordinate support, education, and advocacy for the declared education majors/adult non-traditional students. The ANTS Learning Community promotes academic success, collaborations, and interactive activities designed specifically for the adult non-traditional student. Researchers report cohort grouping, such as those for professional seminars, is beneficial; students who socialize more and cooperate to learn have better outcomes (Drucker, 2000; Frieswick, 2000; Moore, 2000, as cited by Wray, 2007). The “ANTS” Learning Community activities support all facets of participants’ lives that may impede academic success. Special emphasis is placed on producing culturally-responsive practitioners, reflective educators, and technology-competent practitioners.

Second, early childhood and special education majors who have progressed to teacher candidate status are targeted for the Integrated Literacy Approach Learning Community. Research indicates a need for an innovative marriage between early childhood educators and special education. Over eighty percent (80%) of children in special education programs are placed simply because they have not learned how to read (Blanton & Pugach, 2007). Also, few children placed in special education close the achievement gap to a point where they can read and learn like their peers (President’s Commission of Excellence in Special Education Report, 2002). To address these findings at Albany State University, classes in the Early Childhood Education Program and the Special Education Program are linked to create a learning community.

The Early Childhood Education & Special Education: An Integrated Literacy Approach Learning Community focuses on collaborative efforts to design and establish co-teaching modules of reading instruction for diverse populations. The Integrated Literacy Approach Learning Community yields culturally-responsive teacher candidates who gain advances in objectivity for assessing, planning and implementing instructional strategies for diverse readers.

The conference presentation will be a panel discussion of the design and implementation of the ANTS Learning Community and the Integrated Literacy Approach Learning Community. Discussions will include the strengths and weaknesses of the two learning communities, the struggles and gains for the students, and the evaluative components used for improvement and continuation. Additionally, a demonstration of best practices will be provided through a video presentation of a simulated lesson plan. The presentation will conclude with a question/answer session.


Hawaii International Conference on Education----Issues in Teaching
Learning Communities in Higher Education

Abstract

The implementation of learning communities at Albany State University (ASU) is one part of the 2006-2011 Strategic Plan to recruit, retain, and graduate students of diverse backgrounds. The purpose and benefits of learning communities align well with the mission and goals of teacher training programs in the College of Education at Albany State University. The Teacher Education Department has established learning communities to address the needs and issues of two distinct cohorts of students: those who are declared education majors and those who have progressed to teacher candidate status.

First, declared education majors are invited to become a part of the Adult Non-Traditional (ANTS) Learning Community. The ANTS Learning Community promotes academic success, collaborations, and interactive activities designed specifically for the adult non-traditional student. All activities support every facet of participants’ lives that may impede academic success with special emphasis on producing culturally-responsive practitioners, reflective educators, and technology-competent.

Second, early childhood and special education majors who have progressed to teacher candidate status are targeted for the Integrated Literacy Approach Learning Community. To address response to intervention research and its implications for program modifications, selected courses in the Early Childhood Education Program and the Special Education Program are linked to create a learning community. The Early Childhood Education & Special Education: An Integrated Literacy Approach Learning Community focuses on collaborative efforts to design and establish co-teaching modules of reading instruction for diverse populations. The Integrated Literacy Approach Learning Community yields culturally-responsive teacher candidates who gain advances in objectivity for assessing, planning and implementing instructional strategies for diverse readers.

Utilizing a Panel Session format, discussions will include the strengths and weaknesses of the two learning communities, the struggles and gains for the students, and the evaluative components used for improvement and continuation. The presentation will conclude with a question/answer session.
BEYOND THE CLASSROOM WALLS

Pros and Cons of Cyberlearning: How Does it Affect Graduate Students, The University and Professors?

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Abstract

This article discusses some of the advantages and disadvantages of online learning as it pertains to graduate students, universities and professors. Although much has been written about the growing presence of online learning, this author's position is that consideration must be given to the rewards and drawbacks of cyber learning as it pertains to graduate programs serving graduate students in remote parts of the country, universities and faculty. Reviews of both sides of the issues via in-depth literature reviews, conversations with graduate students experienced in distance learning along with studies from universities guided the discussion of the article. The general consensus pertaining to online learning was viewed as beneficial overall, despite some major drawbacks.

Keywords: online learning, advantages and disadvantages of distance learning, graduate student perceptions of online learning, instructor perceptions of online learning
Beyond the Classroom

“The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error.”

John Chambers, CEO Cisco

Online education is growing exponentially in popularity among graduate programs of education throughout the country. This phenomenon called online learning has been revered as an extraordinary change to the delivery platform of education. However, there are some that seem to believe this is not the panacea it is venerated to be, as it has sacrificed academic growth and the imagination of students (Monk, 2010). How has this format of learning affected the universities, faculty and most importantly, the students in graduate programs located in remote parts of the country? What is being said about the pros and cons of online learning?

Traditional Classrooms to Online Classrooms

Distance education, what exactly is it? According to Lewis, Whitaker, and Julian (1995), it is “the delivery of the educational process to receivers who are not in proximity to the person or persons managing or conducting the process” (as quoted in Bitter and Legacy 2006, p. 130). Distance education has "brought new life and possibilities...No longer is learning away from a traditional classroom the exception, but rather it is becoming a learner-centered standard many educational models strive to replicate" (Bitter & Legacy, 2006, p.131). With the increasing popularity of the Internet within the past thirty years, new dimensions of learning have surfaced as alternative forms of education that has brought traditional learning platforms offered in higher education out of the four walls of the classroom into the realm of cyberspace.

The Advantages of Online Learning

Convenience is cited as the foremost advantage of online learning. According to graduate students, the convenience of time and distance was a huge advantage over the brick and mortar classrooms. Morrison, Ross, and Kemp (2007) postulated that distance education has "additional
strengths beyond the traditional classroom lecture and self-paced instruction for both training and education environments...Students can ‘attend a class’ without going to campus. Very large audiences situated miles apart can potentially be served” (Morrison et al., 2007, p. 21). This is especially important to graduate students living in remote areas of the country. Such was the case with a south Texas graduate student, "For me personally online work has been a big time saver for me. I live about... three hours from [campus].... it would have taken a lot longer to finish." (personal conversation, May 7, 2010). Another student adds, "If you use your time wisely, the extra time saved allows students to spend that time producing better quality work or doing better research" (personal conversation, May 12, 2010). There is more flexibility, as the course is as close as the computer and an Internet connection. The student decides when and where study is to take place. The student sets the pace of assignment completion, study and research time.

Distance learning allows students expeditious access to instructors, peers and information. When, Leia, a graduate student attending Phoenix University, was asked what she liked most about online classes, she replied, “I like having the entire Internet at my fingertips to do all of my research, although there are some situations that call for a book, but they are few and far between… [and] the freedom of creating my own schedule. Posting when and how I can. I also don’t have to worry if I have enough gasoline to make it to class.” Leia also received her Bachelor degree from Phoenix University, thereby giving her five years of experience in the online learning environment (personal conversation, February 1, 2010).

Participation

Ease of participation is an appealing feature of the cyber classroom. One of the many versatile elements of cyber learning is the ability for students to participate either asynchronous, synchronous or in a blended learning format. Teaching online “offered via the Internet can take
many forms, ranging from Web pages to mailing lists to course management systems such as Blackboard. Students can interact in real time in chat rooms or asynchronously by posting to bulletin board or forums” (Morrison, et al., 2007, 218). Provided with all of these communication formats, students are afforded an easier route of communication with the instructor or other students in the class.

The playing field for communication and participation purposes is leveled, because everyone in class can contribute. According to professors at Central Florida, "Introverts, who are quiet in the face-to-face class, really participate [online]," (Garnham and Kaleta, 2002, p.3). Kupczynski, Stallone Brown and Davis' study (2008), found student participation increased in the asynchronous environment, as there is time to "post messages, read and respond to messages, reflect on responses, revise interpretations, and modify original assumptions and perceptions..." but in a face-to-face class this would not be the case (p. 6). A south Texas graduate student admits, "I am basically a shy person. I don't share a lot of my opinions and thoughts in a whole class situation. The online class has given me the freedom to "take a chance" and share my thoughts and opinions with others. I also like time to think about my response so taking this online class is great in that area as well (Discussion Board Conversation, May 11, 2010).

Hybrid Courses

The hybrid or blended course, as it is sometimes referred to, is another advantage of distance education. “As the name implies, there are a blend of various forms of learning activities. These may include classroom, learning experiences, and e-learning or various forms of e-learning or some combination of all three” (Steen, 2008, p. 528). This type of offering meets the needs of those students who prefer a face-to-face format as well as those students who prefer an online format. Garnham and Kaleta (2002) explain “The goal of hybrid courses is to join the best
features of in-class teaching with the best features of online learning to promote active
independent learning and reduce class seat time" (p. 1). Students' positive perceptions of blended
learning are the "reduced logistic demands, convenience, increased learning flexibility, and
technology enhanced learning" thereby promoting a more enjoyable and successful academic
experience (Dziuban, Hartman, Moskal, 2005, slide 19). A graduate student participating in an
online Educational Administration class states, "Overall I think that the online course work is
good but, I do think the combination of face to face courses and online is better than all online"
(Discussion Board Conversation, May 7, 2010).

What about the faculty teaching the mixed class format? Faculty teaching hybrid courses at
the University of Central Florida noted more flexibility, interaction and communication with
their students. Garnham and Kaleta (2002) found that “The amount of student to faculty contact
is going to increase in the hybrid format. Students are more engaged in learning activities
therefore will seek out more assistance” (p. 2). For example, a professor of archaeology can
create lectures on artifact classification for online activities. Class time could be devoted to the
actual handling and experiencing of the artifacts, thereby making seat time a more enriching
experience (Garnham and Kaleta, 2002). The academic attainment for students in hybrid courses
was significantly improved in hybrid classes. Instructors believed their students performed better
on exams, produced better papers and came prepared to have more meaningful discussions while
in the classroom (Morrison et al., 2007).

Student Retention

Student retention was also an advantage of online classes. Students participating in online
courses tended to complete their programs more often than not. Graduate students discussing the
aspects of completing their degrees online stated, "Online classes are allowing me to get a degree
I would otherwise have to put off later in life or not at all." Another student added, "I love my on-line classes and would not be able to finish without them!!!!!!" (Discussion Board Conversation, May 10, 2010). According to data attained from a study on Web-enhanced courses at the University of Central Florida (2005), "Web-enhanced courses have higher success rates (percentage of students obtaining an A, B, or C) and lower withdrawal rates than their comparable face-to-face courses" (University of Florida, 2005. p. 3).

**University Benefits**

Universities also realize advantages to hosting online classes. More students tend to register and take the online classes, as this reduces the opportunity costs of an education for the student and the university (Dziuban, et al., 2005, slide 19). In combination with increased student population and lower withdrawal rates of online students, universities have found online learning to be very cost effective and efficient via many avenues never thought possible before online learning came into existence (Steen, p. 527).

As more students enroll in online classes, classroom allocation is an area that can be streamlined. The demand for classrooms tends to drop, because the space is not needed as often, thereby cutting the cost of utilities and up keep. “Online programs have little or no cost for instructional facilities, transportation and related staff” (Cavanaugh, 2009, ¶ 6). In these days of budget cuts, reductions in force in both the private and public sectors coupled with declining enrollment for some universities, this is good news for the university bottom line.

**Disadvantages of Online Learning**

So far, online learning appears to have many advantages for all concerned. Even though there is a positive spin being endowed on cyber learning, there are negative aspects that need to be
brought to light. If not properly understood, anticipated and prepared for, these disadvantages can prove to be formidable obstacles.

**Computer Literacy**

An aspect that is often times overlooked is that individuals participating in online courses are computer literate. Students and faculty have to be computer literate. It’s a plain and simple fact. As hard as it is to imagine these days, there are individuals that are less than adequately prepared for a technology-rich learning environment (Ratliff, 2009). Without this ability, the cyber classroom is a moot point. According to Dutton et al., 2002; Halsen & Gratta, 2002, numerous studies have indicated that the Internet can prove to be an effective learning instrument, but the studies also point out that the students participating in an online course necessitates a particular level of computer literacy also (as cited in Wojciechowski, Bierlein Palmer, 2005). According to Peach 2001, when an online student is not computer literate, this leaves the faculty member charged with teaching the online course to bear the responsibility of teaching content of the course, as well as remediating the student in the use of technology (as cited in Ratliff, 2009).

**Online Access**

Although computer literacy is a requirement of online learning, so is online access. The lack of access either due to logistics or economic reasons, will exclude participants from the cyber class. Quality transmission is another issue of the telecommunications system and other resources required to successfully transmit. Although there may be two-way communication capabilities available, if the quality is poor, distractions and frustrations can ensue making it "difficult to follow aurally and visually, students may lose interest in the instruction" (Morrison, et. al., 2007, p. 218). Morrison also brings out the point that hardware requirements for online learning may be too expensive for some institutions and students (p. 219). In essence, the
institution hosting the eLearning courses as well as the participants need to acquire reliable access before considering the online learning endeavor.

**Course Design**

Design and implementation can be a disadvantage to online learning. Designing the cyber course to effectively meet students' needs can be a sizeable responsibility for the educator, as "there is no one-size-fits all approach to the design of eLearning, because each course is unique..." (Steen, 2008, p. 531). Data from the University of Central Florida's study (2005) on the learning impact of online courses found 77% of faculty believed preparation time for online courses to be significantly higher as opposed to preparing for comparable face-to-face sections (slide 6).

Individuals charged with the implementation of courses online not only have to be knowledgeable of the subject area they are teaching, but also "acquire new teaching skills, such as learning to facilitate online interactions and assess student online learning..." (Garnham and Kaleta, 2002, p. 4). Online teaching is has many different requirements than the brick and morar classroom. Dr. Steve Bain, professor of counseling education at Texas A&M University-Kingsville proposes that "Online learning is two dimensional. You can think it and write it, but you can't feel it. In other words, there is the physical and the cognitive" (personal communication, February 2, 2010). For those educators that have taught only face-to-face classes now have to be retrained to think in different dimensions as Dr. Bain has alluded to.

**Face-To-Face Time**

Lack of instructor face time is another issue that is seen as a downside to cyber learning, especially for students of particular learning modalities. For example, students that learn via the tactile/kinesthetic modality do best when moving, doing, and touching to facilitate their learning.
experience. Learning online for these students is not the ideal environment for them, as they perceive their educational experience to be "through abstract symbols, decontextualized and cast on a two-dimensional screen making it intangible to them " (Monk, p. 326 - 327). Graduate students in an online south Texas Educational Administration Discussion Board class conversation (May, 2010) lament this issue, "The hardest obstacle for me is the lack of face to face social interaction-I do like to talk and visit on a personal level-just not share in class discussions. I really like getting to know people and listen to their stories. I like to share stories about my family. I think you can network, problem solve and collaborate easier in person as well." Another student from that same conversation states,

Society still calls for a personal face-to-face connection, especially in education. Although online learning has many benefits, this phase of learning is severely needed. Each student needs to be individually challenged through a “class” setting. I know I personally answer questions differently online versus a face-to-face setting. Whether because of the time frame of assignments or the comfort of the home computer, I feel the student, especially at the Master’s level, needs the pressure of oral question and answer feedback.

Attending classes online is out of the physical realm of the campus thus requiring students to work at their own pace. Students requiring a "pacing mechanism, such as a weekly lecture..." may not be successful in the cyber classroom, as they may fall behind (Morrison et al., 2007, p. 219). "On the average, fully online courses have slightly lower success rates...than either their face-to-face or Web-enhanced counterparts" (University of Central Florida, 2005). There is little support and guidelines provided for students in an online course, as they are expected to seek their own resources for assignment and examination completion. This can be a daunting experience for some students as is evidenced in this graduate student's Discussion Board lament on the downside of online learning,

It definitely takes more of a commitment and a higher level of responsibility and maturity to take these types of courses. For the very same reasons I discussed on why these classes are
such a benefit, can be the same reasons why it could be detrimental to ones education. Some people need a structured and organized course framework. Some people need to be challenged and stimulated by a professor (in person on a regular basis). It's kind of like a coach pushing you to reach your potential. Could you do it without that person helping you and pushing you? Also, it's very easy to let time get away from you. If you don't have the discipline to make sure you are doing all your work on a regular basis, it can get away from you and you're playing "catch up" all year. Student GPA's have suffered from taking online courses. In my opinion they are a tougher course to take, compared to traditional courses or research type courses. One would think, as graduate students you should have reached this level of maturity and responsibility to deal with this. I'm not convinced it's as easy as what it seems on the surface. It can slowly creep up on you, without you even realizing how far you are behind. You need to have good study habits, and a keep to your structured schedule of providing time each week towards your studies. It's all on your shoulders, without a professor meeting with you two or three times a week.

**Parting Thoughts**

With the increase of e-Learning, consideration needs to be given to some of the advantages and disadvantages of online learning and how it affects all the individuals involved. As technological advances have become entrenched in the information world, individuals have become more exacting and better informed as to what choices exist for their education. Of these new advances, Berge (1998) hypothesizes collectively the demographic trends, political forces, economic factors, the need for lifelong learning, and the changing emphases in teaching and learning, there is a resurgence of interest in distance education both at traditional institutions of higher education and in organizations whose sole mission is distance education as with any situation, there are two sides to consider. (p. 1)

The two sides Berge refers to are the advantages and disadvantages of such an educational delivery system. As online education grows exponentially in popularity among programs of education, the deliberation of the strengths compared to the weaknesses is vitally important so as to be better prepared to cope with the challenges of working and/or learning in this environment.
After looking at these two sides Berge refers to, what is to be gleaned from this comparison? How has it really affected the entities involved in this evaluation? Since graduate students are affected the most in the end with the attainment of their Masters Degree or not, why not let them sum it up? The following are actual responses from a Discussion Board conversation (May 2010) between graduate students taking online classes to attain their Masters Degree in Educational Leadership at a south Texas university: "This has been a very positive experience." "It has been a great experience for me." "For me personally, when you weigh the good versus the bad, it's a far more benefit to having the opportunity to take online courses than not." "Online learning is the best thing that ever happen to help students finish their education."
References


1. Title:
   Learning the Heritage Language from the Student’s Perspective: Implications for Recruitment and Retention of the Heritage Learner of Mexican Descent

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6. Abstract: The purpose of this interpretive qualitative study was to explore, understand, and describe the past and present experiences of heritage learners (HLs) of Mexican descent who have been educated in the United States and were studying or had recently studied advanced Spanish at the university level. The researcher sought to understand their experiences and gain insight into the motivations and factors that lead these students to study advanced Spanish. This study is important because many HL students are entering and are expected to continue entering and will continue to enter educational institutions in the United States.

7. Bio: Alicia Gignoux teaches Spanish at The University of Montana in Missoula, Montana. She was born in the Philippines and is of Mexican American descent. She earned her Ed.D. in Curriculum and Instruction in 2009. She has a BA and an MA in Spanish, a minor in Asian studies, and a K-12 teaching certificate. Her areas of research have included Afro-Hispanic literature in Venezuela and heritage learners
of Mexican descent. She has also filmed a collection of oral histories in Guadalajara, Mexico.
Tennessee’s Statewide K-6 and Higher Education Mathematics Academies

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Tennessee has been awarded a grant from the U.S. Department of Education in the first phase of the Race to the Top competition. Only two states were selected in the first phase, and Tennessee’s award was $500 million. Arne Duncan, Secretary of the Dept. of Education, said, "Both states have statewide buy-in for comprehensive plans to reform their schools. They have written new laws to support their policies. And they have demonstrated the courage, capacity, and commitment to turn their ideas into practices that can improve outcomes for students." While the funds are for educational reform in general, this paper describes a two-fold idea on how Tennessee plans to improve mathematics education in the state.

Initially, we began working on this idea in anticipation of our state receiving the Race to the Top (RttT) funds. As early as February 2010 we began brainstorming on ways to improve mathematics education in Tennessee. By May 2010, we developed a two-fold idea that might change the paradigm of mathematics education in Tennessee. This is the subject of this paper.

Soon after Tennessee learned of its RttF award, it began allocating the monies to improve education. However, we were surprised to find out that no portion of the RttT funds were earmarked for statewide professional development. Part of the rationale for this lack of designation is that districts throughout the state were slated to receive half of the funds to spend as they deemed appropriate. The remaining balance of funds were disbursed according to the discretion of the Tennessee Higher Education Commission. For the first fiscal year of the grant, this is how they distributed approximately $20 million.

List of Projects from Race to the Top Managed by THEC: $20,369,136

1. Integrating Common Core Standards into Pre-Service: $1,350,000
   a. THEC will contract with an external source to provide training for college faculty. Training will be provided for faculty at no cost to the institution.
2. Integrating TVAAS into Pre-Service: $1,350,000
   a. RFP issued for development of module (geared toward SAS or Battelle).
b. RFP issued for higher education institutions to receive funds to implement the module as well as contract with SAS for additional studies related to graduate performance as measured by TVAAS.

3. School Leaders Supply and Demand Study: $172,800
   a. This will be a direct contract with UTK's Center for Business and Economic Research.

4. UTeach Program Replication: $4,104,000
   a. These will be direct contracts with the University of Memphis and the University of Tennessee, Chattanooga to implement the UTeach programs proposed through the RFP issued in March 2009.

5. Teacher Preparation Program Effectiveness Report Card: $432,000
   a. THEC will be working with teacher preparation programs to design a more effective report card. This will include the state-wide report card as well as institutional feedback reports related to graduates.


7. STEM Professional Development: $6,480,000
   a. RFPs will be issued for STEM Centers to provide professional development to K-12 teachers in STEM disciplines.

8. Tennessee Consortium on Research, Evaluation, and Development (TNCRED) (This will flow through to Vanderbilt University's National Center for Performance Incentives.): $3,240,000

An interesting observation from the disbursement schedule above is that $6.48 million has been set aside for professional development for K-12 STEM education. While this is a substantial amount of money for professional development, this amount will be divided among six regional hubs to distribute. Although we see this as a forward step in supporting professional development efforts, it still leaves Tennessee a little less unified and a bit more fragmented relative to its statewide effort.

The state spent a great deal of effort to write mathematics standards for statewide implementation in complying with the Common Core State Standards, a requirement in the RttT funding. But relative to how monies are spent on professional development, regions and school districts are left to their own discretion. Teachers and their students will certainly benefit from this investment of money. However, the state of Tennessee will continue to develop its teachers in a way that keeps them disconnected from one another.

Knowing that we have to work within the current structure, we plan to modify our ideas to fit a regional model, in the hopes that it will become exemplary for statewide implementation in the coming years. We developed a theoretical framework to base these ideas on as shown in Figure 1. In the following sections, we provide details to explain and describe the framework.
K-12 Education – In-service Teachers

The in-service teachers located in the public schools maintain involvement with the university in two ways: 1) taking courses for personal and/or professional growth and 2) cooperating in undergraduate education through field placements and student teaching. Their role as supervisors of undergraduates who are either in a field-placement observation role or the more intense student teaching role has placed them in a position of being a teacher educator.

In-service teachers often enroll in university-based courses with the intention of improving their pedagogy or content knowledge. This interaction between in-service teachers and the higher education teacher educators is often the extent to which these two groups interact. In this case, it is solely for the benefit of the in-service teacher’s professional growth. To our knowledge, these courses have no direct impact on the pre-service teachers that may be placed in the K-12 classroom throughout the school year.

Higher Education – Teacher Educators

One role of the teacher educators in institutions of higher education are teaching courses and they are typically located in one of two areas: 1) Colleges of Education and 2) Colleges of Arts and Sciences. The Colleges of Education house departments such as Curriculum and Instruction and Early Childhood Education. Primarily through the department of Curriculum and Instruction, pre-service teachers take a range of courses designed to teach them about the elements of effective teaching. With the exception of a single course that serves as a liaison between the university and the field placement, all of the other courses are taught within the university with no contact with the K-12 environment. For example, at East Tennessee State University, our students enroll in courses that require a field placement component, but the instructor of that course has no contact whatsoever with any part of the K-12 setting. A typical semester will have one field placement, approximately one credit hour, which is required as a co-requisite. The instructors of the courses operate independent of this K-12 component.
The College of Arts and Sciences is involved primarily with the content preparation for secondary education majors (grades 7-12, ages 13-18), as well as the content preparation for elementary teachers (grades K-6, ages 5-12). Preparation for secondary licensure includes a major in mathematics while preparation for elementary licensure includes three well-defined courses: Number Concepts and Algebraic Structures, Logic, Geometry and Problem Solving, and Probability and Statistics. A few of these university teacher educators are also uninvolved in the K-12 field placement component of the pre-service teacher’s education.

The other role of the university teacher educator is that of K-12 liaison. This important role is assigned to only a few individuals within the university. They spend most of their work time traveling to various K-12 sites where they monitor and observe the in-service teachers who are completing their field placement hours.

**University – Pre-service Teachers**

The lives pre-service teachers lead is unusual, but interesting. On one hand, they are placed in K-12 settings where they do not know the teachers, administrators, or staff. Their only connection to the school may be the higher education liaison who is not frequently present. They are on their own to negotiate a relationship with K-12 teachers who may or may not have any initial contact with the university liaison. Pre-service teachers often have a variety of tasks to complete within the field placement setting, and the K-12 teachers may be reluctant to allow them the freedom necessary to complete these tasks.

On the other hand, pre-service teachers are enrolled in many courses, as previously described, in the Colleges of Education and Arts and Sciences. Frequently, the coursework they take is not only disjoint from the K-12 setting in which they will eventually be placed, but their content and pedagogy courses are also bifurcated.

**A Plan for Tightening the Framework**

In this paper, we outline the two-fold idea to tighten the framework of mathematics education in Tennessee through the implementation of dual Academies. These two academies will target a separate group, both of whom are strategic in reforming and improving mathematics education in Tennessee.

1) Professors in institutions of higher education responsible for preparing future K-6 teachers, and

2) Teachers of mathematics in grades K-6.

The third component of the “new” framework, namely the cadre of pre-service teachers, is completely dependent upon the two groups identified above. Moreover, an implied, but natural outgrowth from this new framework is one that strengthens the influence of university teacher educators upon in-service teachers.
Tennessee Elementary Teacher Educators for Mathematics (TETEM)

TETEM is a group of two-year college and university professors that formed from a National Science Foundation (NSF) project to develop stronger, more common mathematics and science courses for elementary teachers. From 2005 through 2010, an NSF grant supported over 15 meetings held on several different campuses in Tennessee, and provided a forum for teacher educators to discuss content and pedagogy in mathematics and science for elementary teachers. The membership of the participating faculty and schools grew to include nearly all institutions of higher education within the state.

What emerged from this NSF program is a closely knit, network-connected, well-focused community of elementary teacher educators whose heart-felt mission is to better prepare in-service elementary teachers in the areas of science and mathematics. At these NSF sponsored meetings, ideas on content, pedagogy, teaching strategies, and technology were shared and discussed among two-year and four-year faculty who have earned mutual trust and respect for each other. During the meetings, the atmosphere was always warm, respectful, encouraging, and optimistic.

Because of faculty obligations, these meetings have ranged from 1 to 3 days. Although topics discussed were good and informative, we believe a week-long retreat just for those responsible for preparing elementary teachers in mathematics content and pedagogy would accomplish much more than the shorter meetings. About 60-70 faculty members from the institutions of higher education would participate in this retreat. The retreat includes two summer, one-week retreats, along with two mid-year, two-day retreats. Initial plans are to include sessions on approximately 25 topics that directly impact the curriculum that occurs in the elementary grades K-6.

A basic theme throughout the week-long presentations is one that promotes a broader, deeper view of K-6 mathematics, and one that encourages these aspiring elementary teachers and their future students to

- Acquire a Butterfly-view of K-6 mathematics, not a Caterpillar-view
- Understand that K-6 Mathematics is Challenging, but accessible
- Trust their own thinking skills, not the thinking skills of others
- Embrace Piaget’s powerful, far-reaching Conservation of Number precept
- Think flexibly with respect to problem solving and computations
- Believe in multiple-way (not one-way) strategies, both in problem solving and computations
- Make sense out of problem solving and computational strategies
- Accept Piaget’s Notion of Disequilibrium: Learning can be hard and confusing at first, but this is an acceptable phase before “Aha moments” arrive.
- Realize that they control mathematics, mathematics does not control them
A few examples of these mathematical topics are early counting concepts, algebraic thinking, and fractions as well as pedagogical topics such as literacy and art, technology, and best teaching practices.

**Tennessee Elementary Teacher Educators for Teachers (TETET)**

TETET is the name of the reform effort for teachers in grades K-6.

*Initial Leadership*

We plan to begin our search for Master Teachers, defined as teachers of record with at least 3 years experience in the classroom and significant professional development activity, early in the spring of 2011. Depending on how many regions we designate, between 30 and 36 Master Teachers will be recruited through an application process to undergo an intense training process, preferably in the summer of 2011, after which they will model future Academies to occur in the next 5 summers.

*Year 0 (begins spring 2011)*

Training of the Master Teachers by selected higher education faculty who were involved in the TETEM project. This should occur at a central location in the state for all of the Master Teachers. One goal is to create camaraderie among this group as well as a statewide professional network for these individuals. At least four Higher Education Faculty per region will do the training of these Master Teachers, for a total of at least 12. About half of these higher education faculty should be mathematicians who are favorable towards K-6 education, and about half should be mathematics educators.

*Participants (In-service Teachers):*

In-service teachers will be recruited, in pairs, from districts in all parts of the state with a two year commitment of Academy participation. Part of their two-year commitment will be a requirement to host student teachers and/or field placement teachers in their classrooms throughout the school year. Approximately 60 teachers per region will be accepted each year. In the summer of 2012, their would be 60 teachers. In the summer of 2013, there would be another group of 60 teachers plus the first group of 60 teachers in their second year, for a total of 120 teachers.

A leadership development component is available after the first two years as described below.

*In-service teachers becoming Leaders*

To extend the leverage of the Academies, a leadership component will be offered to keep a steady flow of leaders. If we identify 10% of the Participants each year to participate in a leadership development effort, we would be able to expand the
potential of the program at a nominal cost. For example, in a group of 60 participants, six could be recruited to meet three or four times in the coming school year to prepare for the following summer. The full process would take 4 summers. Table 1 shows the transition through a four-summer process.

Table 1

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To illustrate the impact of those seeking a leadership role consider two participants, X who started in the first summer and Y who did not start until the second summer. Table 2 illustrates their transition through the years, using five summers to illustrate the cycles.

Table 2

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By the fifth summer, we have the potential of having 12 teacher Leaders per region, assuming group sizes of 60 and 10% participation in the leadership function. Having many people trained as leaders is beneficial since not all of them may be able to participate each summer. With enough trained, they may not all be necessary for the current year Program, allowing for people to take leaves of absence, or other personal reasons for not filling the leadership role.

Regional Site Structures:

Each university will be required to have an undergraduate mathematics education group, preferably designated as an affiliate of the National Council of Teachers of Mathematics (NCTM) and Tennessee Mathematics Teacher Association (TMTA). Funds will be allocated to start groups where no current group exists. These funds will assist in the start-up of groups, including money for teambuilding events, travel for the student leaders to state, regional, and national conferences. The purpose of this is to ensure that our future teachers are involved in the professional growth and development of mathematics teaching on many levels.

Each institution of higher education will be required to have two faculty members as sponsors for these undergraduate groups: one from a mathematics department and one from an education department.
In-service Teachers who are participating in the TETET project will be used as guest speakers at meetings of the undergraduate groups.

**Regional Group Structures:**

The state will be split into 3 parts: west, middle, and east. Each region will host groups of in-service teachers for training. Training will take place at either the university, a state park, or other suitable site.

The two Academies set forth in this paper are intended to help Tennessee prepare to meet benchmarks set out by the U.S. Department of Education as part of the Race to the Top funding. By focusing on those in higher education who prepare K-6 pre-service teachers, as well as in-service K-6 elementary teachers, we hope to radically change the culture of teaching throughout Tennessee. Through this new framework, our goal is to improve both attitude and achievement in mathematics. Ultimately, we want students to reach their highest potential in mathematics and fulfill their vocational dreams.
Facilitating Students Attendance via An Online Attendance System

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Abstract

Many studies have revealed that attendance is strongly associated with student achievements, and have proposed different strategies to improving students' attendance. However, there are few studies investigating how to take students' attendance -- the key component to improve students' attendance. Taking attendance manually is inefficient since it will consume part of the limited class time. This paper describes the design of a simple online attendance system. The implementation of the system is currently undergoing at both West Virginia University and California University of Pennsylvania.

Introduction

The importance of attendance to students' performance is well understood. Regular attendance has been linked to higher achievement. Many studies have revealed that attendance is strongly associated with student achievements (Ali et al. 2009; Buckalew & Daly, 1986; Johnson, 2000; Jones, 1984; Ledman, 2010; Park & Kerr, 1990; Romer, 1993; Street, 1975), since the most invaluable time for students' achievement is the time spent in the classroom, compared to other time such as the time spent in discussion sections or the time spent studying outside of class preparing for the class session itself (Schmidt, 1983).

Consequently, strategies to improving students' attendance have been proposed (Reeves, 2008). However, there are few studies investigating how to take students' attendance, which is the key component to improve students' attendance. Manually taking attendance is a time-consuming process, especially for big classes in which the instructor may not recognize every student. In a 50-minute class, it may take 5 minutes to take students' attendance, which is very inefficient, considering that the most valuable and important time commitment in a course was the time actually spent in the classroom.
In this paper, we describe a simple online attendance system that can be used in classrooms to efficiently take students’ attendance. The online attendance system allows students to take their attendance from the computer they are using with a simple click. Although paid online education systems such as Blackboard, E-College or Desire2Learn are currently used at WVU or CalU, none of them has the function for students to take attendance.

The implementation of the system is undergoing at both West Virginia University (WVU) and California University of Pennsylvania (CalU). Once it is completed, the system will be used in computer-equipped classrooms at CalU. Codes of the system will be shared on the Internet.

**Design**

In this section we describe the requirements of an online automatic attendance system, based on which we will present the modules of the system.

**System Requirements**

Normally, in a classroom equipped with computers, each student will use a separate computer. Considering such a scenario, we define the following attendance policies.

- An attendance can only be taken during the class time. Students should not be able to take attendance before or after the class.
- Each student can take at most one attendance in one class.
- Attendances can only be taken within the classroom. In other words, only the computers physically located in the classroom can be used to take attendance.

The main purpose of this online attendance system is to save the instructor's time so that the instructor can efficiently spend the whole class time in teaching. It also needs to facilitate the instructor's managing students' attendance in some special situations, for example, students’ absence due to
sickness; students forgot to take attendance but realize it immediately after the class is over; some computers are broken and two students need to share a single computer. When these situations happen, the instructor may also want to manage the attendance records.

System Model

The requirements mentioned in the previous subsection will be achieved by the attendance models described in this subsection. This attendance system consists of three major components (Figure 1). Attendance webpage is the webpage students will use to take their attendances. Every student's name is listed on the webpage and at most one student can be selected. After a student selects his/her own name and submits the attendance, the information is sent to the second component, a common gateway interface (CGI) program. The CGI program running on the web server checks whether an attendance is valid based on the attendance policies described previously. If the attendance is valid, the CGI updates the attendance records; otherwise, it sends an error message back to the student's web browser. The third component is the management component. Basically, this component allows the instructor to modify students' attendance in the special scenarios described above and displays statistics data of the attendance.
References


Buckalew, L. W., & Daly, J. D. (1986). Relationship of initial class attendance and seating location to academic performance in psychology classes. Bulletin of the Psychonomic Society, 24(1), 63-64.


Figure 1. Modules of the proposed online attendance system


Nontraditional Student Transition to Higher Education

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Abstract

This study is intended to explore the experiences of nontraditional students as they transition to community college. The target population is students who returned to school after being separated from any type of formal education for 5 or more years who are underemployed or dislocated workers and finished at least one year. Community Colleges that have initiated programs to facilitate nontraditional students’ transitions are the focus. An understanding of the students’ personal motivations and the opinions of faculty and administrators about transition obstacles or innovations are explored using qualitative research methodology. Preliminary results show that once transitional challenges are alleviated with supportive services provided by the college, nontraditional students in community colleges are highly capable of completing an associate degree, obtaining a certificate or transferring to a 4-year institution. The greatest institutional resource is having one center where students have access to services that provide academic and personal support. Other important services include targeted mandatory orientations, advisory check-ins throughout the year, and supplemental instructors who are in the classroom and who are also available for tutoring outside of class.

The Current Study’s Relevance

A study of the transition pathways for nontraditional students\(^1\) is especially relevant because of the current economic climate in the US where massive job layoffs have resulted in large populations of unemployed and displaced workers who need further education to obtain gainful employment (Carnevale, 2009). Community college programs that focus on accelerated remediation and incorporate college ready skill development are showing promise in helping more students, especially nontraditional students, transition to community college. Theories on student motivation underpin the rationale of these programs. Research on the experiences of

\(^1\) The characteristics of nontraditional undergraduates include any or all of the following: delaying enrollment (i.e., not entering postsecondary education in the same calendar year as finishing high school); attending part time for at least part of the academic year; working full time while enrolled; being financially independent from one’s parents; having dependents; or being a single parent; does not have a high school diploma (National Center for Educational Statistics, 2002). For the purposes of this study, nontraditional students are 25 years or older, unemployed due to involuntary separation from employment and may have completed high school.
nontraditional students attending community colleges shows there is a need for institutional change involving both organizational and pedagogical adjustments (Kilgore & Rice, 2003; Achieving the Dream, 2005; Bailey, Calcagno, Jenkins, Kienzl & Leinbach, 2005; Pusser, et al., 2007; Bailey, 2008; Bailey, 2010; Jobs for the Future, 2010).

Examining the progress of programs that are designed to facilitate nontraditional students” transition is a timely inquiry. In light of President Obama’s unprecedented commitment to spend twelve billion dollars over ten years to increase community college completion rates – “which represents the first serious consideration by the federal government to invest in broad community college improvement” (Bailey, 2010). With “54 million adults who lack a college degree,” the ultimate goal is to bolster their skills so that the United States has a well-trained workforce that is employable in the jobs of the 21st century (Pusser, et al., 2007). Thus, it is important for college administrators and policy makers to know if the efforts to remediate adult students who are entering or re-entering college are effective and if students are responsive to the programs. Students who were employed in fields that have become obsolete and do not have any postsecondary education are in need of some form of higher education to compete for the types of jobs that are available today. For those who decide a college degree is the path to pursue, they will likely undergo a life-altering transition process.

**Literature Review**

Bailey (2008) acknowledges that most of the transition research is focused on remediation initiatives. Researchers have attempted to show causation between remediation and successful college-going, but their results have not provided any concrete evidence that there is a positive relationship. Bailey, et al. (2005) created an empirical model for measuring institutional effects on community college graduation rates using data from the National Education Longitudinal
Study (NELS) and the Integrated Postsecondary Education Data System (IPEDS). Unobserved factors like leadership, faculty relations, the local political environment, and the number of institutions a student attended were included in the production function to test whether they had any bearing on student outcomes. Bailey et al. (2005) found that graduation rates go down as school size increases; institutions with higher part-time faculty have lower graduation rates; where there are high concentrations of minority students, there are lower graduation rates; and financial factors did not have strong effects for community college students. Bailey et al.’s (2005) institutional characteristics study showed implications for greater student services. Students who face multiple barriers need more counseling and guidance. It was pointed out that other variables related to “pedagogical, faculty culture and organizational structure” were not analyzed and could be more influential than the NELS and IPED data measured by this study. Bailey et al. referred to these variables as “unobservable characteristics” and stated they are missing from a number of studies on suggest they be included in further research.

Other authors recognize the need for special institutional services for older students who must juggle multiple priorities in addition to attending school. Kilgore and Rice (2003) advocate for a special approach to program planning for adult education, whereby, the organization of academic, social and administrative functions take place in “a web of interrelated people.” Rice (2003) identified specific areas in institutions where changes are needed to accommodate nontraditional students. She said, for example, “many student services offices meet the needs of adult students by offering alternative office hours” (p. 54). She also mentioned that offering a “unique orientation program” provides a forum for nontraditional students to get information tailored to their needs and situations. Kilgore (2003) discusses a “holistic approach” to the higher education planning process which is flexible enough “to meet the diverse motivations and needs
of adult students…” (p. 87). Kilgore and Rice offer valuable information for understanding the transition factors in the context of curriculum and program planning for adult students. Their advice echoes earlier work related to adult learners’ motivation and ability to persist through college beyond the traditional college-going stage of life.

There is much literature about how the decision to attend college for older students is a life-altering (Hardin, 2008), mentally challenging (Conley, 2008) expression of self-efficacy and economic survival (Bandura, Barbaranelli, Caprara and Pastonelli, 1996; Zajacova, Lynch & Espanshade, 2005). One example is Courtney’s (1992) work that explored the question the question “Why Adults Learn?” Courtney’s offered a “theory of participation in adult education.” He discussed the evolution of adult education in community colleges and cited historical research related to the sociology of participation, the psychology of motivation, decision-making models, theory of action, and participation in voluntary institutions. Courtney asserted several thought-provoking questions in his conclusion, such as the futility of continuing research on why more adults are not participating or why they drop out. He goes on to propose that perhaps less attention is needed researching motivation and the “underlying personality characteristics of disadvantaged adults” and more attention to “whether the institutions are really designed for those who need education the most” (Courtney, pp.145-146).

Several other scholars of Courtney’s time came to a similar realization, such as Bean and Metzner’s study that focused solely on the experiences of nontraditional student. Bean and Metzner (1985) found several poignant factors that affect persistence among nontraditional undergraduate students. Bean and Metzner’s described these factors as “environmental variables” and included student characteristics such as seeking economic advancement, commuting to school as opposed to living on campus, older age (beyond 24 years), and the need
to balance family, work and school responsibilities simultaneously. Bean and Metzner (1985) assert that “environmental support compensates for weak academic support, but academic support will not compensate for weak environmental support,” (p. 492). They found that the environmental variables, which often relate to family responsibilities, took precedence over academic variables, such as grades. This means that the more environmental support a nontraditional student can maintain, such as child care, the better he or she will be able to sustain themselves academically. Thus, environmental variables are often of greater significance and impact nontraditional student transition and persistence more than cognitive ability and identity development factors as Tinto’s theories suggest.

Tinto’s (1987) original model of student departure explores undergraduate student transition in the cognitive and social integration domains. His later theory of student departure has influenced many college administrators and is widely used by education scholars to examine “the adequacy of past theory and the effectiveness of existing programs to enhance student retention on campus” (Tinto, 1993 p. ix). However, his theories have also been greatly debated and criticized as lacking relevance for graduate, nontraditional and minority students, and for excluding factors from outside the college environment that affect a student’s persistence. Even though Tinto (1993) extends his model to include a theory of graduate persistence, which includes nontraditional students, the basic premise is rooted in the undergraduate attrition rationale and also does not take into account institutional inhibitors that are beyond the individual student’s ability to become fully socially integrated.

A conclusion from the Bean and Metzner study as well as Courtney’s book is that nontraditional students have many competing factors that affect their college-going and persistence, many of which require intuitional support through special services. Despite the
efforts of scholars to shed light on the needs of nontraditional students over the past three decades, most community colleges continue to operate pretty much in the same way. Bailey et al.’s (2005) institutional characteristic study showed that several aspects of the way community colleges are currently operating result in lower graduation rates. It also showed implications for greater student services. So what are community colleges doing today to address the special needs of nontraditional students?

Theoretical Framework

Community college programs that focus on accelerated remediation and incorporate college ready skill development are showing promise in helping more students, especially nontraditional students, transition to community college. Theories on student motivation underpin the rationale of these programs. The learning strategies are based on pedagogical methodology research which has proven to be most effective for teaching adult students. Many scholars believe that the motivation to start or return to college is a function of a person’s self-efficacy (Zajacova, Lynch & Espanshade, 2005) and nontraditional students often undergo a particularly agonizing mental and psychological adjustment (Bandura, Barbaranelli, Caprara and Pastonelli, 1996; Conley, 2008; Hardin, 2008). Although there has not been a lot of research on the specific experiences of nontraditional students attending community colleges, research has shown there is a need for institutional change involving organizational and pedagogical adjustments (Bean and Metzner, 1985; Terenzini, 1992; Kilgore and Rice, 2003; Bailey, 2008). Achieving the Dream (ATD) was created to address the institutional processes that impede the success of student populations who are most at-risk and “have faced the most significant barriers to success” (Achieving the Dream, 2005).
The work of Bailey et al. (2005), Bandura, Barbaranelli, Caprara & Pastorelli (1996) and Terenzini (1992) and has greatly influenced the current research. Bailey et al.’s work identifies the characteristics of institutions and their effects on student success. Bandura et al.’s work on self-efficacy theory provides insight into the psychology of motivation, especially for understanding why older students’ return to school, particularly during periods of financial difficulty. And Terenzini’s work illuminates the impetus for community college administrators to implement pedagogical and institutional changes to better accommodate nontraditional students’ needs. The Achieving the Dream initiative is of interest because it is a nationally recognized program designed to “improve student progression” through comprehensive institutional improvement (Achieving the Dream, 2009).

Missing from the current literature are studies on how programs, such as Achieving the Dream, are progressing and whether they are impacting students’ orientation to learning enabling them to persist and eventually finish with an associate degree or vocational certificate. Evidence of ATD’s national effectiveness is forthcoming, as the current cohorts matriculate through the programs and states continue to develop data-collecting systems for tracking student performance. There is positive evidence that schools that have implemented the ATD strategies are showing better retention rates since 2004 (Jaschik, 2010), but this data represents all of the ATD participants. What are the outcomes of the nontraditional student population? At present, the ATD program is aimed at helping traditional-aged students. How many community colleges are using it to help nontraditional students and are they realizing any progress in terms of persistence and retention? These are relevant questions since the majority of nontraditional students enroll in community college as the entry point to higher education (Bailey et al., 2005).
The purpose of this study is to examine the experiences of nontraditional students attending community colleges that have implemented institutional changes in order to facilitate nontraditional students’ transition; and to examine colleges using the strategies prescribed by the ATD program. The research questions are: Why do nontraditional students have trouble transitioning and persisting through their first year of community college? What are the institutional characteristics that have facilitated nontraditional students’ transition?

Methodology

Data Collection

The majority of nontraditional students enroll in community college as the entry point to higher education (Bailey et al., 2005), thus, the target population is students who returned to school after being separated from any type of formal education for 5 or more years. They are also underemployed or dislocated workers and have finished at least one year at the institution. A qualitative multi-case study approach seems to be the most appropriate for the study because of the replication logic in the case study process (Yin, 2006) and the use of phenomenologically based interviewing, which produces in-depth life stories of the participants (Seidman, 2006). The first part of the research is an exploration of personal characteristics affecting motivation among students. An understanding of the students’ personal motivations and elements of their transition process was gained through 45 minute, tape-recorded, face-to-face interviews. The second part relates opinions about students’ transitions and developmental education innovations from faculty and administrators, also through 45 minute, tape-recorded, face-to-face interviews. The interview questions for students were designed to probe their feelings about going to college and how they expected it would impact their future. The questions for the faculty and administrators were related to the ATD academic goals that include: successful completion of remedial
instruction; successful completion of “gatekeeper” courses in math and English; achieving a grade of “C” or better; persistence through multiple terms; and earning an associate degree or certificate (Achieving the Dream 2009). The interview questions also inquired about the ATD targeted areas of institutional improvement that include: leadership committed to “achieving equity in student outcomes across racial, ethnic and income groups” (p. 8); establishing a data collecting process for tracking student outcomes; engaging all departments across the college as well as community stakeholders; developing planning processes using the data on students outcomes (Achieving the Dream 2009).

The main college chosen for the current study (Case A) has participated in the ATD program since 2007. Two additional schools were included because they were in varying stages of implementing the ATD program. Case B has developed the ATD strategy framework and will be rolling out the implementation in the fall of 2010. Case C recently adopted the ATD initiative and is in the strategic planning stage. The researcher felt that by looking at schools in varying stages of implementation, a more comprehensive view of the ATD initiative could be obtained.

The interview participants were recruited on site once permission was granted by the appropriate administrator. For Case A, three students who were visiting a resource center were asked to participate. The interviews were conducted in a private office. For Case C, the participant was randomly recruited at a campus café. Permission was not granted for access to students at Case B. The 45 minute interview format provided ample time for the participants to give thoughtful responses to the questions. Each participant was given a $10 restaurant card.

Limitations

This study was the first phase of research on community colleges utilizing ATD to facilitate nontraditional students’ transition to college. A limitation of the study was the number
of institutions that could be examined during the limited research period of 6 weeks. Another limitation was the availability student participants from Cases B & C because of the institutions’ status in implementing the ATD program. Although the number of participants for Case A is small, the researcher found the in-depth information that she was seeking through the interviews of students, faculty and administrators. The continuation of this study will include returning to Case B and C as well as adding other institutions that are further along in the implementation of ATD. A future goal is to compare the students’ interview responses with those of the faculty and administrators to identify distinct patterns of student and institutional characteristics across multiple cases.

The next phase of research will include on-site observations, data on the college setting, student-administration interaction, student-faculty interaction, and student engagement inside and outside of the classroom. To supplement the interviews and the observations, the researcher will also review the school’s history and public records to establish a more informed perspective of the state-of-the-environment at each site related to nontraditional student transitions.

Data Analysis

The tape-recorded interviews were transcribed and uploaded for analysis in QSR NVivo8. The responses were coded manually to include certain categories which were not specifically named in the interview responses, such as “transition process” and “adjustment.” Other codes were created automatically from the frequency of certain text or phrases, such as “use of technology” and “intimidation.” As additional sources become available, the researcher intends to query combinations of categories to explore any special connections among them. Because there were so few sources from which to draw at this phase of the study, the associations were not considered statistically meaningful at this time. However, the data from the
interviews do provide valuable information about the experiences of students and institutional characteristics from Case A. At this stage of the study, the answers to the research questions were derived directly from the interview responses.

**Current Findings**

For Case A, three students were interviewed. All of the participants are over age 40, had successfully completed their first-year and were enrolled for the upcoming semester. Two administrators were interviewed, a dean and a director, and one full-time faculty member. There were no students for Case B and one interview with a dean. There was one student for Case C who is 35 years old and was continuously enrolled for two years, but did not complete the degree, transfer or receive a certificate. One administrator was interviewed for Case C, a director of student services. The answers to the research questions were derived from participants’ responses as described in the following paragraphs.

**Mental and Psychological Adjustments**

*Why do nontraditional students have trouble transitioning and persisting through their first year of community college?* The students reported a lack of confidence, a fear of change, and never being challenged in the way college challenges them. This response is consistent with Conley’s (2008) findings about the need for students to be mentally prepared. Many students become lost and disengaged in the process because of a lack of information about what it requires to be “college ready. They also report difficulties in navigating the college systems, such as registration, financial aid, advocating for themselves and seeking assistance. One of the administrators for Case A mentioned:

They have a sense of being kind of outside of the education experience. Because you are already taking them out of the context of life, new contacts, new people and new stuff to
navigate. The other challenge that I hear is the work after school. With a job you go home and with school you go home and do homework.

The faculty member and the students echoed a similar sentiment. Successful completion of a degree requires learning a new set of behaviors, such as cognitive strategies, content knowledge, academic preparation and contextual skills (Conley, 2008). A student who is college ready is familiar with college culture and academic expectation which enables him or her to relate to professors, classmates and family members differently than he or she did in high school. For nontraditional students, who initially chose not to pursue education beyond high school, these skills are never cultivated. The director of the student service center described a transition problem in the context of learning how to use the computer.

They didn’t know how to use the mouse, didn’t know how to use Word, didn’t know what that little cursor thing was, didn’t know how to set margins. This can send them right over the edge. Not only were they stressed with losing a job, not having a job or training for a new job or having a lot of responsibilities, not having computer skills was the last straw.

The director’s comment illustrates how one difficulty can be compounded into a feeling of total defeat, which explains why many older students start at community college completely terrified and unsure how they will do it. They often start and stop-out, then return. Hardin (2008) describes adjusting to the challenges and rigors of going to college as “creating a new identity.” There are many characteristics of nontraditional students that “put them at risk for being unsuccessful” (p. 50), they include: part time enrollment, full time jobs, financially responsible for dependents and being academically unprepared. Hardin (2008) classifies these characteristics as stemming from “institutional barriers,” “situational barriers,” and “educational barriers.” The most challenging to overcome are the “psychological barriers,” which include “inadequate coping skills due to lack of confidence, peer-self image and school created anxieties based on negative prior experiences or expectations about outcomes” (p. 53). It is sometimes difficult for
older adult students to start over in a new discipline, especially if they once had a successful career. This causes feeling of “vulnerability” as he or she adjusts to the beginner role in an academic program. For some it causes a mid-life identity crisis. A male student mentioned that not only were there mental challenges, but he faced physical ones as well.

Um, it is really a challenge basically when you’ve really been out of the workforce for so long ago that you readjust, you know, to how they conduct things [in school]. You are used not used to sitting down in a room with computers and stuff like that and you’re used to being in a factory, a factory, where you stand for 3-4 hours, so you try to learn how to do that.

Overcoming transition challenges involve a range of changes that differs from person to person. As Conley and Hardin suggests, if the readiness skills were taught throughout secondary schooling or included in meaningful orientation programs, more students would be prepared for success and the transition to higher education would be less difficult. Adequate psychological preparation would reduce the stressors of multiple mental adjustments involved in developing a college disposition (Hardin, 2008).

The researcher observed a change in the students’ disposition when they talked about their adjustment period. As students talked about “the dark days,” as one student referred to it, their voices became barely audible. And when they started talking about how things are going for them now, the volume went way up, their body position shifted and the tone of their voices was more cheerful. The students explained that going to college made them feel proud and confident. They also exhibit diligence, curiosity and a sense of commitment.

I am ambitious now. I must make sure I get good grades. You have to keep pushing yourself. And another exclaimed “You start finding out you can do things that you didn’t really think you could do. But it does take sacrifice. I think I feel better about myself.

The students’ attitudes support Zajacova et al.’s (2005) study on self efficacy and stress. This research posits that self-efficacy beliefs affect college outcomes by increasing student motivation
and persistence to master challenging academic tasks and by fostering the efficient use of acquired knowledge and skills. It also suggests the extent to which a person perceives a situation as a threat versus a challenge affects a person’s ability to manage external demands and manifests his or her level of self-efficacy. On the other hand, “people confronted with high stress and anxiety on a regular basis could show lower levels of self-efficacy in their decision-making” (p. 680). The students expressed a similar emotional tug-of-war as they learned to process their transition as a challenge rather than a personal threat against everything they already knew.

The faculty and administrators also notice the change in students who struggled initially, but managed to persevere. A dean commented, “But by gosh they persist and they do pretty well in their classes!” The dean also talked about the overall performance of nontraditional students.

What I”m getting at is that the older student does persist higher than average and their cumulative grade point average is 3.13 overall. The overall GPA for this school is like 2.0. So they are doing better and they are persisting better.” She further explained “You can see them as students and when we give them a clear direction, goals and support they use all that. They parlay the resources, use all of them and they follow the advice. The success of the nontraditional students at this institution is attributed to the efforts of the faculty and administrations that have used the ATD tools to create strategies aimed specifically at the nontraditional student segment. The specific institutional elements that have made a significant difference in facilitating student success are discussed in the next section.

While listening to the students’ stories, the researcher wondered if their longevity could be a factor in overcoming seemingly insurmountable obstacles. The students in this study were all age 35 or over and had worked at previous jobs for many years. Does age affect a person’s resilience? Gecas (1989) offers a view of older students in his assessment of self-efficacy “over the life course,” which adds another dimension to understanding nontraditional students” transition that has been largely understudied. From his perspective, self-efficacy in later years is
more related to consequences of life rather than a specific age. If events occur more “untypically” than one would expect in comparison to the experiences of peers (i.e. returning to school), then there are possible negative associations with “off-time” events. Events that increase “role strain, economic or social disruption” [such as losing a job] can have a negative impact on self-efficacy (p. 307). The resulting effects are the “psychological barriers,” as Hardin (2008) describes, which causes challenges for older students attempting to adapt to the college environment. Conversely, Gecas believes this type of adversity is less likely to affect the self-efficacy of older students because they have developed the adaptive capacity to deal with crises over the course of their lives. This idea supports a more positive view of the capacity of older students to adapt to the rigors of going to college. The students of the current study certainly exhibited great resilience, a sense of pride and optimism toward using their newly acquired knowledge. All of the students recognize that going to college has not been easy, but they have embraced it and are eager to continue.

I made mistakes when I was younger as a former drug addict. Honestly, it’s a struggle, but I feel good about me going through this struggle. I think I’ve learned how to help myself and how to get resources and how to search for resources.

For another student, there have been certain epiphanies, such as “Honestly, one of the things that I learned is that, if you are struggling, you need to ask for help.”

Perhaps the transition to college for older nontraditional students is less about creating a totally new identity but more about expanding their life-long identities with a new level of academic efficacy.

**College Services**

What are the institutional characteristics that have facilitated nontraditional students’ transition? The greatest resource in Case A is having one place where students can access multiple services such as tutoring, counseling services, computers, printers, and other students.
As Kilgore and Rice (2003) stated, nontraditional students require a special approach to program planning, whereby, the organization of academic, social and administrative functions take place in “a web of interrelated people.” A faculty member commented on the student service center: “They are not going to show up at the tutor center unless they know somebody who says, yes this is a cool place” And a student gave an example how she used the center.

I like their counseling because I went to their counseling for a while, which is paid for in the tuition. When I started to feel stressed with home and balancing, I was able to sit down with a social worker and make a plan. The center, I highly recommend it especially when you are just getting back. They have staff that will help you sit down and teach you how to learn to study again and use the computer and utilize your time.

This student has successfully completed all of the prerequisites and is moving into the nursing program in the fall. She credits her success to the people in the student center who helped her through the initial difficulties.

Other important services are targeted orientations that are mandatory, advisory check-ins throughout the year, and supplemental instructors who are in the classroom and who are also available for tutoring outside of class. Rice (2003) mentioned that offering a “unique orientation program” provides a forum for nontraditional students to get information tailored to their needs and situations. All of the administrators in this study concur with this recommendation.

They need their own orientation because nontraditional students need to tell you their life and have that attention. And they have a different set of questions than younger other students who are coming in, so we try to keep that in mind… It’s a different conversation.

Kilgore (2003) discusses a “holistic approach” to the higher education planning process which is flexible enough “to meet the diverse motivations and needs of adult students…” (p. 87). One of the deans remarked that “nontraditional students thrive in a guided environment, whether it is the cohort based or the learning community models, they perform better when they are familiar with their surroundings.” A faculty member from Case A expressed that “the adjustment [to college] for learning community students is easier than students who are not in a guided environment.”
The program director from Case C echoed a similar sentiment by saying “Certainly, they feel stronger in school in the cohort-based community.”

Case A exemplifies the holistic approach to meeting the needs of the students through the creation of a student center that caters to nontraditional students’ unique circumstances. The administrators explained how their institution rose to meet the challenge:

We have the same services for everybody, but we have beefed up the services for nontraditional students. We are the support services arm of the college. We provide peer tutoring, paraprofessional tutoring (those are tutors that have already received their associate degree), and adjunct instructors who are teaching something here at the college. Most are tutoring in writing, some a little bit of math and the others are tutoring whatever the college needs.

For nontraditional students we have advisors that are particularly assigned for nontraditional students. They take a little longer in the advising session and they do a more thorough discussion, I think, of what the students are going through and what skills they come from. Generally, especially a displaced worker will not see the skills they have, like this was my job, but they don’t translate, they have trouble translating skills into something else. So they help with that. And we have social workers that help them talk through the emotional things they are going through. The advisors and social workers are connected in the community and are familiar with the resources they can offer if you are having trouble making this bill or finding this class.

The efforts to accommodate nontraditional students are showing positive results for Case A. The dean shared some of the data from the most recent semesters. She was able to extract specific information about the No Worker Left Behind participants who are all nontraditional students.

We had just looked at our No Worker Left Behind population and the result we have for that, kind of typically, from semester to semester like from fall to winter, our persistence rate hangs around 70 -72%. Here’s the numbers for the traditional versus nontraditional students in the SI [supplemental instruction] and non-SI for the math class. With the SI situation, 67 % success compared to what...15% higher than the traditional age. Success in this class is 2.0 or higher.

The collecting of group-specific information is an outcome of implementing the ATD strategy.

The only student from Case C told an interesting story about her experience. She explained that upon entry to college, her intent was to complete the program in two years.
Unfortunately, institutional limitations coupled with changes in the spouse’s employment (forces beyond the students’ control), the student’s progress toward completion has been suspended. As with all of the student participants, inescapable life situations had a direct impact on their transition and ability to persist in college. When these circumstances are compounded or if there are insufficient institutional resources to alleviate transitional difficulties, such as inflexible class scheduling, the primary barriers are institutional as well as environmental. As previously mentioned, Bean and Metzner’s (1985) study showed nontraditional students’ persistence is closely connected to environmental variables. Thus, as in the student of Case C, institutional barriers coupled with environmental variables had a greater impact on her persistence than cognitive ability and identity development factors.

**Conclusion**

Case A is an example of an institution where the implementation of Achieving the Dream for nontraditional students is showing success. It was reported that many nontraditional students are out-performing the traditional age students because of the focused support available to them. Learning communities provide a guided environment where the students are less intimidated by more advanced students and get critical assistance in navigating college systems. The dean from Case A reported that nontraditional students in Michigan’s No Worker Left Behind program (they are also enrolled as ATD participants) are persisting at an average of 70%. In the fall semesters, the persistence average rose to 86% in 2008 and 87% in 2009, which is higher than the rest of the college’s population. The average grade point average for the No Worker Left Behind student is 3.13 while the average for the total student population is around 2.0. Another important strategy is the use of supplemental instructors for developmental math classes. The nontraditional students’ success rate is 67% compared to traditional students whose success rate
is 15% (success is achieving a grade of 2.0 or better). At present, the faculty is in the process of developing supplemental instruction for other subjects, such as reading and writing.

The progress of the nontraditional students in Case A is attributed to the institution’s attention to the “environmental factors” that previously impeded their transition. As Bean and Metzner’s (1985) study found, environmental variables are of greater significance and impact nontraditional student transition and persistence more than cognitive ability and identity development factors, as Tinto’s (1993) theories suggest. The literature also recommends special orientations to address nontraditional students’ specific questions and concerns (Terenzini, 1992; Kilgore & Rice, 2003; Bailey et al., 2005). For students that have persisted beyond the first year, their motivations (as an expression of self-efficacy beliefs) are quite different than the motivations of traditional students especially during periods of financial difficulty (Gecas, 1989; Bandura et al. 1996).

It is hoped that information from this study informs college administrators of the special academic and psychological needs of nontraditional students. The preliminary results suggest that when transitional challenges are alleviated with supportive services provided by the college, nontraditional students are highly capable of completing an associate degree, obtaining a certificate or transferring to a 4-year institution for a baccalaureate degree.
References


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Culturally Responsive Practices for Students with Autism Spectrum Disorders

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**Abstract**

With the current estimations of autism spectrum disorder (ASD) prevalence at 1 in 110 and the increasing number of culturally linguistically diverse (CLD) students attending early childhood programs and preschools, educational professionals, speech language pathologists, and other related service providers are presented with an opportunity to develop a more culturally responsive approach to the treatment of students with ASD and how they interact with the student’s family. The purpose of this review of literature is to gather information in regard to current best practice in meeting the child and his/her families’ needs through culturally appropriate practices. Utilizing a combination of three practice components, educational professionals, speech language pathologists, and other related service providers can improve their knowledge and skills to a new level that will be more responsive to diverse populations. The practice components discussed are cultural competence, family centered involvement and child centered development of activities and methods.
In search for participation and transparency
- Evaluating organization for reform of national course syllabi in compulsory school

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Abstract

The article present and discuss how a national reform initiative was created and carried out during 2009 and 2010 in Sweden aiming at change of national curriculum and course syllabi for compulsory school. The research objective is to study how the organization for the revision was constructed and how the work process was carried out. The vision the National Agency for Education had was to increase transparency and participation during the process, compared with earlier revisions of curricula and syllabi. As a part of the transparency the work with the revision was also evaluated. It is part of the evaluation that is referred to in this study. As a way of evaluating the work participants in the revision were asked to comment. The participant group comprise those who worked with the first version of the course syllabi such as workgroups, reference groups with experts and schools all over the country, researchers, teachers and the staff at the National Agency for Education who wrote the last version. The method used for data collection comprises text analysis, observations, interviews and questionnaires. A conclusion that can be made from the design of the reform process is that transparency and participation can be discussed both from a political and a practical perspective. The different actors found the model for the organization suitable, but gave a lot of suggestions for improving the work process in general.

Keywords:
National reform, Compulsory School, Participation, Evaluation
A Review of Transition of International Education and Educational Co-operation in Developed Countries and Developing Countries

SAKAGUCHI Chie

Abstract

This study reviewed the transition of international education and educational co-operation as the approach of global society in terms of education in developed countries and developing countries. While developed countries recognized the significance of education for understanding the world imbalance from their aspects such as Development Education and World Studies, developing countries put the expansion of insufficient basic education before everything else. The review should be able to reveal and present the diversion of education from point of views of developed countries and developing countries which were less seen in preceding studies. Therefore, how international education and educational co-operation have transited would be deeply focused on and described in the review. And, it extended upon the article on Sakaguchi (2010) in the bulletin of Graduate School of Social Sciences and Humanities, Chiba University at the history of international education and educational co-operation.

The rise of international education in developed countries and construction of basic education in developing countries were characteristic of 1960s. A small number of developed countries occupied the great majority of the world until World War II ended. Colonized countries gained independence after 1945, although obvious differences between developed countries which were placed generally in the Northern parts of the world and developing countries which were mainly in the Southern parts of the world were there. Hence, the world economy was polarized rapidly and the situation was recognized as North-South problem. Actually, the United Kingdom and other European nations have started to notice North-South problem from the beginning of 1960s. Consequently, the promotion of Development Education which is the study of understanding the structure of North-South problem, and considering the way of resolving it was directly related with attention of North-South problem (Osler, 1994).

At the same time, construction of basic education system became one of the urgent issues in developing countries (Kuroda, Yokozeki, 2005). The literacy rate in developing countries was terrible low in 1960s. UNESCO held on the regional international conferences for educational development at Karachi in 1960, at Addis Ababa in 1961, and at Santiago in 1962. In these conferences, the goal of the implementation of basic education till 1980 (and till 1970 in Latin America) was resolved.

Thereafter, establishment of several international education standards in developed countries and
stagnation of expansion of basic education in developing countries were appeared from 1970s to 1980s. In the United States, Global Education was introduced in 1970s (Yoshida, Ito, Ishimori, 2009). In 1970s, the United States was in the Vietnam War and people were disgusted by that linger war. So, the educational activities were based on reflection against Americanism such as the war, and recognition of multicultural country the United States was (Tanaka, 1994). And it was taken over as World Studies in the United Kingdom. The idea of World Studies is to learn the world wide issues, and to acquire knowledge and attitude to live in the multi-cultures and people (Otsu, Mizoue, 2000). Almost the same time, the Labour Party government established Development Education Fund in the Overseas Development Administration in 1977 in the United Kingdom. Development Education has been expanded that scale gradually.

Then, UNESCO suggested “recommendation concerning education for international understanding, co-operation and peace and education relating to human rights and fundamental freedoms” in 1974. This recommendation has been useful substantial conception in terms of education for the world issues even it was adopted more than a quarter of a century ago (Otsu, Mizoue, 2000).

Whereas, the generalization of basic education was incomplete in developing countries. In fact, primary education was expanded immediately after the regional international conferences. However, population growth in developing countries was much rapidly (FASID, 2010). And then economic crisis was happened to many parts of developing countries in 1980s. It obliged educational budget to cut, and development of social sectors was standstill.

Then, educational co-operation for basic education has been progressed after 1990s. The World Conference on Education for All was held under the auspices of World Bank, UNESCO, UNICEF and UNDP in Jomtien, Thailand in 1990. The biggest purpose was nation and global society should have responsibility on the assurance of basic education. This international conference influenced educational policy in developing countries and educational co-operation directly. Education for All (EFA) became the key word of educational development hereafter.

Ten years later, World Education Forum was held on Dakar, Senegal in 2000 as the follow up conference. Dakar Framework for Action was established to achieve goals for EFA which was still unreachd since 1990.

In the same year, United Nation Millennium Summit in New York. Millennium Development Goals (MDGs) was put together with eight goals and eighteen concrete precepts (MOFA, 2009). It included two educational goals of the spread of basic education and gender equality in terms of education as well as Dakar Framework for Action.

The history showed that international conferences and international educational co-operation make a point of educational development for social cohesion (Kuroda, Yokozeki, 2005). The educational stream of the world has been working on the achievement of MDGs at present.

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Main References


BULLYING AT A NON-PUBLIC SCHOOL:
AN INTERVENTION PLAN

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Master of Arts

By
Jean Pellerin
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DEDICATION

To the students of The Kayne ERAS Center:

Thank you for your participation in this study and for all I’ve learned from you.
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The completion of this project would not have been possible without the assistance and support of many individuals. I would like to thank my thesis committee members: Dr. Menzies, Dr. Symon, and Dr. Garcia. I am particularly grateful to Dr. Menzies for chairing the project and for her guidance, support, and unending patience throughout this endeavor. I am especially thankful to her for taking the time to read my drafts and provide me with her invaluable feedback and insights. The amount I learned from her is immeasurable and I would not have been able to accomplish a project of this magnitude without her. I am grateful to Dr. Symon and Dr. Garcia for agreeing to be on my committee and providing me with their astute guidance and expertise.

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ABSTRACT

Bullying at a Non-Public School:

An Intervention Plan

By

Jean Pellerin

Bullying is a serious problem for schools. It is difficult to address as it often goes unnoticed by teachers. Victims of bullying experience stress, low self-esteem, and depression. This study examines bullying at a non-public school that includes elementary, middle, and high school students. A School Wide Positive Behavior Support Plan was introduced to reduce bullying behaviors. The plan’s implementation consisted of training, defining expectations, precorrection, reinforcement, and suggestions for alternate behaviors. Student perceptions of bullying and the program’s effectiveness were measured using self-report questionnaires. Results indicated a significant decrease in student reports of bullying.
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CHAPTER 1

Introduction

Statement of the Problem

Around the world, reported instances of bullying have reached alarming numbers and involve many students (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Olweus, 1993, 1997, 2001; Rigby & Slee, 1991; Stephenson & Smith, 1989; Swearer & Espelage, 2004; Wong & Lo, 2002). In the United States, 24% of students report being bullied once a week (Dinkes, Cataldi, & Lin-Kelly, 2007). Smith and Brain (2000) define bullying as an aggressive behavior intended to cause emotional, social, or physical harm to others of lesser power. Bullying is neither random nor limited to physical aggression. Bullying behaviors include verbal abuse, harassment, threats, intimidation (Patton, Glover, Bond, Butler, Godfrey, & DiPietro, 1998), name-calling, teasing, inappropriate gestures, social exclusion (Olweus, 1991) gossiping, suggesting the shunning another person, spreading rumors, and befriending someone out of revenge (Bjorkqvist et al., 1992). Olweus (1993) defined open attacks on a victim as direct bullying and social exclusion as indirect bullying. In all of its forms, bullying is an unacceptable behavior that has been shown to have negative effects on students (Boulton, Trueman, & Flemington, 2002).

Bullying can affect a student’s academic and psychosocial well-being and self esteem (Crick & Bigbee, 1998; Hawker & Boulton, 2000; Hodges & Perry, 1999; Olweus, 1994a, 2001) and can have negative effects for all involved. Students with learning disabilities who are bullied are especially prone to low self esteem, feelings of
inferiority (Forness & Kavale, 1996), loneliness, depression, anxiety, (Hawker & Boulton, 2000; Nabuzoka & Smith, 1993; Olweus, 1994b, 2001; Rigby, 2002) and can have psychosocial problems that prevail into their adulthood (Hellendoorn & Ruijssenaars, 2000). Bullies are more likely to drop out of school, use alcohol and drugs (Gottfredson, Gottfredson, & Hybl, 1993), engage in domestic violence (Rigby, Whish, & Black, 1994), and have criminal convictions (Olweus, 1994a). Peer bystanders can prolong bullying by providing reinforcing attention (Craig & Pepler, 1995), and they, too, may end up feeling sad, depressed, angry, guilty, confused, disgusted, or fearful that they may become the next victim (Lodge & Frydenberg, 2005). Interventions to address bullying are considered a matter of high priority by educators and school administrators (Lodge & Frydenberg, 2005).

*Bullying at The Kayne Educational Resource and Service (ERAS) Center*

The Kayne Educational Resource and Service (ERAS) Center is a Non-Public School that serves K-12 students with special needs including those with emotional disturbance (ED), autism (AUT), mental retardation (MR), specific learning disabilities (SLD), and other health impairment (OHI). The school is in Culver City and the students are transported by bus from varying neighborhoods. Some of the inappropriate behaviors exhibited by the students are stealing, tagging (gang related graffiti), foul language, lying, and bullying. These behaviors seem to occur at a higher rate in the hallways, bathrooms, and in the cafeteria.
At the Kayne ERAS Center, bullying appears in all of the previously mentioned forms. It appears to be more prevalent among middle school and high school students than among elementary students, though it also occurs between them as well. Students often target a student whom they consider to be weaker or of lesser social status. Peers are encouraged to join in the harassment. Students that do most of the bullying are popular among the other students in the school, which is consistent with research findings (Rose, Swenson, & Waller, 2004). There does not appear to be a significant difference between the genders in number of occurrences; however, boys tend to bully physically, or bump into students while passing them in the halls. Girls tend to bully in more indirect ways: threatening to withdraw friendships, social manipulation, social exclusion, gossiping, starting rumors, and whispering about someone loud enough that they can be overheard, which is also consistent with previous research (Craig, Pepler, Connolly, & Henderson, 2001). Both types of bullying can potentially escalate to physical altercations. Bullying has been observed during unstructured time and in classes where the teacher may have poor behavior management skills, but it seems most prevalent during transition to classes, transition to and from the buses (particularly in the afternoon), on the buses, and in the cafeteria.

The Kayne ERAS Center offers a Diploma Track (DT) and a Certificate Track (CT) program. DT students are working toward a diploma, while CT students may not be able to achieve that, so instead they earn a certificate of completion. Bullying seems to be an issue all over the school, but it appears to be more prevalent between the DT students
and the CT students. DT students are more often in the role of the bully, while CT students are more often in the role of the victim. In a preliminary study at Kayne ERAS, students answered questionnaires about bullying and why they thought they were bullied. Students who were bullied reported that they were bullied due to their track or disability. The DT students may think of themselves as better than CT students, even though many of them will also receive a certificate of completion rather than a diploma. They may also get bullied at home about being in a special education school and possibly displace their anger by bullying those they perceive of as less powerful. Leff, Power, and Goldstein (2004) found that bullies often demonstrate academic difficulties. Copius research demonstrates links between being bullied and learning disabilities (Nabuzoka & Smith, 1993; Farrell, 1997; Norwich & Kelly, 2004). In a study by Norwich and Kelly (2004) 49% of the students who were bullied had learning disabilities, and related being bullied to their learning disabilities. In another study, 83% of students with dyslexia reported being bullied regularly (Singer, 2005). These findings are consistent with the behaviors exhibited at the Kayne ERAS Center, where 70% of the students attributed being bullied to their disabilities.

Review of the Literature

Positive Behavior Support

Over the past eight years, more than 5,000 schools in 39 states have successfully implemented Positive Behavior Support (PBS) programs at every grade level (Frey, Lingo, & Nelson, 2008) to modify behavior and promote academic success (Bohanon-
PBS programs have been administered at individual schools (Lane & Menzies, 2003) as well as at the school district level (Sadler, 2000) and state level (Freeman et al., 2005).

PBS uses functional behavior analysis (FBA) to assess the function, or purpose, of the behavior. FBA specifically describes the behavior, identifies the events preceding it, and the contexts in which the behavior is likely to occur. Then, reinforcers or consequences that support the behavior are identified. FBA hypotheses may be derived from a variety of sources including (a) direct observation, (b) student records, (c) office referrals, (d) team consensus, or (e) data from assessment scales (Killu, 2008). These assessment findings may be used to establish PBS programs that can reduce a student’s need to use inappropriate behaviors (Sugai et al., 2000). PBS programs should teach appropriate, alternative, pro-social behaviors to students and support the students’ use of these behaviors (Johnson-Gros, Lyons, & Griffin, 2008). The key features of PBS include the following: They are prevention-based and implement proactive approaches to teaching and improving social behaviors. They clearly state expected behaviors and subsequently reinforce the demonstration of those behaviors. Finally, they use data to monitor an intervention’s effectiveness and to implement changes as needed to ensure success (Sugai et al., 2000). A PBS plan specifies the observable outcomes and how to assess whether the plan is effective (Sugai & Horner, 2002). The goal of PBS is to
increase appropriate behaviors in students and reduce the need to use inappropriate
behaviors. This allows for productive academic time, increased engagement (Sugai &
Horner, 2002), and a better overall school environment, which may lead to a better
quality of life.

School-Wide Positive Behavior Support

School-wide Positive Behavior Support (SWPBS) programs can use a 3-tiered
system of intervention that includes the following levels: primary (school wide plan),
secondary (classroom or small group intervention), and tertiary (individual intervention;
Sugai & Horner, 2002). Primary interventions in PBS target the increase of appropriate
behavior in all students in the school setting and typically demonstrate success with 80% of
them (Sugai & Horner, 2002). SWPBS programs are effective only if the environment,
or school, is effective in making the necessary changes needed to support the behavioral
changes; thus, SWPBS plans are directed toward the environment (Sugai, 2008): What
changes will the staff make? What changes need to be made in the school or classroom?
What changes need to be made in teaching strategies?

SWPBS programs typically include providing positive reinforcement for desired
behavior, teaching appropriate behaviors, prompting or pre-correcting to assist in the
students’ use of these appropriate behaviors, and creating learning environments that
discourage inappropriate behaviors (Colvin, Kame'enui, & Sugai, 1993; Johnson-Gros, et
al., 2008; Lewis & Sugai, 1999). These plans include a description of what will change
in the school to help students reduce their need to use problem behaviors and improve
their social skills (Sugai et al., 2000). The school environment should support the students’ changes in behavior. Since SWPBS is directed at changes that should occur in the environment, including school and staff, it should also provide staff training. It is imperative that there be consistency in the implementation of the plan, as without it the plan may not be as effective (Warren et al., 2006). Also, it is imperative to facilitate staff consensus as to the problem to be addressed, as well as their support of the plan (Sugai, 2008). It may be important for staff to understand that if students can develop more appropriate social skills at school, they may be able to generalize those skills to other areas of life (Carr et al., 2002).

Primary interventions view the school as a unit. Schools may consider a SWPBS when they encounter students engaging in problem behavior and existing intervention plans or strategies have been ineffective. SWPBS plans typically include (a) a visible leadership team, (b) description of problem behavior, (c) a review of existing data, (d) definition of expected outcomes, (e) the measurement to be used to analyze implementation and outcome, (f) use of an evidence-based plan, and (g) supports for students who engage in appropriate behaviors.

Secondary interventions incorporate the same guidelines and conceptual components as primary interventions, but on a more intense level. Sugai (2008) describes secondary interventions as those that are designed to support a smaller group of students who are at-risk for problem behavior of a more serious nature. These students require more support to be successful in making behavioral changes. It is beneficial to first
understand the function of the behavior in order to design the most effective plan, and then regularly assess data to monitor the success of the plan. Secondary interventions typically target the approximately 15% of students who don’t respond to the primary level of intervention. Recommendations for secondary level intervention may come from teams that assess office discipline referral data, review the student’s attendance, grades, and achievements, or use screening tools such as the *Systematic Screening for Behavioral Disorders* (Walker, & Severson, 1992). They may also include teacher and parent referrals.

McCurdy, Kunsch, and Reibstein (2007) implemented a secondary level PBS in an urban elementary school to reduce disruptive behaviors with eight students. Students checked in with the facilitator at the beginning of the school day where they were given a behavior check sheet and a reminder to adhere to the school rules. Results were mixed with 50% of the students achieving significant results in increasing their ability to adhere to the rules.

Tertiary interventions focus on the approximately 5% of individuals who do not respond to primary or secondary level interventions. These students are at high risk for problem behaviors of a more severe nature. As with the secondary level of intervention, the tertiary level begins with a FBA: What does the behavior look like? When and where does it occur? What supports the student using the behavior? What consequences follow the behavior? What is the student trying to get or avoid? After a FBA has been conducted, a Functional Behavior Plan (FBP) is implemented. The student is taught
alternative behaviors that are supported through making behavioral changes and monitored using measurable instruments to ensure the success of the plan (Sugai, 2008). Sometimes physical changes to the environment are necessary as well: seating arrangement, signaled transitions, etc. As with secondary intervention plans, tertiary intervention is best executed by a collaborative support team that may include teachers, special education teachers, behaviorists, and other school staff that are experienced in the area of behavior support (Medley, Little, & Akin-Little, 2008).

Lane, Rogers et al. (2007) implemented a tertiary level intervention plan that included FBA and FBP with two students, a first and an eighth grader, at an inclusive rural school. Unresponsiveness to primary and secondary interventions was defined academically by low GPA ($\leq 2.7$) or one or more failing grades, and behaviorally by having one or more office referrals in the first four months of school or scoring moderate to high-risk using the Student Risk Screening Scale (SRSS; Drummond, 1994). The SRSS is a screening tool used to identify students with antisocial behavior patterns. Student and teacher interviews, the SRSS, observations, and a six-celled function matrix (Umbreit, Ferro, Liaupsin, & Lane, 2007) were used to determine the function of the behavior (to get or avoid attention, tangibles, or sensory stimulation), thus insuring implementation of the appropriate intervention. FBP included manipulation of antecedents and reinforcers to increase the likelihood of appropriate behaviors and directives for extinguishing the inappropriate behaviors. The study indicated successful outcomes for both students.
Review of Positive Behavior Support Plan Implementations

A variety of SWPBS interventions have been studied. These studies have looked at (a) FBA of inappropriate behaviors (Frey et al., 2008), (b) the importance of staff support and participation (Warren et al., 2006), (c) clearly defined expectations that were discussed, taught, and posted (Benedict, Horner, & Squires, 2007), (d) precorrection (Johnson-Gros et al., 2008), (e) reinforcement of appropriate behaviors (Frey et al., 2008; Lane, Wehby et al., 2007; Warren et al., 2006) and (f) measurable, data-based assessment (Frey et al., 2008; Warren et al., 2006).

Functional Behavior Analysis. FBA is typically applied to tertiary and secondary levels of intervention. Analyses focus on the relationship between the student’s behavior, the context of the behavior, and the need that the student is trying to meet (Scott & Caron, 2005). Scott and Caron suggest that at the primary level a FBA should consider the school as a single unit. The predictions, functions, and prevention strategies of problem behaviors are examined according to the locations in which they happen.

Lane, Rogers et al. (2007) determined the function of behavior to be one of six objectives: to get or avoid attention, tangibles, or sensory stimulation. Frey et al. (2008) highlighted the importance of FBA of elementary students when developing a SWPBS plan to reduce bullying. They suggested that the bullying behavior was due to a lack of empathy for the victims. They also stated the importance of reinforcing appropriate behaviors and minimizing the reinforcement of inappropriate behaviors. Their study was guided by three critical elements: (a) finding a clear link between behavioral and
academic success, (b) using SWPBS due to the success of past studies, and (c) using data to drive their decision making. Faculty and staff were committed to the planning process as well as the implementation of the plan. The results were decreased office referrals, suspensions, detentions, and a 61% increase in instructional time gained, thus showing a link between behavioral success and academic success.

Participation. As suggested in the Frey et al. (2008) study, it is imperative to have staff cooperation, support, and participation when developing a SWPBS. Warren et al. (2006) ran a three-year study of SWPBS in an urban middle school. Their study targeted three main components of SWPBS: training staff, explicitly teaching expectations to students, and reinforcing appropriate behaviors. They devoted their first year to training faculty and building a rapport between research staff and faculty to ensure their support of the program. The administrators and teachers developed a “Steps to Success” program for the students that included being respectful, responsible, cooperative, ready to learn, and safe. Warren et al. found significant decreases in most of the disciplinary outcomes during year two. Unfortunately, the decreases did not continue through year three. They attributed this to a lack of staff support of the original intervention plan that included punitive additions to the SWPBS, decreases in positive reinforcement, and the addition of other behaviors to the list of targets.

Benedict et al. (2007) found that as teachers’ use of universal features of the SWPBS increased, children’s appropriate behavior increased, thus making a case for staff support as well as the use of SWPBS in pre-schools. The teachers affirmed their
satisfaction with the SWPBS and their desire to recommend it to other professionals. In a two-year study by Lane, Wehby et al. (2007) the entire first year consisted mainly of training staff to devise, execute, and assess a SWPBS plan. The staff created a list of five behavioral expectations for students and four teaching expectations for teachers: post the mission statement and expected behaviors in common areas, give reminders during school announcements (pre-correction), have monthly assemblies, and model expected behavior. Johnson-Gros et al. (2008) had success with a one-time, 30-minute, after-school training session. Faculty and staff were trained in active supervision, which included arriving to the designated area on time, staying in the area and scanning for students congregating, gesturing or physically prompting students to go to class, and interacting with students during the entire transition period. Faculty was given daily feedback on their abilities in active supervision. The study showed a significant decrease in student tardiness.

Codding, Feinberg, Dunn, and Pace (2005) indicated that performance feedback to teachers increased the likelihood that PBS intervention would be implemented as intended. Teachers were trained in PBS and FBA and implemented a PBS program using behavior support plans (BSP) that were already in progress in the school. Data were collected on the accuracy with which teachers delivered antecedents and consequences according to feedback they received.

*Defining expectations.* It is important that behavioral expectations are clearly defined, taught, and posted to ensure a successful SWPBS. Typically a list of 3-5
expectations stated in clear, positive, observable terms is often developed with input from students, teachers, and staff. These expectations may also serve as replacement behaviors.

Warren, et al. (2000) implemented a SWPBS program that included explicit instruction of expected behaviors. Five behavioral expectations were taught to all students using direct modeling and practicing. For five weeks of intervention, one expectation was taught per week. Expectations were integrated into the classroom rules and included during school-wide morning announcements. Results indicated significant decreases in problem behaviors.

Benedict et al. (2007) ran a successful SWPBS in 15 preschools: 6 Head Start programs, 6 community preschools, and 3 special education classrooms. They used the Preschool-wide Evaluation Tool (Pre-SET; Horner, Benedict, & Todd, 2005) to monitor the schools’ progress. They assessed the schools implementation of the plan according to 15 features of the SWPBS including (a) defined expectations, (b) expectations taught, (c) acknowledgement of appropriate behavior (reinforcement), and (d) the organization and predictability of the setting. Both teachers’ use of these elements of the SWPBS as well as the children’s response to them was assessed. Teachers were measured on the degree of implementation of some universal SWPBS practices: Was there a poster with clearly stated rules? Was a classroom schedule posted? Did the teachers use a transition signal? As the teachers adhered to the implementations of these practices, the success of the outcome increased.

*Precorrection.* Another important facet in developing a successful SWPBS plan is
the use of pre-correction strategies. Precorrection is an antecedent intervention that can reduce predictable problem behaviors before they occur (Colvin, Sugai, Good, & Lee, 1997). For example, a teacher might say “Remember to walk in a line down the hallway” before the children leave the classroom, thus reminding them, or precorrecting them, to walk appropriately down the hall (Benedict et al., 2007). Precorrection may also include gestural cues, modeling, tangibles, such as “Gotcha” tickets for students who are engaging in appropriate behaviors (Oswald, Safran, & Johanson, 2005), or reminders of reinforcers available for use of appropriate behaviors (DePry & Sugai, 2002).

Johnson-Gros et al. (2008) implemented SWPBS in a high school to assess the effectiveness of the plan in regard to tardiness. They modeled it after the DePry and Sugai (2002) study, which paired the components of active supervision with precorrection, and suggested significant results in decreasing problem behavior in students. Stormont, Smith, and Lewis (2007) implemented a PBS program in a Head Start Preschool that measured the effects of precorrection and praise statements. Teachers precorrected students before they had an opportunity to behave incorrectly. Precorrection was paired with verbal praise for appropriate behaviors. Results were a reduction in overall problem behaviors among students.

*Positive reinforcement.* Positive reinforcement of appropriate behaviors is crucial to an effective SWPBS plan. Positive reinforcement of desired behaviors is powerful when attempting to change behavior. Skinner (1938) developed a reinforcement and punishment method of successfully modifying behavior. Through operant conditioning he
could increase or decrease behaviors by giving or taking a reinforcer or aversive condition (Skinner, 1958). According to Skinner (1938), positive meant giving something and negative meant taking something away. Reinforcement meant the behavior increased and punishment meant that the behavior decreased. It is important to remember that positive and negative, in this instance, are mathematical rather than positive meaning something pleasant and negative meaning something unpleasant (Malott, Malott, & Trojan, 2000). Examples of these techniques are as follows: Positive Reinforcement is getting a reinforcer, such as computer time, to increase a behavior, such as finishing work in a specified amount of time. Negative Reinforcement is the removal of an aversive condition, such as doing homework, to increase behavior, such as following the classroom rules. Positive Punishment is getting an aversive condition, such as detention, to decrease behavior, such as using foul language in class. Negative Punishment is the removal of a reinforcer, such as a class trip, to decrease behavior, such as verbally disrupting class (Skinner, 1938). It seems that the most powerful and long lasting of these is positive reinforcement of desired behaviors (Leaf & McEachin, 1999; Skinner, 1958; Sugai & Horner, 2002).

Frey et al. (2008) had significant success reinforcing appropriate behaviors and minimizing the reinforcement of inappropriate behaviors. In successful studies by Warren et al. (2006) and Lane, Wehby et al. (2007), reinforcement was in the form of tickets that went into a drawing for prizes; however, every student that received tickets did not win a
prize. The impact of random reinforcement (prize drawing) may be difficult to assess as students who work hard, but don’t win anything may become discouraged.

When trying to increase desirable behavior it is imperative that reinforcers are reinforcing. Teachers often think that what they like will be a reinforcer, when in fact it may not be a reinforcer to the student at all (Lane, Wehby et al., 2007; Leaf & McEachin, 1999).

Assessment. Data-based assessment should drive the SWPBS program as well as measure its success. Lane, Wehby et al. (2007) implemented SWPBS in two high schools, with students in 10th through 12th grades, with the purpose of addressing the following questions: How did different types of high school students respond to SWPBS? How accurate was the teachers’ assessment of the students? Did students have equal access to reinforcement? Was the SWPBS implemented accurately? Students were categorized behaviorally as externalizing, internalizing, co-morbid, typical, and high-incidence (specific learning disabilities, other health impairment, or speech and language impairment). Dependent variables included the students’ (a) grade point average (GPA); (b) attendance (including unexcused tardiness); (c) discipline referrals and suspensions; and (d) referrals to an alternative learning center (ALC), Students Taking a Right Stand (STARS), General Education Intervention Team (GEIT), or special education eligibility determination (SPED). The study showed that there were subtle differences in how different students responded to the SWPBS plan: students with internalizing behaviors were most responsive in the areas of GPA and attendance, typical students were most
responsive in the area of disciplinary referrals, and students with comorbid and high-incidence behaviors were the least responsive in all categories.

In a three-year study by Warren et al. (2006) staff training and its efficacy on subsequent implementation of the SWPBS plan was the primary focus. During year one, staff was trained with no implementation of the plan. The plan was implemented in year two with continued staff training, and in year three the staff implemented the plan without training or assistance from the researchers. Year one, staff chose target behaviors for the students, which were subsequently incorporated into the posted classroom rules during year two. Student adherence to these rules was measured. Data consisted of the number of (a) office referrals, (b) conferences, (c) time-outs, and (d) in-school and out-of-school suspensions, and was collected at the beginning and end of years two and three. Staff adherence to altering the environment, increasing choices, adapting curriculum, teaching replacement behaviors, and administering reinforcement were observationally assessed. Training was added as needed in these areas. Results suggested a decrease in disciplinary outcomes during year two, which were not sustained during year three.

Numerous studies indicate that SWPBS is an effective way to increase appropriate student behavior and that a successful SWPBS plan needs to include staff support and participation, clearly defined expectations, precorrection, reinforcement of appropriate behaviors, and measurable, data-based assessment.
Social Skills

An effective SWPBS program should also include social skills instruction. Expected behaviors should be explicitly described, taught, and supported (Lewis, 2008). Social skill lessons may be taught using a variety of techniques including direct instruction, role-playing, and modeling.

Social skills are an important aspect of a child’s development as well as later success in adult life. Developmental theorists such as Erickson (1963) and Bandura (1969) found that there was a connection between socially well-adjusted children and their successful progression into adulthood. Bandura’s (1969) social learning theory stressed that children learn through modeling, observation, and imitation. He suggested that there is continuous interaction between the environment, cognition, and behavior; thus, social skills are acquired through interaction with one’s environment, including parents and peers. It is evident that the ability to effectively socially interact with peers and others is an important aspect of childhood and throughout life.

Children with learning disabilities are at high risk for social inadequacies (Bryan, 2005). Kavale and Forness (1995) found that about 75% of students with learning disabilities had deficits in social skills in contrast to their peers. In fact deficits in social skills are often a distinguishing characteristic of students with learning disabilities (Canney & Byrne, 2006). Social skills deficits are also predictive of challenges in employment (Elksnin & Elksnin, 1998). For these reasons social skills teaching should be a high priority for teachers of students with high incidence disabilities.
Social skill deficits manifest themselves in various ways and researchers have defined them differently: lack of ability to initiate and sustain relationships (Gresham, 1997), disruptive and non-cooperative behaviors (Pearl, Donahue, & Bryan, 1985), attention seeking behaviors (Perlmutter, 1983), depression, anxiety, and self-imposed isolation (Miller, Lane, & Wehby, 2005). Kavale and Mostert (2004) list examples of social skills: starting a conversation, introducing yourself, negotiating, dealing with frustration, responding to failure, apologizing, controlling anger, and listening. Rustin and Kuhr (1989) categorize social skills into four subjects areas: foundational skills (including eye contact and understanding non-verbal communication), interaction skills (including initiating conversation and turn taking), affective skills (recognizing your and others’ feelings and trust), and cognitive skills (problem solving, negotiating, and self-monitoring). Gresham (2002) groups social deficits into four categories: skill deficits (referring to what a student doesn’t know socially), performance deficits (referring to a student’s choice to perform the known social skill), fluency deficits (referring to the student’s inability to generalize the skill or perform it in a natural way), and competing problem behaviors. Gresham’s (2002) breakdown is functional, targeting the purpose of social deficits, and therefore may make it easier to target specific areas for change.

Students’ proficiencies in social skills predict positive outcomes such as friendships, acceptance, and academic success (Lane, Menzies, Barton-Arwood, Doukas, & Munton, 2005). Students with deficits in social skills often experience negative outcomes such as teacher and peer rejection and bullying (Farrell, 1997; Nabuzoka &
Smith, 1993; Norwich & Kelly, 2004). Positive affect is also a vital aspect of social development. Positive affects are subjective good feelings, emotions, and moods that can increase attention and desirable behavior (Fredrickson & Branigan, 2005). Children with positive affects perform significantly better in math and reading (Bryan, 2005).

**Social skills teaching.** Social skills instruction can be an important component of a SWPBS plan. Research supports the necessity of social skills teaching (Lane et al., 2005; Lewis, Sugai, & Colvin, 1998). It should not be expected that students already possess the expected behaviors; they need to be taught the behaviors. The best social skills teaching is consistent (Lewis et al., 1998), is systematically administered (Colvin & Sugai, 1988), and is based on specific needs (Lane et al., 2005). Research also supports that an intervention plan needs to: incorporate students, staff, and parents; use a positive support plan (reinforcement); and be consistently administered.

Gresham (2001) recommended that social behaviors be examined in context. What might be appropriate in one setting may not be in another. Behavior should be assessed in regard to where it occurs: what are the stimulus (antecedent) and the consequence (including reinforcers and punishers) to the behavior? He also stated that the best intervention in social skills includes manipulation of antecedents and consequences. The effects of using well thought out reinforcement practices can be very powerful (Skinner, 1958).

Lane et al. (2005) achieved significant results in an increase of improved social interactions, a decrease in disruptive behaviors, and an increase in engaged time in the
classroom using Elliott and Gresham’s (1991) *Social Skills Intervention Guide: Practical Strategies for Social Skills*. The intervention included five phases: tell, show, do, follow through, and generalization. These phases included instruction with questions and answers, role-play, written work, and integrating the new social skills into situations beyond the classroom. Success was supported by well constructed lesson plans, integrity, clear expectations, positive reinforcement, and lessons that were conducted in a natural setting (Lane et al., 2005). Unfortunately, the generalization phase is often neglected and the skills fail to sustain over time (Lane & Beebe-Frankenberger, 2004).

An effective social skills intervention plan requires appropriate staff instruction (Barton-Arwood, Morrow, Lane, & Jolivette, 2005), good training tools and lesson plans (Lane et al., 2005). In addition, direct instruction techniques for modeling and role-play (Gresham, 2001) are critical and the plan must be in place for a prolonged period of time (Gresham, Van, & Cook, 2006). Students need to be motivated through consistent positive reinforcement (Skinner, 1958).

In a study by Canney and Byrne (2006), social skills training was taught during circle time. The results were inconsistent due to the variable of teacher input indicating the importance of consistency in which the training is delivered. Kavale and Mostert (2004) also had modest effects with their intervention plan, which was based on structured training for students with learning disabilities. They attributed the disappointing results to the intervention tool, the intensity of training (their plan for three hours per week for ten weeks), and problems with the concept of what appropriate social
behavior is which would indicate the importance of explicitly defined expectations. Miller et al. (2005) studied the effects of using a social skills curriculum with a group of seven students in a self-contained classroom. Only one student maintained appropriate social skills post-intervention. Disappointing outcomes were attributed to brevity of intervention, variability in students’ academic levels, and limitations due to a self-contained classroom. Lastly, Gresham et al. (2006) found that most interventions only ran for an average of 30 hours. He took this limitation into account and studied the effects of social skills training with homogenous groups for 60 hours. Students who received the social skills instruction showed decreases in problem behaviors, validated by pre/post tests at two-month follow-up.

A social skills intervention plan should include social skills instruction for students and staff, explicit behavioral expectations, opportunities for students to practice new social skills, and positive reinforcement for exhibiting those skills (Barton-Arwood et al., 2005). Without effective reinforcement, it is unlikely that students will incorporate the new skills into their repertoire and generalize them into other settings (Miller et al., 2005). It seems too, that if generalization is where the effects start to fade (Lane & Beebe-Frankenberger, 2004) that this area of instruction needs to be targeted as well. It is also important when dealing with inappropriate behaviors to use Applied Behavioral Analysis (ABA) to assess what the function of the behavior is, to properly intervene with successful outcomes (Barton-Arwood et al., 2005).
In conclusion, some of the issues faced in regard to social skills instruction are that social skills deficits are not part of the definition of learning disabilities, so instruction is recognized as necessary (Bryan, Burstein, & Ergul, 2004). Also, social skills instruction typically addresses more disruptive behaviors that influence instruction rather than peer interaction skills (Bryan, 2005). It is understood that teacher and school personnel have many responsibilities, and to add social skill instruction on top of that would be difficult and time consuming (Lane et al., 2005). Yet, it is important to help students acquire the social skills needed to maximize academic achievement and social competence (Bryan, 2005), as well as the skills necessary to negotiate interactions with adults (Miller et al., 2005). Social skill deficits have negative effects on students with learning disabilities. They draw negative attention from their peers (Kavale & Forness, 1995), elicit bullying, (Norwich et al., 2004), negatively impact academics (Bryan, 2005), and affect adult life including employment (Elksnin & Elksnin, 1998). It is important to address this issue.

*Intervention Plans to Address Bullying Behaviors*

SWPBS plans may be used to address various social skills and behaviors including bullying. Bullying is of primary concern in schools. Several studies have been conducted on the implementation of anti-bullying intervention programs (Beale & Scott, 2001; Frey et al., 2005; Salmivalli, Kaukiainen, & Voeten, 2005; Olweus, 1997). Similar to the SWPBS plans mentioned here, these intervention plans included (a) staff training; (b) staff, student, and parental involvement; and (c) social skills instruction.
**Staff Training.** Studies indicate that staff training is an essential aspect of SWPBS and bully intervention plans. Salmivalli et al. (2005) used a three-tiered program that included tertiary, secondary, and primary levels of intervention. The program was implemented in 16 schools and included 48 classrooms with students in grades four, five, and six. It began with extensive teacher training that spanned a year. There were four meetings total, two in the fall semester and two in the spring semester. Three of the meetings were all day (eight hours) and one meeting was three hours. Teachers were trained on facts, research, methods of intervention in bullying instances, and curriculum. The intervention plan showed an increase in efficacy beliefs, a decrease in bullying, and a decrease in victimization. The study had some limitations: Fidelity of training and implementation were not reported. It was difficult to measure the consistency among staff in 16 different schools in the implementation of the plan. Frey et al. (2005) implemented a successful plan that ran for 12 weeks and included weekly staff training. The “Steps to Respect” manual was used to train teachers, administrators, and counselors in how to respond to and advise students who were bullied. Researchers noted a decline in bullying behaviors and an increase in pro-social interactions.

**Staff, student, and parental involvement.** Studies also indicate the necessity of staff and student involvement in SWPBS and intervention plans. Olweus (1997) implemented a bully intervention plan that incorporated students, staff, and parents. The goal of the program was to increase awareness of bullying problems, involve parents and teachers, create rules about bullying, and provide protection and support for victims. The
program began with a study of what characterized bullies and victims. This study included interviews with the students’ parents as well as the teachers to raise their awareness and involvement. Questionnaires for the students were used to monitor the plan’s success. The plan incorporated a three level approach: primary, secondary, and tertiary. It included conferences, class rules, PTA meetings, and individual talks on a serious level. The plan was implemented in 42 schools over a two-year period and resulted in a 50-70% decrease in bullying behaviors.

Frey et al. (2005) also included teachers, parents, and students in their anti-bullying program. Parental involvement included initial information about the program, letters sent home about the progress of the program, and activities to support the program at home. Beale and Scott (2001) involved parents through school newsletters that included activities they could do at home to help address bullying. The students also reenacted their plays about bullying for the members of the PTA. Although parental involvement was a component in these successful studies, it was very difficult to measure actual levels of parent participation (e.g. some parents may not take the time to read the information sent home or implement the at home activities). As a result, it is unclear to what degree parent involvement contributed to the program’s success.

*Social skills instruction.* As with SWPBS, social skills instruction is a common component of bully intervention plans. Beale and Scott (2001) employed drama to reduce bullying. Sixth grade students acted in plays that represented realistic bullying situations. The plays were followed by discussions that encouraged students to examine ways to
deal with bullying. Teachers were encouraged to create classroom rules with students’ help to target bullying behavior. Students were asked to discuss what they were learning about bullying prevention as well as sign a pledge against bullying. The pledge included an agreement not to bully, to watch for bullying, and to report any bullying. The program was successful with a 20% reduction in instances of bullying over the course of a year.

Beale and Scott’s program had some limitations. Victims of bullying may have low self-esteem issues and may not want to participate in a play in front of other people. In fact, many students would probably be afraid to perform in a play in front of others.

Frey et al. (2005) used a school wide “Steps to Respect” program that included literature-based and scripted-skill lessons, and lessons for students grades two through six that focused on peer relationships (being part of a group), being an effective reporter of bullying (tattling vs. reporting), and recognizing and refusing to be bullied. The effects of the intervention plan showed an increase in positive social interactions and a decrease in instances of bullying behavior. Frey et al. (2005) targeted multiple levels of context and social skills; however, the social skills training was mainly to counter bullying rather than to forge a general increase in friendships. An increase in friendships may have more significant long-term effects on instances of bullying.

The Salmivalli et al. (2005) curriculum included discussions about bullying, role-play, literature, class rules, and bystander behavior. The curriculum included three levels of focus: raised awareness, self-reflection, and commitment to stop bullying (Salmivalli et al., 2005). The intervention plan showed an increase in efficacy beliefs, a decrease in
bullying, and a decrease in victimization. The effects varied over the grades. The intervention plan had a more significant effect on fourth graders than on fifth and sixth graders.

These intervention plans had a significant impact on bullying behavior. All of them included training staff and teaching students. Two of them also included parents. An effective bully intervention plan should include all concerned people, use a three-tiered approach, and target multiple levels of the behavior.

Assessment

In the area of bullying, researchers have relied primarily on student self-report questionnaires that are completed anonymously. Salmivalli, Karhunen, and Lagerspetz, (1996) found self-reports to be unreliable when asking the students if they bullied. They concluded that students may not consider their behavior to be bullying. Olweus (1991) asserted that self-reports were the best vehicle for measuring instances of bullying and that more accurate results could be attained by asking students if they participated in specific bullying behaviors, such as teasing and threatening, rather than general bullying. Cole, Cornell, Dewey, and Sheras (2006) compared self-reports and peer reports in regard to bullying. They concluded that peer reports were more reliable and markedly different from self-reports.

Furlong (1995) used a comprehensive school safety questionnaire to determine the demographic differences between multi-victim and non-victim students. The questionnaire included 21 questions about specific violent behaviors ranging from verbal
harassment to threats with weapons. It also included questions about students’ feelings of safety, belonging, peer relationships and teacher connections. Questions about unlikely situations were included in the questionnaires to check for validity. They found that multi-victim and non-victim students differed in a variety of variables including perceived safety, peer relationships, and course grades.

Conclusions

Research on school wide positive behavior support plans, social skills teaching, positive reinforcement, and bully intervention plans indicate that an effective intervention plan to address bullying in schools can be developed. It appears that the most powerful tools are (a) SWPBS, (b) positive reinforcement of appropriate behaviors, (c) pre-correction, and (d) social skills teaching. The literature studied here on the effects of social skills teaching, especially in generalization over time, was the least conclusive. An effective plan would need to incorporate students, faculty, and parents. Additionally, raising general awareness about bullying may be an effective component. The plan to address bullying at the Kayne ERAS Center will incorporate these elements.

Statement of Purpose

There is a “Policy for Bullying Prevention” already in place at the Kayne ERAS Center. At the beginning of each academic year the students must read and sign the policy and it is placed into their file. The policy includes the Center’s belief that all students have a right to a safe, healthy, and respectful school environment. It lists various behaviors that the Center believes are acts of bullying. It includes environments such as
the classroom, the lunchroom, other on and off campus areas, including off site school-based activities, where bullying is most likely to occur. It includes a list of consequences to deter bullying such as a report to the principal, staff intervention, and possible expulsion. It is a reactive, punishment based plan. The policy doesn’t seem to be effective. This may be because the policy and the school wide behavior plan are not consistently adhered to and the students are aware of that.

Lack of consistency in administering the policy and the implied behavior plan is only one aspect of why bullying may be so prevalent at the Kayne ERAS Center. Other reasons may be that students take great pains to hide their bullying. Indirect bullying is often whispered and occurrences of bullying are underestimated by school staff (Bradshaw, Sawyer, & O’Brennan, 2007). While social support is helpful in ameliorating the impact bullying has on a victim (Demaray & Malecki, 2003), its impact varies according to age and gender (Davidson & Demaray, 2007).

This study looked at the outcomes of a School-Wide Positive Behavior Support plan implemented at a non-public school to decrease instances of bullying between students who are primarily from inner-city neighborhoods and have special needs that include ED, AUT, MR, SLD, and OHI. Students filled out pre, mid, and post questionnaires to (a) define target behaviors and determine how prevalent occurrences of those behaviors in school were, (b) assess which bullying behaviors occur most often, (c) determine the primary locations of bullying events, and (d) assess the effects of a SWPBS
plan on instances of bullying. Another goal was to determine whether there were increased rates of pro-social behavior.
CHAPTER 2

Method

Goals and Design Type

The goals of this study were to determine student perceptions of (a) how prevalent bullying was in the school, (b) which bullying behaviors occurred most often, (c) the location of bullying events, and (d) the effects of a school wide positive behavior support plan (SWPBS) plan on instances of bullying. Another goal was to determine whether there were increased rates of pro-social behavior due to implementation of the plan.

The research design employed use of a survey to measure student perceptions of bullying behaviors. Rates of pro-social behavior were estimated through student eligibility and attendance at the weekly reward celebrations, which were dances, movies, or picnics.

Participants

Students

Of the 216 students at the Kayne ERAS Center, 155 participated in the study. Although all 216 students participated in the intervention program as it was a school activity, data were collected from only the 155 students who returned verification of parental permission (see Table 1 for participant characteristics).

Many of the participants lived in foster homes (27%) and/or received free lunch (74%). All of the participants had Individual Education Plans (IEPs). Eligibility
categories included specific learning disability, emotional disturbance, autism, other health impairment, and mental retardation.

*Student participation.* Student participation decreased over the eight weeks in regard to number of questionnaires collected at four and eight weeks. Initial student participation was 155, dropping to 131 in the fourth week and 126 in the eighth week. Reduction in student participation was due to absences and decisions not to participate.

Table 1

*Participant Characteristics*

<table>
<thead>
<tr>
<th>Grade</th>
<th>n (n M/F)</th>
<th>AFA n (%)</th>
<th>CAU n (%)</th>
<th>HSP n (%)</th>
<th>ASN n (%)</th>
<th>OTH n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem</td>
<td>25 (18/7)</td>
<td>11 (.44)</td>
<td>5 (.20)</td>
<td>5 (.20)</td>
<td>1 (.04)</td>
<td>3 (.12)</td>
</tr>
<tr>
<td>Middle</td>
<td>56 (43/13)</td>
<td>31 (.55)</td>
<td>5 (.09)</td>
<td>14 (.24)</td>
<td>2 (.04)</td>
<td>4 (.07)</td>
</tr>
<tr>
<td>High</td>
<td>74 (49/25)</td>
<td>34 (.46)</td>
<td>11 (.15)</td>
<td>7 (.23)</td>
<td>1 (.01)</td>
<td>11 (.15)</td>
</tr>
<tr>
<td>Total</td>
<td>155 (110/45)</td>
<td>76 (.49)</td>
<td>21 (.14)</td>
<td>36 (.23)</td>
<td>4 (.03)</td>
<td>18 (.12)</td>
</tr>
</tbody>
</table>

Note. AFA = African-American; CAU = Caucasian; HSP = Hispanic; ASN = Asian; OTH = Other.

*Ethical provisions.* Research procedures were reviewed by the California State University, Los Angeles Institutional Review Board for the Protection of Human Subjects in Research. All students in the school participated in the SWPBS plan; however, data
was only collected from participants who had signed consent forms. Consent forms (see Appendix B) and letters explaining the research project (see Appendix A) were sent home to parents/guardians prior to the onset of the intervention. Consent forms included the procedure for the study, confidentiality safeguards, and a statement that no risks, discomforts, or inconveniences to the students were expected. Consent forms were collected and stored in a confidential file. Access to the files was limited solely to the researcher.

Participants were volunteers and were not paid for their participation in this study. They were treated in accordance with ethical standards of the APA in the *Ethical Principals of Psychologists and Code of Contact* (American Psychological Association, 2002).

*Researcher*

The researcher was a Caucasian female pursuing her M. A. in Mild/Moderate Special Education. She also held a B. A. in Behavioral Science. She had three years experience as a Special Education Teacher and eight years experience as a Behaviorist in the field of Autism in both home and school settings.

*Staff*

Staff members included 129 school personnel and 16 bus drivers that assisted in the implementation of the plan as well as the observation of bullying instances. The school staff included 25 teachers, 25 teacher’s aides, 49 one-on-one aides, 5 speech therapists, 13 counselors (4 licensed and 9 interns), 7 in-house staff (staff to assist in students’
severe behavior episodes), 3 assistant principals (one for each, elementary, middle school, and high school), 1 principal of high school, and 1 director of programs (above all of the school staff). The director of programs insisted on full participation by staff. Staff participation was assessed through discussion and observation and prompted through weekly delivery of supplies.

School site

The school is located in a large urban area in Southern California. It was a non-public school (NPS) where all students have IEPs and received all of their eligible services on campus. It was a highly restrictive environment. Students were required to have an escort when in the halls or the bathroom. There were four hallways (wings): (a) one for elementary and middle school Certificate Track (CT), (b) one for middle school Diploma Track (DT) and high school CT, (c) one for high school DT with one CT classroom, and (d) one that connected them all and included the assistant principal’s, principal’s, and director of programs’ offices and the computer lab. There was also a drama classroom and an art classroom on the high school wing. The CT classroom on the high school wing included four students who are working toward their diploma despite being in CT. There was one small cafeteria that accommodated about 50 people at the tables. Students used the cafeteria in shifts according to grade or program. There were bathrooms and In-House (time out) rooms in each of the classroom hallways. There was one Isolation Room for extreme behavioral circumstances.
The number of students per class was small: 12 or less. Some students had one-to-one aides if their behavior warranted a more intense approach. Elementary and middle school students were in self-contained classrooms while high school students transitioned to their various classes: six 50-minute periods throughout the day and lunch.

Measures

Two types of assessment tools were used in this study: questionnaires that were developed by this researcher and head-count attendance at highest-level reinforcer events. Participants (students) were given questionnaires to fill out; they filled out the first one at an initial Bully-Free meeting and the second two in their classrooms. The first questionnaire (see Appendix C1) consisted of 14 questions that included demographic information such as gender, ethnicity, grade level, track assignment, gang affiliation, and parental gang affiliation. Three questions about student perception of bullying were measured using a 5-point Likert scale: (a) bullying behaviors observed in the school, (b) how often they bullied others, and (c) how often they were bullied. Three open ended questions requested their opinion about (a) bullying behaviors not mentioned on the questionnaire, (b) why they bullied, and/or (c) why they thought they were bullied. Two questions asked where bullying occurred. The second two questionnaires (see Appendix C2) consisted of 11 questions; the questions that pertained to gang affiliation and what is considered bullying behavior were omitted.

Questionnaires were distributed, filled out, and collected three times during the study: before the program was implemented, four weeks into the intervention, and at the
end of the program. The intervention ran for eight weeks. The first questionnaire was given at the initial Bully-Free assembly and training for the students. The assembly took place on the Friday prior to the start of the intervention in the multi-purpose room and was attended by students according to grade level: one meeting each for elementary, middle, and high school students. After the presentation of the new intervention plan, the researcher distributed questionnaires and pencils to students. The researcher read each question aloud to the students from the stage using a microphone. School staff assisted them at their seats if students asked for assistance. Questionnaires were collected and students returned to their classrooms. The intervention began the following Monday. The second and third questionnaires were distributed by the researcher to the students in their homerooms on the mornings of the bully-free assemblies at the end of the fourth and eighth weeks. Students filled out the questionnaires with their teachers in the classroom. Questionnaires were picked up by the researcher by first period and tallied before the assemblies. Progress of the intervention was reported to the students at the assemblies.

Head count attendance was taken by the researcher and an assistant at each of the dances, the park picnics, and the movies: five high school, six middle school, and two elementary school dances; two elementary school movies; and two elementary and one high school picnic in a local park. Attendance at each grade level was tallied and recorded on paper.
Intervention Plan and Procedure

The SWPBS plan ran for eight weeks. It included school staff, bus staff, students, and parents. Students were able to earn tickets to a weekly dance, an in-school movie with popcorn, or a picnic in a local park, as well as homework free passes and positive phone calls home for having BFs (Bully Free; indicated that the student had not bullied) on their check sheets. Students already carried behavior check sheets on which they earned points for various behaviors. Staff used these same check sheets and added a BF in green ink after every period (50 minutes), lunch (30 minutes), or homeroom (10 minutes) that the student was bully-free and a - BF if the student bullied. At the end of the day, if the student had earned at least nine BFs (they had the opportunity to earn 10), they received a ticket from their homeroom teacher. The BFs and tickets worked both as positive reinforcers for pro-social behavior and as a precorrection not to engage in bullying behaviors during transition to the next period of intervention. The tickets earned from the morning bus also served as reinforcement for behavior on the bus and precorrection to proceed to class without exhibiting bullying behavior.

Homeroom teachers kept the students’ tickets in individual envelopes in their desks out of students’ reach. The students also earned a ticket a day from their bus drivers if they were bully-free on the ride home and the ride back to school. They received their tickets in the morning as they exited the bus and gave them to their homeroom teacher, who put the tickets in the same envelopes. At the end of the week, if the student had earned at least eight tickets (they had the opportunity to earn 10) they were able to go to
the dance, picnic, or movie. The dances/picnics/movies were held three times a month and bully free meetings were held once a month. Tickets were not required to attend the bully free meetings; however, during these meetings the tickets they had earned were entered into a raffle drawing for prizes. Differential reinforcement included a ‘Homework Free Pass’ for at least seven tickets earned and a positive phone call home regarding their progress and improvement for at least six tickets earned. Consequences for bullying included lack of access to the above reinforcers, differential phone calls home, student and/or parent conferences with the principal, detentions, in-school suspension, and/or suspension.

The plan also included suggestions for replacement behaviors that were provided and discussed at the bully-free meetings. Posters of the targeted bullying behaviors, reinforcers, and consequences were also hung in classrooms and in hallways. Students had opportunities to (a) discuss bullying issues in their counseling sessions, (b) report bullying anonymously by putting notes in a ‘bully-box’, and/or (c) join buddy support groups, which were to be made up of students who signed up and met in a group with one of the counselors. None of the students participated in the last option.

The intervention plan was first presented to the school leadership team, then to the Parent Teacher Organization (PTO), and finally to the staff at one of two all-staff meetings. The first staff presentation was given after school for 1 hour. The second presentation was given during the school day, also for 1 hour, and was for staff that could not be at the first meeting. Both presentations for the staff were the same. The
presentations were designed to forge staff awareness of bullying behaviors in the school as well as elicit their participation and buy in to the plan. The information given at the presentations specified (a) the definition of bullying with an explanation of its damaging effects, (b) the instances of bullying found at the Kayne ERAS Center in a preliminary study, and (c) the success of previous intervention plans to decrease the instances of bullying at other school sites. Expectations of staff and students were solicited. The staff was presented with the bullying behavior, reinforcement, consequence, and replacement behavior lists. Letters to the parents that explained the SWPBS plan and parental consent forms were given to all of the teachers to send home the next day and have returned within the next few days (before the presentation to the students).

The researcher distributed tickets and supplies, including green pens, envelopes, and flyers with reinforcements and alternative behaviors, on Friday afternoons. Procedure check and discussion of plan progress was discussed at this time as well.

The intervention plan was then introduced to each bus driver individually. The procedure for bus tickets was explained in detail and an opportunity for questions was given. Bus drivers received the first set of tickets at this time. This researcher provided a procedure check every day for the first week and bi-weekly thereafter. New tickets were given weekly on Friday afternoon for the upcoming week.

Lastly, the intervention plan was presented to the students by grade level (i.e., elementary, middle school, and high school). The plan (which included a list of bullying behaviors, defined expectations, reinforcers, consequences, and suggestions for
replacement behaviors) was explained in detail to the students. Students were also presented with the option to use their counseling time to work through bullying situations. The following concepts were discussed: (a) people often decide that they don’t like someone without even knowing who they are, (b) it is okay to not like someone, and (c) you can dislike someone without being cruel to him/her. The concept that these bullying behaviors will not be tolerated in school was discussed as well. The students were told about the ‘bully-boxes’ that were placed in each of the in-house rooms where they could report bullying anonymously. They were given the opportunity to sign up for the buddy support groups that were available by grade level.

Data collection began with the distribution of the questionnaires to the students at the end of the presentation. The students were told that no names were to be on the questionnaires and that they would be kept anonymous and confidential. The questionnaires were passed out and the questions were read aloud one by one to the entire group by the researcher. Students were given time to answer the questions. They had the opportunity to get assistance from their teachers if needed to fill out the questionnaires. When the questionnaires were completed, they were collected by the researcher. The results of the questionnaires were tallied according to accounts of being bullied, bullying, ethnicity, grade level, and gender.

At the end of four weeks and eight weeks (the end of the plan), there were bully-free meetings by grade level. Students were given the questionnaires to fill out in their morning homeroom. Data from the questionnaires was tallied for presentation at the
meetings, which occurred in the afternoon. All students were invited to attend the meetings that consisted of a presentation of data results and a discussion of the progress of the plan. Students were given the opportunity to ask questions about the plan and to share how it was going. They put their tickets in for a drawing for prizes. At the first meeting 30% of the students won a prize, but at the last meeting every student won a prize. Names were drawn from raffle tickets and students chose from the displayed prizes. Students could win one prize each.

Guidelines and Contingencies

On the questionnaires students reported bullying behaviors to be the following: (a) physical aggression, (b) verbal abuse, (c) threats, (d) intimidation, (e) name-calling, (f) teasing, (g) inappropriate gestures, (h) social exclusion, (i) gossiping, and (j) spreading rumors.

Reinforcers included one-hour dances on Fridays, three times per month, for middle school and high school students with the exception of one picnic in the local park for high school students. Elementary students rotated reinforcers: picnic in the park, in-school movie with popcorn, and a one-hour dance. There were also once a month meetings by grade level where students could win prizes, homework free passes, and positive phone calls home. Teachers and bus drivers each gave one ticket per day for students who refrained from bullying.
Consequences (punishers) included lack of access to the above reinforcers, phone calls home reporting misbehavior, silent lunch, student and/or parent conferences with the principal, detentions, in-school suspension, and/or suspension.

Replacement behaviors included the following alternatives: (a) find someone in the room that they like and talk to them about something else, (b) find staff and discuss it with them, (c) carry a small stress relieving activity in their pocket, such as lanyard key chains or beaded jewelry, (d) participate in sports such as football or basketball to facilitate team membership and tolerance of others’ differences, or (e) join a support group to facilitate more socialization and friendships.

Effective replacement behaviors are individual, so the students could brainstorm with their counselors as to what their replacement behaviors would be. Also, if the students agreed to it, the bully and the victim could have some counseling time together. All of the students in the school received an hour of counseling per week, so this was easily arranged.

All surveys were collected and stored in a locked cabinet in the researcher’s office. The instances of bullying were tallied for presentation at the two bully-free meetings. Data was entered and calculated in accordance to gender, grade level, have bullied, and been bullied after the program had concluded.
CHAPTER 3

Results

Prevalence of Bullying Prior to Intervention

The first question addressed was students’ perceptions about the prevalence of bullying prior to the intervention. Data from the pre intervention survey indicated that a total of 48.15% (n=64) of students reported bullying others while 47.1% (n=64) reported being bullied. Of those who were bullied, 20% (n=32) reported bullying and 23% (n=37) reported being bullied a lot or always. The five most prevalent bullying behaviors were (a) name calling (57.75%), (b) teasing (54.25%), (c) threats (51.3%), (d) intimidation (48.2%), and (e) gossiping (48%). The two least reported bullying behaviors were spreading rumors (41.1%) and social exclusion (40.5%). Although rumors and social exclusion were reported the least, over 40% of the students reported experiencing this type of bullying (see Figure 1).

Figure 1. Prevalence of bullying by type prior to intervention.

![Graph showing prevalence of bullying behaviors](image-url)
The five most prevalent bullying behaviors among males were (a) name calling (62.8%), (b) threats (57.55%), (c) teasing (57.35%), (d) verbal abuse (56.9%), and (e) physical aggression (52.8%). The two least reported bullying behaviors were spreading rumors (43.9%) and social exclusion (43.5%). The five most prevalent bullying behaviors among females were (a) name calling (46.8%), (b) teasing (46.8%), (c) gossiping (43.05%), (d) intimidation (40.5%), and (e) verbal abuse (39.45%). The least two reported bullying behaviors among females were spreading rumors (33.9%) and social exclusion (32.85%). Both male and female students indicated on their questionnaires that the most prevalent bullying behaviors prior to intervention were name calling, teasing, and verbal abuse. Both also indicated that the least prevalent bullying behaviors were spreading rumors and social exclusion. Males reported bullying 15.47% more than females (see Figure 2) and being bullied 11.89% more than females (see Figure 3).

*Figure 2.* Prevalence of bullying prior to intervention according to gender.
Figure 3. Prevalence of been bullied prior to intervention according to gender.

The prevalence of bullying (see Figure 4) and been bullied (see Figure 5) according to grade level is indicated below: elementary (49.79% have bullied, 41.03% been bullied), middle school (53.83% have bullied, 56.8% been bullied), and high school (44.95% have bullied, 41.27% been bullied). Although data indicates that bullying was prevalent across genders and grade levels, it was most prevalent in middle school and least prevalent in high school. The three bullying behaviors that occurred most in elementary, middle, and high school were (a) name calling, (b) teasing, and (c) verbal abuse. The fourth most prevalent bullying behavior in elementary and high school was threats while in middle school it was physical aggression. Physical aggression was fifth for high school. All three grade levels indicated social exclusion and spreading rumors as the least occurring bullying behavior.
Figure 4. Prevalence of bullying prior to intervention according to grade level.

![Figure 4](image)

Figure 5. Prevalence of been bullied prior to intervention according to grade level.

![Figure 5](image)

Location of Bullying Events

The third question examined the prevalence of bullying in specific locations: school, home, community. 92.9% of students indicated that bullying occurred in school (see Figure 6). Of the students who reported bullying or being bullied in school, 92.2% indicated bullying occurred in the classroom, 89.1% indicated the bus, and 76.6%
indicated the hallway. Other areas indicated as places where bullying occurred were the cafeteria (57.8%) and the bathroom (39.1%; see figure 7).

*Figure 6.* Where bullying occurred.

![Graph showing the distribution of bullying incidents across different locations: Home, School, Community, Cafeteria, Hallway, Bathroom, Bus.]

*Figure 7.* Where bullying occurred in school.

![Graph showing the distribution of bullying incidents within the school: Cafeteria, Hallway, Bathroom, Bus.]

*Efficacy of Intervention Plan*

The final question examined students’ perceptions of the effectiveness of the school-wide anti-bullying intervention in reducing bullying behaviors. A one-way analysis of variance (ANOVA) was conducted to determine whether there were
significant differences in students’ perceptions before and after program implementation (see Table 2). Using an alpha level of .05, results revealed significant effects of the program on the students who have bullied in (a) physical aggression, $F(1, 256) = 10.67$, $p<.001$, (b) verbal abuse, $F(1, 254) = 8.54$, $p = .004$, (c) threats, $F(1, 256) = 11.23$, $p<.001$, (d) intimidation, $F(1, 252) = 11.13$, $p<.001$, (e) inappropriate gestures, $F(1, 251) = 7.71$, $p = .006$, (f) social exclusion, $F(1, 251) = 4.82$, $p = .029$, (g) gossiping, $F(1, 252) = 10.91$, $p<.001$, and (h) spreading rumors, $F(1, 250) = 4.62$, $p = .033$. Students’ perceptions of bullying decreased in these areas from pre to post intervention. Results were not statistically significant for name calling, $F(1, 255) = 1.98$, $p = .16$, and teasing, $F(1, 255) = 3.23$, $p = .07$ (see Table 2). Effects were not significant for students who were bullied, however, all behaviors decreased (see Figure 8).

*Figure 8.* Decreases in bullying among students who reported being bullied.
### Table 2

*Means and Standard Deviations of Pre and Post Intervention*

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
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<td>M (SD)</td>
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<td>PA</td>
<td>1.46 (1.63)</td>
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<tr>
<td>TH</td>
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<tr>
<td>IN</td>
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<td>1.36 (1.60)</td>
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<tr>
<td>TS</td>
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<td>1.56 (1.61)</td>
<td>1.34 (1.64)</td>
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<tr>
<td>IG</td>
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<tr>
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<td>1.07 (1.59)</td>
</tr>
<tr>
<td>SR</td>
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<td>0.65 (1.32)*</td>
<td>1.23 (1.54)</td>
<td>0.93 (1.53)</td>
</tr>
</tbody>
</table>

Note. PA = Physical aggression; VA = Verbal abuse; TH = Threats; IN = Intimidation; NC = Name calling; TS = Teasing; IG = Inappropriate gestures; SE = Social Exclusion; GS = Gossiping; SR = Spreading Rumors.

Another goal of this study was to determine whether there were increased rates of pro-social behavior among the students. Rates of pro-social behavior were estimated through student eligibility and attendance at the six weekly reward celebrations which were dances, movies with popcorn, or picnics. Bully-free meetings were held at the end
of the fourth and eighth weeks of the intervention. All students were invited to those, so that attendance data at that event is not included here. Results showed an increase of attendance at all of the reward celebrations by all grade levels although the lowest rate of growth was demonstrated at the elementary level (see Figure 9).

*Figure 9.* Attendance at weekly reward celebrations according to grade level.

![Graph showing attendance at weekly reward celebrations by grade level]

*Notes:* Total participants varied according to grade level: 25 for elementary, 56 for middle school, and 74 for high school. R=reward celebration.
CHAPTER 4

Discussion

Research Questions

This study examined the outcomes of a School-Wide Positive Behavior Support plan implemented at a non-public school to decrease instances of bullying among students who were primarily from inner-city neighborhoods and had special needs that included emotional disturbance, autism, mental retardation, specific learning disability, and other health impairment. Results indicated a significant decrease in bullying from students who reported bullying others in all behaviors except two: teasing and name-calling. Results also indicated a decrease in being bullied from students who reported being bullied, however, those results were not statistically significant.

This study also assessed (a) how prevalent bullying behaviors in school were prior to the intervention, (b) which bullying behaviors occurred most often, and (c) the primary locations of bullying occurrences. Increased pro-social behaviors were also measured using head count attendance at weekly reinforcement opportunities. Results showed increased attendance at all grade levels: elementary, middle, and high school.

Prevalence of bullying behaviors prior to intervention. The examination of student’s perceptions of bullying prior to intervention via self-report questionnaires indicated that nearly half of the students were either being bullied or engaged in bullying, which are alarming numbers that exceed other findings (Olweus, 1993, 1997, 2001; Rigby & Slee, 1991; Swearer & Espelage, 2004; Wong & Lo, 2002), but may not
surprising for a non-public school. There is considerable congruence between reports of being bullied and engaging in bullying, which would indicate similar perceptions between the groups. In addition, bullying was most prevalent amongst the middle school students, followed by elementary, and lastly high school.

The most prevalent bullying behaviors across grade levels and genders were teasing, name-calling, threats, and verbal abuse. Previous studies have also indicated that these verbal bullying behaviors are the most common among students (Hazier, Hoover, & Oliver, 1991). The least reported behaviors among the groups were spreading rumors and social exclusion, but even those were reported by 40% of the students.

Locations of bullying in the school. Students also indicated on their questionnaires that bullying occurred (from most prevalent to least prevalent) in the (a) classroom, (b) bus, (c) hallway, (d) cafeteria, and (e) bathroom. It is surprising that student reports indicated the classroom as the area where bullying most occurred as it should be the most restrictive and monitored of the five locations. This may be due some students’ deficits in pro-social behaviors; teasing and verbal abuse may be their primary way of interacting. Other studies have indicated that bullying more often occurs in the least restrictive areas (Olweus, 2001), particularly the playground, which was not an option on these questionnaires. This study was done at a non-public school, which was a highly restrictive environment and outdoor recess was only permitted at the elementary level where staff to student ratio was approximately 1:4.
Elements of the intervention. The intervention consisted of a SWPBS plan that included (a) taught expectations with suggestions for alternate behaviors, (b) used precorrection, (c) offered positive reinforcement, and (d) provided staff training and participation. This combination of elements was used for the following reasons. First, several studies have shown the importance of ensuring that students understand what is expected of them (Benedict et al., 2007; Horner et al., 2005). In this study, students were presented with bullying behaviors, information about the effects of bullying, the plan including reinforcers and consequences, and alternative behaviors at a power point presentation by grade level. The students responded well, exhibiting appropriate behavior in the meetings as well as asking appropriate questions about various aspects of the plan.

Second, precorrection was used as it is also an effective tool in behavior support. Teachers and researchers have had tremendous success with precorrecting (DePry & Sugai, 2002; Johnson-Gros et al., 2008), particularly when it was paired with reinforcement (Stormont et al., 2007). In this study precorrection came in the form of posted reinforcers and consequences around the school, song request sheets for the dances, positive marks on the students check sheets, and tickets, one from their teacher at the end of the school day and one from their bus drivers in the morning. As bullying often occurred in the hallway, carrying the tickets from the bus to the classroom was a precorrection not to bully on the way to class. In addition, the green bully-free (BF) marks on their check sheets acted as precorrection not to bully on their way to the next class, or even in the next class. The song request sheets served as a reminder of the
coming reinforcer. The students demonstrated excitement about the marks and tickets and it became necessary to use color-coded tickets to keep them from trading or selling them.

Third, reinforcement was used. Reinforcement, when used correctly, is very powerful in changing behavior (Frey et al., 2008; Skinner, 1958; Sugai & Horner, 2002). Warren et al. (2006) had significant success when reinforcing appropriate behaviors and minimizing the reinforcement of inappropriate behaviors. It is particularly important that reinforcers are actually reinforcing (Lane, Wehby et al., 2007; Leaf & McEachin, 1999). Reinforcers for this study included six weekly reward celebrations: dances, movies with popcorn, or picnics. Reinforcers were selected according to observation. Students enjoyed socializing in the classrooms, halls, and cafeteria. High social status was attained through some forms of bullying; if the students hoped to achieve social status by bullying, maybe they could achieve the same goal in a more appropriate way with more satisfying results. Also, as this was a highly restrictive environment, most students held social events in high regard. The students were enthusiastic about the weekly reinforcers and often discussed them with staff and students. At the dances the students and staff seemed to enjoy music played by a D. J., particularly if their requested song was played. Some of the male students even dressed in suits for the events. Students who earned the dances, but weren’t particularly interested going, played video games in one of the classrooms.

Lastly, as suggested by Frey et al. (2008) it is imperative to have staff cooperation, support, and participation. Benedict et al. (2007) found that as the teacher and staff
participation increased, the children’s appropriate behavior increased. Johnson-Gros et al. (2008) gave faculty daily feedback on their abilities in active supervision and achieved a significant decrease in student tardiness. During this study staff received supplies weekly at which time they could ask questions, receive feedback, or comment on how it was going. Codding et al. (2005) indicated that performance feedback to teachers increased the likelihood that a PBS intervention would be implemented as intended. Most staff participated enthusiastically. Staff and bus drivers commented weekly about the changes in the students since the onset of the intervention plan. They often stated that they saw drastic decreases in bullying both on the bus and in school, and that the students were enjoying the program.

In conclusion, the combination of these four elements should render significant results. It is notable that raised awareness about bullying seemed to have a positive effect on both staff and students.

Effects of the intervention. According to student self-report questionnaires, students who reported bullying others showed a significant decrease from pre to post intervention for (a) physical abuse, (b) verbal abuse, (c) threats, (d) intimidation, (e) inappropriate gestures, (f) social exclusion, (g) gossiping, and (h) spreading rumors. This indicates the intervention’s success. Although the two most prevalent behaviors, teasing and name-calling, decreased, the results were not statistically significant. Several reasons may explain this: First, these types of bullying behaviors are often hidden by students and escape the attention of school staff (Bradshaw, Sawyer, & O’Brennan, 2007). Second,
these types of behaviors often gain the reinforcement of laughter from the other students, hence elevating the bully’s social status (Craig & Pepler, 1995). It may be that the reinforcement from teasing was greater than the reinforcement that the program provided.

Among the students who reported being bullied, or victimized, data showed a decrease in the instances of all ten bullying behaviors; however, those results were not significant. Reasons for this may be that these victims experience ongoing feelings of low self-esteem, inferiority (Forness & Kavale, 1996), loneliness, depression, or anxiety (Hawker & Boulton, 2000; Nabuzoka & Smith, 1993; Olweus, 1994b, 2001; Rigby, 2002) long after a bullying incident (Hellendoorn & Ruijssenaars, 2000) and may have reported being bullied to a greater extent then they were after implementation of the intervention. In addition, even if these students were not being bullied to the extent they were before, they were probably still being bullied to some degree and the degree to which one feels bullied is difficult to measure.

According to head count measures, attendance at the weekly reinforcer events was greater every week at every grade level indicating that students had demonstrated an increase in pro-social behaviors. This also suggests that the celebrations were reinforcing. Attendance at the first high school reinforcer (dance) was quite low compared to the number of students who earned it. This was probably due to two variables: a few classes were on a field trip and other students indicated they were unsure whether the dances were going to be “cool.”
Strengths and Limitations

The present study adds to the literature in several important ways. First, as it attained significant results in reducing bullying behavior it supports the previous literature that SWPBS is a powerful tool when trying to modify behavior and promote success (Bohanon-Edmonson et al., 2004; Eber, Sugai, & Smith, 2002; Lane & Menzies, 2003; Lane, Wehby et al., 2007; Sugai & Horner, 2002; Warren et al., 2006).

Second, it is unique in participant characteristics. All participants received special education in a highly restrictive school. Most of the participants were inner city students of low socio-economic status (SES). Students were from grades K-12 and included those from diverse ethnicities with varying and sometimes multiple disabilities including emotional disturbance.

Third, it is unique in researcher characteristics. The researcher primarily ran a SWPBS plan to decrease the instances of bullying without external support. This speaks to the efficacy of practitioner led interventions. Also, the plan was implemented for a short period of time (eight weeks) and still achieved some significant results. Often SWPBS plans are implemented for as much as one to three years to achieve significant results (Lane, Wehby et al., 2007; Salmivalli et al., 2005; Warren et al., 2006).

Limitations to the study included (a) staff inconsistencies, (b) selections for reinforcers, (c) reliability of student self report, (d) follow through and generalization, and (e) head count attendance data. Lack of focused social skills teaching was a limitation as well; however, it will be discussed as a focus for future research.
Staff inconsistencies came in two forms: one high school teacher did not participate and some bus drivers needed weekly prompting to ensure that their students received their tickets. The teacher who did not participate blamed the students for not carrying their check sheets to receive their green BF s and subsequently their tickets for the dances or other reinforcers. Unfortunately, none of her homeroom students were present at the dances or the picnic though they expressed their desire to attend. Also, due to inconsistencies with some of the bus drivers’ participation, the researcher needed to be out by the buses on a weekly basis to ensure that deserving students received all of their tickets.

During the intervention, some of the students chose to play video games in a classroom instead of going to the dances. Some students approached the researcher with suggestions for other reinforcers. This would indicate that there needed to be more choices for reinforcers. What one student finds reinforcing may not be reinforcing to another student. Also, students’ desires may change over time and reinforcers need to be reevaluated (Leaf & McEachin, 1999).

Student self-report questionnaires can sometimes be unreliable. Students may not consider their behavior to be bullying (Salmivalli et al., 1996). Cole et al. (2006) concluded that peer reports were more reliable and markedly different from self-reports. During this study there were the additional variables of students who could not read and were embarrassed to ask for assistance and students who were “too cool” to fill out the questionnaire properly.
Unfortunately, the generalization phase is often neglected and the skills fail to sustain over time (Lane & Beebe-Frankenberger, 2004). Due to time constraints and the structure of this study, generalization was not measured.

Although head count data showed an increase in attendance at the weekly reinforcers, more information may have been gained with sign-in sheet data. The documentation of students’ names would have provided insight as to who was attending the reinforcers every week: bullies or non-bullies.

**Future Research**

Because social skills teaching was minimally addressed in this study, it may be an aspect of future research when paired with this existing program. Although some of the literature studied here on the effects of social skills teaching, especially in generalization over time, was inconclusive (Canney & Byrne, 2006; Kavale & Mostert, 2004; Miller et al., 2005), some did indicate its success in increasing desirable behaviors (Elliott & Gresham, 1991; Lane et al., 2005; Lewis et al., 1998), particularly when paired with positive reinforcement (Barton-Arwood et al., 2005).

When developing social skills instruction it is important to remember that expected behaviors should be explicitly described, taught, practiced, and supported (Lewis, 2008). Instruction should be provided for staff as well as students. Students must have opportunities to practice their newly acquired social skills and should receive reinforcement for exhibiting the new skills (Barton-Arwood et al., 2005). This study only addressed raised awareness, expectation descriptions, suggestions for alternative
behaviors, and reinforcement. A social skills curriculum might also include self-
reflection, discussions about expected behaviors including bystander behavior, lesson
plans, role-play, and commitment. Additionally, it could be beneficial to incorporate the
expected behaviors into the class rules (Lane et al., 2005; Lewis et al., 1998; Salmivalli et
al., 2005).

Because children with learning disabilities are at high risk for social inadequacies
(Bryan, 2005; Kavale & Forness, 1995), social skills teaching may be particularly
important. Deficits in social skills are often a distinguishing characteristic of students
with learning disabilities (Canney & Byrne, 2006) and manifest themselves in various
ways, including lack of ability to initiate and sustain relationships (Gresham, 1997),
disruptive and non-cooperative behaviors (Pearl, Donahue, & Bryan, 1985), and attention
seeking behaviors (Perlmutter, 1983). Moreover, students with deficits in social skills
often experience negative outcomes such as teacher and peer rejection, and bullying
(Farrell, 1997; Nabuzoka & Smith, 1993; Norwich & Kelly, 2004); therefore, future
studies might address social skills instruction and practice in conjunction with an anti-
bullying program.

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References


Gresham, F. M. (1997). Social competency and students with behavioral disorders: Where we are, where we’ve been, and where we should go. *Education and Treatment of Children, 20*, 233-249.


Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years’ research on peer victimization


Leff, S. S., Power, T. J., & Goldstein, A. (2004). Outcome measures to assess the


prevention practice within positive behavior support systems. Preventing School Failure, 50(1), 13-20.


Sugai, G. & Horner, R. H. (2002). Introduction to the special series on positive behavior support in schools. Journal of Emotional and Behavioral Disorders, 10(3), 130-


Appendix A1
Letter to the Parents

Bully Intervention Plan

A School Wide Bully Intervention Plan, has been developed by Jean Pellerin, a graduate student at California State University, Los Angeles and High School Teacher at The Kayne ERAS Center. The plan will be put into effect for 8 weeks: April 7-May 30. All of the students will be participating in the positive support plan. Please find the lists of bullying behaviors, the reinforcement list, and the consequence list below. Students will be earning tickets for being bully-free in school and on the bus. The tickets will be used for the reinforcers listed below. As part of the intervention, the students will be filling out questionnaires to help assess the plan’s effectiveness. Ms. Pellerin would also like to use the questionnaire data for her graduate thesis. The attached Parental Consent form is asking your permission to use the information from the questionnaires as part of her thesis report. The questionnaires are anonymous, unless your child needs assistance in filling them out, and then they will be kept confidential.

Thank you for your cooperation in this effort, Jean Pellerin

Bullying behaviors include the following:
- Physical aggression
- Verbal abuse
- Threats
- Intimidation
- Name-calling
- Teasing
- Inappropriate gestures
- Social exclusion
- Gossiping
- Suggested shunting
- Spreading rumors

Reinforcers:
- 1-hour dances on Fridays
- (Need 8 tickets to get in (checks for elem.))
- Once a month meetings. Tickets will go in for a drawing on the Fridays that we have the meetings.
- ‘Homework Free’ passes
- (Need at least 7 tickets (checks for elem.))
- Phone calls home (Need at least 6 tickets (checks for elem.))
- Teachers and bus drivers will give 1 ticket per day for students who refrain from bullying.

Consequences:
- Lack of access to the above reinforcers.
- Phone calls home.
- Silent Lunch
- Student and/or parent conferences with the principal.
- Detentions.
- In-school suspension.
- Suspensio
Appendix A2

Plan de Intervención acerca de intimidación agresiva (Bullying)

Este es un plan amplio de una intervención acerca de intimidación agresiva (bullying), desarrollado por Jean Pellerin, una estudiante de maestría de la Universidad Estatal de California, de Los Ángeles y maestra de (High School) secundaria en el centro de Kayne ERAS. El plan estrenará efecto por 8 semanas: 12 de abril – 20 de junio. Todos los estudiantes participarán en este plan positivo. Por favor de considerar la lista abajo de comportamientos de intimidación agresiva (bullying), reforzamiento, y consecuencia. Los estudiantes ganarán boletos cada vez que no intimiden o son agresivos (bully) en la escuela y en el autobús. Los boletos serán utilizados para reforzar la lista abajo. Como parte del programa, los estudiantes llenarán los cuestionarios para ayudarnos en evaluar la eficacia del plan. Ms Pellerin también quisiera utilizar los datos del cuestionario para su tesis de graduación. La forma asociada de consentimiento parental le está pidiendo su permiso de utilizar la información de los cuestionarios como parte de su informe del tesis. Los cuestionarios son anónimos, a menos que su niño necesite ayuda en completarlos, y entonces serán mantenidos confidenciales. Gracias por su cooperación, Jean Pellerin

Los comportamientos bullying incluyen lo siguiente:

• Agresión física
• Abuso verbal
• Amenazas
• Intimidación
• Llamar a otros por sobre nombres
• Irritar
• Comportamiento inapropiado
• Exclusión social
• Chismes
• Sugerir a ortos (el no juntarse con otros estudiantes)
• Hacer rumores

Reforzamiento:

• Una hora cada viernes de danzas
• Se necesitan 8 boletos (Cheques para la Elementaria.)
• Tendremos juntas una vez al mes. Los boletos se rifaran cada viernes que tendremos las juntas.
• Pases gratis de tarea
• (Se necesitan por lo menos 7 boletos (Cheques para la Elementaria.)
• Llamadas telefónicas a casa (Se necesitan por lo menos
• 6 boletos (Cheques para la Elementaria.)
• (necesidad por lo menos 6 boletos (comprobaciones para Elementaria.)
• Los profesores y los conductores del autobús darán 1 boleto por día para los estudiantes que se refrenan de bullying.

Consecuencias:

• La lista previa de privilegios no estarán disponibles.
• Llamar al hogar.
• Almuerzo en silencio
• Conferencia con el estudiante, padre y principal.
• Detención.
• Suspensión en la escuela.
• Suspensión
Appendix B1

Parental Consent Form

Your child is invited to be in a research study conducted by Jean Pellerin, a graduate student at California State University, Los Angeles, who is also a High School Teacher at The Kayne ERAS Center. Kayne ERAS is implementing a new, positive intervention plan to reduce the instances of bullying. This is a school-wide plan and intervention and all students will be participating. The purpose of this intervention, which will run for 8 weeks, is to uncover bullying behavior at Kayne ERAS and the effects of a new anti-bullying plan. It is also designed to explore bullying or being bullied.

Students will be earning Bully-Free (BF) marks on their check sheets. They will earn one ticket per day that they are bully-free in school. They will earn one ticket per day from their bus drivers as well. At the end of the week there will be things they can earn with their tickets: Entrance into a 1 hour dance, raffle prizes, picnics in the local park, etc. We will send home separate permission slips for any events that will occur off-campus.

During this time, your child will also be asked to complete three 14-answer questionnaires: one before the plan is implemented and two after the plan is implemented. Your child will be asked to rate to what degree s/he is bullying or being bullied. Each questionnaire will take approximately 15 minutes to complete. Questionnaires will be filled out and collected anonymously, but if your child requires assistance from his/her teacher with filling it out, the information will be kept confidential.

For my study, I would like to use the questionnaire information collected from your child during the 8 weeks of the intervention in my graduate thesis report. We ask that you read this form and ask any questions you may have before agreeing to allow me to use your child’s questionnaire information in this report. No names will be used in the published report.

There is minimal risk involved, including the possibility that students may be uncomfortable in answering some of the questions, and the possibility of a breach of anonymity/confidentiality. Your child may choose not to answer any question that makes him/her uncomfortable. The records of this study will be kept private. Questionnaires will ask only for gender and age and no names will be on the questionnaires. I will not be assisting the students and will have no way of connecting any questionnaire responses with a particular student. Consent forms, questionnaires, and data will be kept securely in separate locations for 3 years after completion of this study.

Your decision whether or not to allow your child’s questionnaire information to be used is entirely voluntary. If you decide not to allow your child’s questionnaire information to be used, it will not affect your child’s grades or their relationship with The Kayne ERAS Center. You may ask any questions you have now or later. You may contact me at 310-737-9393 ext. 306 (Jean Pellerin) or my adviser, Dr. Holly Menzies, at 323-343-6346.

Signature of Parent/Guardian ____________________ Date _____________
THIS PROJECT HAS BEEN REVIEWED BY THE CALIFORNIA STATE UNIVERSITY, LOS ANGELES INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH. ADDITIONAL CONCERNS AND COMPLAINTS, OR QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH PARTICIPANT, SHOULD BE DIRECTED TO THE DIRECTOR OF RESEARCH ADMINISTRATION (Phone number: 323-343-5366).
Appendix B2

Formularios de Consentimiento de los Padres

Su hijo/hija está invitado a participar en estudio de búsqueda conducido por Jean Pellerin, estudiante de maestría en La universidad estatal de California, en Los Angeles, que también es profesora de secundaria en el centro de Kayne ERAS. Kayne ERAS está ejecutando un plan nuevo, positivo de intervención para reducir las instancias de bravatas o amenazas (mal trato sobre los estudiantes que parecen débiles). Todos participarán en este programa escolar, cual será realizado en seis semanas. El propósito de este estudio es para detectar los varios comportamientos de bravatas o amenazas en Kayne ERAS y para anotar los efectos de un plan nuevo de anti-bravatas.

Todos los estudiantes recibirán puntos de anti-bravatas (AB) en sus hojas de cuenta. Ellos ganaran un boleto cada día que mantengan el estatua de anti-bravatas. También ganaran un boleto por el conductor del autobús. Al final de la semana podrán ganar cosas diferentes con sus boletos, como: una entrada a un baile de una hora, precios de rifa, partidas de campo, etc. Mandaremos hojas de permiso separadas para los eventos que se tomaran fuera de la escuela.

Durante este tiempo, les vamos a pedir que completen un cuestionario de catorce preguntas, uno antes de implementar el plan y dos después que plan se implemente. Le preguntaremos a su hijo/hija hasta que degrado han sido sometidos a bravatas/amenazas. Cada cuestionario se tomará aproximadamente 15 minutos en completar. Los cuestionarios serán llenados y colectados anónimamente, pero si su hijo/hija requiere ayuda de su maestra/maestro, en llenar el papel, la información será confidencial. Los nombres no apareceran en el reporte publicado.

Para mi estudio, Me gustaría usar la información colectiva de su hijo/hija durante las ocho semanas de intervención en mi reporte de el tesis de graduación. Les pedimos que lean este papel y que hagan preguntas que tengan antes de consentir darme permiso de usar la información del cuestionario de su hijo/hija en este reporte. No usaremos los nombres de sus hijos/hijas en el reporte publicado.

Hay mínimo riesgo involucrado, incluyendo la posibilidad de que los estudiantes se sentirán incómodos contestando algunas de las preguntas, y la posibilidad de una infracción de anonimato/confidencialidad. Su hijo/hija puede escoger no contestar cualquier pregunta que lo haga sentir incomodo. Los documentos de este reporte serán mantenidos privados. Los cuestionarios preguntarán solo el genero y edad y los cuestionarios no tendrán nombres. Yo no asistiré a los estudiantes y no tendré manera de conectar ninguna respuesta de los cuestionarios con algún estudiante en particular. Los formularios de Consentimiento, cuestionarios, y datos se guardarán con seguridad en localidades separadas por tres años después de completar este estudio.

Su decisión de dejar o no dejar usar la información del cuestionario de su hijo/hija es completamente voluntaria. Si usted decide no dejar usar la información de su hijo/hija, no afectara las calificaciones de
su hijo/hija o la relación con el centro Kayne ERAS. Usted puede preguntar cualquier duda que tenga ahora o más adelante. Puede comunicarse conmigo al (310) 737-9393 ext. 306 (Jean Pellerin) o con mi consejera, Dra. Holly Menzies, al (323) 343-6346.

Firma de Padre/Tutor __________________________ Fecha ______________________

ESTE PROYECTO HA SIDO REPASADO POR LA UNIVERSIDAD DEL ESTADO DE CALIFORNIA, LOS ANGELES. EL COMITE INSTITUCIONAL HA EXAMINADO ESTOS ESTUDIOS PARA LA PROTECCION DE TEMAS HUMANOS. QUEJAS ADICIONALES, O PREGUNTAS CON RESPECTO A SUS DERECHOS COMO PARTICIPANTE DE ESTE ESTUDIO, SE DEBEN DIRIGIR AL DIRECTOR DE ESTUDIOS ADMINISTRATIVOS (número de teléfono: (323) 343-5366

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Appendix C1

Initial Bullying Questionnaire

Bullying Questionnaire

Circle all that apply:

1. Male  Female.

2. Hispanic  African-American  Caucasian  Asian/ Pacific Islander
   Bi-racial  Other____________________

3. Circle – Certificate Track or Diploma Track

4. Elementary  Middle School  High School

5. Circle – are you a member of a gang?  Yes  No

6. Circle – are your parent’s members of a gang?  Yes  No

7. On a scale of 0-4, to what extent do you consider the following items to be bullying? (0=Not at all, 1=A little, 2=Some, 3= A lot, 4= Absolutely)
   • Physical Aggression  0  1  2  3  4
   • Verbal Abuse  0  1  2  3  4
   • Threats  0  1  2  3  4
   • Intimidation  0  1  2  3  4
   • Name Calling  0  1  2  3  4
   • Teasing  0  1  2  3  4
   • Inappropriate gestures  0  1  2  3  4
   • Social Exclusion  0  1  2  3  4
• Gossiping 0 1 2 3 4
• Spreading Rumors 0 1 2 3 4

8. Are there any other actions that you consider bullying? _____________________

9. On a scale of 0-4, to what extent have you bullied other students in the past 3 months? (0=Not at all, 1=A little, 2=Some, 3= A lot, 4= Always)

• Physical Aggression 0 1 2 3 4
• Verbal Abuse 0 1 2 3 4
• Threats 0 1 2 3 4
• Intimidation 0 1 2 3 4
• Name Calling 0 1 2 3 4
• Teasing 0 1 2 3 4
• Inappropriate gestures 0 1 2 3 4
• Social Exclusion 0 1 2 3 4
• Gossiping 0 1 2 3 4
• Spreading Rumors 0 1 2 3 4

10. On a scale of 0-4, to what extent have you been bullied in the past 3 months? (0=Not at all, 1=A little, 2=Some, 3= A lot, 4= Always)

• Physical Aggression 0 1 2 3 4
• Verbal Abuse 0 1 2 3 4
• Threats 0 1 2 3 4
• Intimidation 0 1 2 3 4
• Name Calling  0  1  2  3  4
• Teasing  0  1  2  3  4
• Inappropriate gestures  0  1  2  3  4
• Social Exclusion  0  1  2  3  4
• Gossiping  0  1  2  3  4
• Spreading Rumors  0  1  2  3  4

11. If you have been bullied, why do you think it happened?

_____________________________________________________________________
_____________________________________________________________________

12. If you have bullied, why did you do that?

_____________________________________________________________________
_____________________________________________________________________

13. Where have you been bullied (circle all that apply)?

Home    School    In the Community

14. Where does most bullying in school occur?

Classroom    Hallway    Cafeteria    Bathroom    On the Bus.

Thank you.
Appendix C2

Bullying Questionnaire Weeks Four and Eight

Bullying Questionnaire

Circle all that apply:

15. Male   Female.

16. Hispanic  African-American  Caucasian  Asian/ Pacific Islander

Bi-racial  Other____________________

17. Circle – Certificate Track or Diploma Track

18. Elementary  Middle School  High School

19. On a scale of 0-4, to what extent have you bullied other students in the past 1 month?  (0=Not at all, 1=A little, 2=Some, 3= A lot, 4= Always)

- Physical Aggression  0  1  2  3  4
- Verbal Abuse  0  1  2  3  4
- Threats  0  1  2  3  4
- Intimidation  0  1  2  3  4
- Name Calling  0  1  2  3  4
- Teasing  0  1  2  3  4
- Inappropriate gestures  0  1  2  3  4
- Social Exclusion  0  1  2  3  4
- Gossiping  0  1  2  3  4
- Spreading Rumors  0  1  2  3  4
20. On a scale of 0-4, to what extent have you been bullied in the past 1 month?

(0=Not at all, 1=A little, 2=Some, 3=A lot, 4= Always)

- Physical Aggression  0 1 2 3 4
- Verbal Abuse  0 1 2 3 4
- Threats  0 1 2 3 4
- Intimidation  0 1 2 3 4
- Name Calling  0 1 2 3 4
- Teasing  0 1 2 3 4
- Inappropriate gestures  0 1 2 3 4
- Social Exclusion  0 1 2 3 4
- Gossiping  0 1 2 3 4
- Spreading Rumors  0 1 2 3 4

7. Are there any other actions that you consider bullying? ____________________

8. If you have been bullied, why do you think it happened?

_____________________________________________________________________
_____________________________________________________________________

9. If you have bullied, why did you do that?

_____________________________________________________________________
_____________________________________________________________________

10. Where have you been bullied (circle all that apply)?

Home School In the Community
11. Where does most bullying in school occur?

Classroom Hallway Cafeteria Bathroom On the Bus.

Thank you.
Appendix D

List of Bullying Behaviors, Reinforcers, and Consequences

Bully Intervention Plan

A School Wide Bully Intervention Plan will be put into effect for 8 weeks: April 7-May 30. All of the students will be participating. Please find the lists of targeted bullying behaviors, the reinforcement list, and the consequence list. Jean Pellerin

Bullying behaviors include the following:

- Physical aggression
- Verbal abuse
- Threats
- Intimidation
- Name-calling
- Teasing
- Inappropriate gestures
- Social exclusion
- Gossiping
- Suggested shunning

Reinforcers:

- 1-hour dances on Fridays
- (Need 8 tickets to get in (checks for elem.))
- Once a month meetings. Tickets will go in for a drawing on the Fridays that we have the meetings.
- ‘Homework Free’ passes
- (Need at least 7 tickets (checks for elem.))
- Phone calls home (Need at least 6 tickets (checks for elem.))
- Teachers and bus drivers will give 1 ticket per day for students who refrain from bullying.

Consequences:

- Lack of access to the above reinforcers.
- Phone calls home.
- Silent Lunch
- Student and/or parent conferences with the principal.
- Detentions.
- In-school suspension.
- Suspension
Appendix E

List of Replacement Behaviors

Replacement Behavior List

• When you feel the desire to verbally bully someone, you can instead find someone in the room that you like and talk to them about something else.

• When you feel the desire to bully someone, you can find staff and discuss it with them.

• You can carry a small stress relieving activity in your pocket, such as lanyard key chains or beaded jewelry, and create something instead of bullying.

• You can participate in sports, such as football or basketball to facilitate team membership and acceptance of others’ differences.
University Alcohol Consumption: A Comparison between Athletes and Non-Athletes

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Abstract  
The purpose of this study was to compare alcohol consumption of student athletes to non-athletes at a midsized university in the Southern part of the United States. The eCHECKUP TO GO program is personalized evidence-based, online prevention interventions for alcohol developed by counselors and psychologist at San Diego State University. It is an interactive assessment tool that allows students to anonymously enter information about their drinking pattern and receive feedback on their alcohol use. The basic alcohol survey takes approximately 20 to 30 minutes to complete. The program is entirely self-guided, and requires no face-to-face contact time with an administrator or counselor. The eCHECKUP TO GO program is currently in use on over 550 universities and colleges across in 49 states, in Canada, Australia and Ireland. The eCHECKUP TO GO program is designed to motivate individuals to reduce their consumption using personalized information about their own drinking and risk factors and encourage students to ‘check-up’ on their use of alcohol, akin to checking their blood pressure or cholesterol levels from time-to-time.
Gardner versus Sternberg: Analyzing Theories of Multifaceted Intelligences and Applying Them to Fourth Grade Gifted Students

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Webster University


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The authors wish to thank Michelle Oder for sharing with us her ideas on gifted education and the Multiple Intelligences Worksheets and Profiles. We also thank Dr. Marlene Birkman for evaluating the children’s poetry and Jeremy Day for proofreading the manuscript.
Abstract

To better serve our gifted students, we as educators need to realize our own intellectual strengths so that we can guide our students to recognize their special abilities and potentials. Our study compares and contrasts two theories of multifaceted intelligences and applies them to ourselves and to fourth grade gifted students in a midwestern elementary school. Based on the theories of Gardner and Sternberg, we used self-reflections, surveys, work samples, observations, and discussions to gather information about 16 fourth grade gifted students and ourselves. Results suggest that each person involved (whether a child or an adult) was intrigued by these two theories and also interested in recognizing how the theories could be applied to him or herself. Through the study of these theories we discovered that each person is a distinct individual with his or her own intellectual strengths. Both Gardner’s and Sternberg’s theories proved to be valuable for adult educators who can use awareness of multifaceted intelligences to understand and appreciate their students, differentiate instruction, and provide a balanced curriculum. Both theories were useful in helping gifted students become aware of their personal traits, but the elementary gifted students in this exploratory study preferred Gardner’s ideas to Sternberg’s because the descriptions of the eight intelligences provided concrete and rich examples of abilities the children could recognize in themselves.
Gardner versus Sternberg: Analyzing Theories of Multifaceted Intelligences and Applying Them to Fourth Grade Gifted Students

Deborah A. Stiles and Joy A. Berry

The two major views of intelligence are as follows: (a) general factor, single trait, theories of intelligence and (b) pluralistic or multifaceted theories (Gardner, 1983, 2006; Sternberg, 1985, 1997). Psychologists Howard Gardner and Robert Sternberg believe in the second view of intelligence, described as “multifaceted conceptions of intelligence, which emphasize the importance of multiple and distinctive aspects of intelligence” (Sternberg, Jarvin, and Grigorenko, 2009, p. 4). Both psychologists view intellectual abilities as multifaceted, recommend that individuals identify their own pattern of intellectual strengths, and encourage schools to use their theories to guide and educate students (Gardner, 2006; Sternberg et al., 2009). In many ways their beliefs about human intelligence are similar, but in other ways Gardner’s and Sternberg’s theories are competing theories.

Gardner has proposed eight intelligences: logical-mathematical, linguistic, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal, and naturalist (Gardner, 2005, 2006). To be human is to possess all of the multiple intelligences. Each person has strengths – that is intelligences that are more developed. “No two individuals – not even identical twins – have exactly the same intellectual profile because, even when the genetic material is identical,
individuals have different experiences” (Gardner, 2006, p. 23). Gardner advocates using his theory to assess children and teach accordingly.

Sternberg has proposed a triarchic theory of intelligence: analytic, creative, and practical (Sternberg, 2006; Sternberg et al., 2009). Analytic skills are critical thinking and evaluation skills; creative skills include brainstorming, “problem-finding”, and the use of the imagination; practical skills involve real-world applications of knowledge. Sternberg et al. (2009, p.6) advocate the following: “Create a supportive learning environment in which students find their own pattern of abilities, understand how uniqueness allows each individual to make a particular contribution to the learning community and value diversity.… Balance the types of activities you offer your students so as to broaden the range of abilities addressed.”

The purpose of this exploratory study was to apply the theories of Gardner and Sternberg to understanding the intellectual abilities of 16 fourth grade academically gifted students. To accomplish this purpose the theories of Gardner and Sternberg were examined, multifaceted intellectual strengths of eighteen individuals were identified, both theories were applied to the classroom setting, and then the two theories were compared and contrasted.

Method

Participants

The main participants in this exploratory study were 16 elementary school students including 8 girls and 8 boys who were 9 or 10 years old. The elementary school is located in St. Louis County, Missouri. The state of Missouri labels the
demographics of the school district in the following ways: Asian 10.9%, Black 16.7%, Hispanic 2.2%, Indian .1%, and White 70%. Students from low-income families were identified on the basis of meeting the criteria for eligibility for free and reduced lunch; 17% met eligibility requirements.

In this school district, educational giftedness is as defined by “working at or above the 96th percentile in the areas of achievement, reasoning/problem-solving, and general mental ability” (unpublished document). On the WISC IV the 96th percentile is associated with an IQ of 126 or 127.

Also participating in the investigation of multifaceted intelligences were two adults, a gifted education teacher (adult Q) who interviewed the children and provided work samples and a university professor (adult R) who served mainly as a consultant.

Materials

Both the gifted education teacher and the university professor read books and articles by Gardner and Sternberg and both viewed and discussed two videos, Multiple intelligences: Developing intelligences for greater achievement and Intelligence, creativity, and thinking styles. Sixteen children completed the Multiple Intelligences Worksheet (based on Gardner’s theory; ALPS Publishing, 1999). Adults collected and evaluated poems from 10 children and work samples from 16 children. Applications of multifaceted intelligences were illustrated by two photographs of the gifted education classroom (Figure 1).

Procedure
In August 2009 intensive study of theories of multiple intelligences commenced. In September the gifted education teacher shared information with her fourth grade students about the lives of Gardner and Sternberg and each of their theories. She provided several examples of Gardner’s “eight ways of being smart” and Sternberg’s triarchic theory (book smart, street smart, and creative).

Each of the 16 gifted education students completed the Multiple Intelligences Worksheet (based on Gardner's theory; ALPS Publishing, 1999). Later the teacher prepared an associated Multiple Intelligences Profile for each student and discussed the results with each student individually. This profile identified strengths based on Gardner’s eight intelligences: verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinesthetic, musical/rhythmic, interpersonal, intrapersonal, and naturalist.

A different process was used for identifying each child’s strengths according to Sternberg’s triarchic theory. Due to difficulties in finding an age-appropriate instrument for fourth graders comparable to the Multiple Intelligences Worksheet, “triarchic” strengths were identified mainly through students’ work samples, teacher’s observations, and students’ self-reflections. Sternberg’s triarchic theory includes analytic, creative, and practical abilities. By definition all of the gifted children in this study have strong analytic abilities because they each scored at the 96th percentile or above on tests of reasoning/problem-solving and general mental ability. Creativity and practical intelligence were mainly assessed through teacher observations. An additional professor who is an expert on children’s poetry independently assessed the poems of 10 of the 16 students.
The criteria for evaluation were similar to what Sternberg has used for adolescents and adults (novelty, quality, sophistication). Responses were rated on a scale ranging from 1 (very low) to 5 (very high). In addition to earning points for novelty, quality, and sophistication, students earned double points for overall creativity. Each poem could receive a minimum of 5 points and a maximum of 25 points.

In September and October, using information from work samples, observations, self-reflections, discussions, and the Multiple Intelligences Worksheet; the teacher and the professor prepared Table 1. This table identifies the intellectual strengths of the 16 children and two adults.

In October the teacher made observations of and reflections on teaching the gifted students; these were recorded in three written emails. (See Table 2).

Results

All of the participants in this study were fascinated by the theories of multifaceted intelligences and enjoyed applying the theories to themselves. Presented here is Table 1 that describes the intellectual strengths of each of the 16 fourth grade students and the 2 adults according to the theories of Gardner and Sternberg. The 16 children are labeled A through P and the two adults are Q and R.

<table>
<thead>
<tr>
<th>person</th>
<th>Gardner</th>
<th>Sternberg</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Boy 9 yr.</td>
<td>Bodily-kinesthetic Logical/ Mathematical Intrapersonal</td>
<td>Analytic Practical</td>
<td>Poem high in creativity – 20 pts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>B Boy</strong></td>
<td><strong>10 yr.</strong></td>
<td><strong>Bodily-Kinesthetic, Musical, Interpersonal</strong></td>
<td><strong>Practical, Analytic</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>B loves and excels in a variety of sports. He is a student who is definitely sensitive to movement and sound. B is very enthusiastic and loves to share his ideas and opinions. He likes working on problem-solving and can relate to many different situations. B is quick to see the practical side of things.</strong></td>
</tr>
<tr>
<td><strong>C Girl</strong></td>
<td><strong>9 yr.</strong></td>
<td><strong>Naturalist, Intrapersonal, Visual/spatial</strong></td>
<td><strong>Analytic, Practical</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>C loves animals and is very concerned about environment. She hopes to become a paleontologist. C is very visual and believes there is only one answer for a problem. She loves to share her ideas and knowledge but prefers to spend time by herself. C has been working on her creativity and it has greatly improved. She thinks her strength is being creative; her teacher thinks she is strongest in analytic intelligence.</strong></td>
</tr>
<tr>
<td><strong>D Boy</strong></td>
<td><strong>10 yr.</strong></td>
<td><strong>Bodily-Kinesthetic, Logical/Mathematical, Interpersonal</strong></td>
<td><strong>Analytic, Practical</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>D loves and excels in a variety of sports. He enjoys challenges, logic and critical thinking activities. There is usually only one correct answer for D and he will definitely defend it. He is always quick to apply new concepts and skills as well as relating them to real life. D is a hardworking, confident, dependable student who shows patience in assisting other students.</strong></td>
</tr>
<tr>
<td><strong>E Girl</strong></td>
<td><strong>10 yr.</strong></td>
<td><strong>Interpersonal, Naturalist, Bodily-Kinesthetic</strong></td>
<td><strong>Practical, Creative</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>E is an avid reader who enjoys sharing her knowledge, ideas, and opinions. She shows strong leadership qualities and is highly regarded by her classmates. E is a born actress and was the lead in our class skit. She always finds a way to bring her vivid imagination, creativity, and artistic talent to her projects.</strong></td>
</tr>
<tr>
<td><strong>F Girl</strong></td>
<td><strong>9 yr.</strong></td>
<td><strong>Naturalist, Logical/Mathematical, Intrapersonal</strong></td>
<td><strong>Creative, Analytic</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>F is very creative and artistic. She brings these strengths to all of her projects. F is a perfectionist who see only one way to solve problems. She is a very independent worker who can sometimes work with a partner. Group activities cause her stress. She loves nature and enjoy learning about living things.</strong></td>
</tr>
<tr>
<td><strong>G Girl</strong></td>
<td><strong>9 yr.</strong></td>
<td><strong>Musical, Interpersonal, Intrapersonal</strong></td>
<td><strong>Analytic, Practical</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>G thinks her only strength is creativity. However, she can look at a problem and come up with a unique solution. G is friendly, social, and loves to share her ideas, but usually prefers to work alone on activities and projects.</strong></td>
</tr>
<tr>
<td><strong>H Boy</strong></td>
<td><strong>9 yr.</strong></td>
<td><strong>Logical/Mathematical, Naturalist, Interpersonal</strong></td>
<td><strong>Analytic, Practical</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>H is an exceptional student whose energy, excitement, and enthusiasm for learning is contagious. He thrives on challenges and loves to work on logic and critical thinking problems. Math and science are his favorite subjects. He also has a quick wit, sense of humor, and vivid imagination. H took a leadership role in creating, developing, and acting in our class skit last year. He was upset that his profile indicated &quot;Interpersonal&quot; because he sees himself as not outgoing and stronger in &quot;Intrapersonal.&quot; Once discussed, he understood and agreed.</strong></td>
</tr>
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<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>I Boy</td>
<td>Logical/Mathematical Naturalist Musical</td>
<td>Analytic Practical</td>
<td>I is a diligent and independent worker. He does well in groups but sometimes takes a more passive role. I excels at problem solving and logical thinking. He was surprised to see naturalist and musical listed as strengths on his profile. He does play an instrument but definitely didn't view music as having a large importance in his learning.</td>
</tr>
<tr>
<td>9 yr.</td>
<td>Poem low in creativity – 11 pts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J Girl</td>
<td>Naturalist Intrapersonal Verbal/Linguistic</td>
<td>Creative Practical</td>
<td>J has a quick wit and vivid imagination that adds spark to our class and presents her classmates with a different perspective. She loves reading, writing, and sharing her ideas. &quot;Artistic&quot; definitely describes this student. J enjoys nature and animals. She just got a puppy and &quot;is in love.&quot;</td>
</tr>
<tr>
<td>9 yr.</td>
<td>Poem low in creativity – 11 pts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K Boy</td>
<td>Naturalist Intrapersonal Logical/Mathematical</td>
<td>Analytic Practical</td>
<td>K thrives on math challenges, especially logical thinking. His favorite subject is science and he is like a sponge for knowledge. K is a loner who will sometimes work with a partner. Group work is hard for him. He likes attention and usually seeks the negative type. He is very creative but needs encouragement to express himself.</td>
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<td>9 yr.</td>
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<tr>
<td>L Boy</td>
<td>Visual/Spatial Interpersonal Logical/Mathematical</td>
<td>Practical Creative</td>
<td>L has the ability to adapt to everyday situations and issues. He is also very social and is a friend to all. L does well when visuals are provided for new concepts. He shows strength at logic and critical thinking (usually drawing pictures to help solve the problems).</td>
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<tr>
<td>9 yr.</td>
<td>Poem low in creativity – 6 pts</td>
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<tr>
<td>M Girl</td>
<td>Naturalist Interpersonal Logical/Mathematical</td>
<td>Practical Analytic</td>
<td>M loves reading, writing, and participating in all activities. She enjoys sharing her knowledge, ideas, opinions, and unique perspective with others. M likes challenges and works diligently until a task is completed. It's as if she attacks logic and critical thinking activities. She likes science and nature, but was surprised that naturalist came in first place on her Multiple Intelligences Profile.</td>
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<tr>
<td>N Boy</td>
<td>Verbal/Linguistic Visual/Spatial Interpersonal</td>
<td>Analytic Practical</td>
<td>N has a passion for words and language. He possesses excellent communication skills. N loves reading, writing, geography, and history. N is extremely analytical, enjoying critical thinking activities. He usually wants to make practical connections between new knowledge and skills. N is also very creative, especially in writing, and was also instrumental in writing and developing our class skit. He was one of the lead characters.</td>
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<td>10 yr.</td>
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<tr>
<td>O Girl</td>
<td>Naturalist Visual/Spatial Logical/Mathematical</td>
<td>Practical Creative</td>
<td>O is a very conscientious student who loves to research in order to learn new facts and concepts. She is very creative, yet loves the challenge of critical thinking activities. O is very capable of applying new knowledge to real world situations. Although she is very quiet, she is a friend to all and is getting better at sharing her ideas and opinions.</td>
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<td>9 yr.</td>
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<tr>
<td>P Girl</td>
<td>Naturalist Musical Interpersonal</td>
<td>Creative Practical</td>
<td>P is a new student who has only been in the class for two sessions. She is a confident student who enjoys participating in discussions and activities. Her creativity is</td>
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already apparent. She also excels at problem-solving and applying knowledge to real world situations. Knowing her strengths will definitely help me in helping her to adjust to the class and in assisting her in selecting projects.

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<thead>
<tr>
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<th>Interpersonal</th>
<th>Creative practical</th>
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<tr>
<td><strong>Q</strong></td>
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<td><strong>R</strong></td>
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My strengths have always served me well in running a family business, as a salesperson, and as a teacher. Working with gifted students, I rely on my strengths to create unique and challenging lessons geared to their strengths and specific learning styles. (Q is most similar to children J, L, N).

My strengths have been obvious since I was a young child. In kindergarten my teacher described me as “artistic and dreamy.” I taught myself to swim at four years. Today my life includes psychology, art, research, and triathlons. (R is most similar to the child F.)

Figure 1 shows gifted education teacher (adult Q) and includes two photographs of her elementary school gifted education classroom. The two photographs illustrate pluralistic views of intelligence incorporated into the design and decoration of a classroom for gifted children.

Figure 1. The gifted classroom

Table 2 contains excerpts of emails documenting observations of and reflections on incorporating the theories of Gardner and Sternberg while teaching gifted students.
Teacher and student are similar to each other

As I think about the students with whom I share similar intellectual profiles, I realize that I relate really well with the students who are most like me. When selecting activities I know exactly what will appeal to these students. I also know how to differentiate instruction to fit their needs. Student J was the one who wasn't happy with finding the facts about Christopher Columbus. I asked her a few questions, counted on her creativity, and suggested writing a song. She happily composed one and immediately sang it to the assistant principal who was observing in my classroom.

Teacher and student are different from each other

As I think about the students whose intellectual profiles are different from mine, I realize that my lesson planning has changed. Now I spend more time researching ideas and ways to reach the students [who are least like me]. Since they are all very strong mathematically, I usually have an additional critical thinking problem for them to work on while others are still completing the first problem. Many times, I have them working on different problems than the whole group. These students would rather work on their own; however, I want them to be able to work with others and select activities where it is logical and worthwhile for them to do so. If the activity allows for independent work, I let these students do so.

Overall benefits of knowing about the intellectual strengths of students

My teaching is improving along with my growing awareness of the theories of multifaceted intelligences. The uniqueness of my students has become very apparent to me. It has become clear that I need to make sure that I am teaching to everyone’s strengths. Last night I had to plan my activities for the Gateway Field trips that we are taking this week. I think I took into account their multiple intelligences… We are going to take the information and create various projects. The students will be able to select how they will present their ‘discoveries’.

Discussion

One might reasonably expect the class of 16 gifted fourth grade students to be quite similar intellectually. After all, these children are all of the same age (9 or 10); they are all strong in academic achievement and general mental ability; and they had all qualified for the gifted education program based on test scores at or above the 96th percentile.

Distinct intellectual abilities
On the contrary, each child in this study proved to be a distinct individual with his or her own intellectual profile; the individual strengths of each child are shown in Table 1.

All eight of Gardner’s intelligences are represented in Table 1, as are all three of Sternberg’s intelligences. No two individuals are exactly alike. The gifted education teacher (adult Q) is most like children J, L, and N; the professor is most like child F.

Table 1 shows that some students (such as A and D) are similar to each other, but no two students are the same. As a result of applying the theories of Gardner and Sternberg, it became apparent, for instance, that students N and F do not have the same intellectual strengths. N has a passion for words and language and is linguistic, spatial, interpersonal, analytic, and practical; whereas F loves nature and enjoys learning about living things and is a naturalist, logical-mathematical, intrapersonal, creative, and analytic. Therefore, students N and F are inspired and challenged by different kinds of activities.

As a result of applying multifaceted theories of intelligence, the educators discovered different intellectual abilities in students who initially appeared to be very much alike. For example, both A and D are athletes and exceptionally good students who enjoy critical thinking activities. Applying Gardner’s theory revealed that A is stronger in intrapersonal intelligence and prefers to work alone; he wrote a self-reflective poem that was rated high in creativity. D is stronger in interpersonal intelligence and interacting with others. D assists other students, speaks out, and expresses himself confidently.
The gifted education classroom

Two photographs show a classroom environment conducive to using multifaceted intelligences. The photograph on the left illustrates how much creativity is encouraged in this class. "Poetry is everywhere!" and examples of poetry from both students and published poets are displayed. Above the poems are several examples of students’ artwork. The photograph on the right illustrates a colorful and comfortable space designed by the gifted education teacher. In this cozy environment children can read and think quietly or they can participate in small group discussions. A student who is giving a presentation to the group is invited to sit in the special multicolored chair that resembles a hand. On the wall is a teacher-made blinking facsimile of the St. Louis arch and photographs of several St. Louis communities and neighborhoods. The gifted education teacher (adult Q) is strong in creative, practical, interpersonal, verbal/linguistic and visual-spatial abilities. Each of these abilities is prominent in the visually inspiring and thoughtfully arranged gifted education classroom.

Applications to instruction

Some results on Table 1 are surprising. Logical-mathematical and linguistic intelligence are the traditional scholastic intelligences; “most tests of intelligence focus on logical and linguistic intelligence” (Gardner, 2005, p. 1). The 16 students qualified for the gifted education program because they all scored at or above the 96th percentile on traditional tests. And yet, on their profiles, none of the 16 gifted students was strongest in both of Gardner’s scholastic intelligences. Sternberg’s analytic intelligence is another example of the “traditional scholastic”
intelligence. None of the gifted students was exclusively strong in Sternberg’s analytic intelligence and only eight students were strongest in analytic reasoning. With this new knowledge of the abilities of her students, the gifted education teacher can differentiate instruction and broaden the curriculum. She can follow the suggestions of Sternberg, Ferrari, Clinkenbeard, and Grigorenko (1996) and broaden her instruction and assessment procedures to include multifaceted abilities.

The profile of the gifted education teacher is most similar to those of children J, L, and N and most different from A, F, I, and K. In Table 2 the teacher reflects on the value of studying and applying the theories of Gardner and Sternberg. She discovered what Sternberg and others wrote (2009, p.14), “Your students can have both preferences and profiles of success that can be very different from yours.” She now revises lesson plans to reflect what she has learned about her students. It has become clear to her that she needs to make sure that she is teaching to everyone's strengths.

Gardner Versus Sternberg

Gardner (2007) asserts that the theories of multifaceted intelligences hold out “hope that more students can be reached more effectively, if their favored ways of knowing are taken into account in the curriculum, instruction, and assessment.” Gardner encourages educators to discover applications of his theories. According to Gardner (2006, p. 73), “Sternberg reveals he is much more of a psychologist and psychometrician than I am. This may explain why his work has been of great interest to psychologists, whereas mine has captured the
In contrast to believing multifaceted theories “hold out hope”, Sternberg tests out his theories with scientific research studies. He designed and conducted several research studies to evaluate the application of his theory of successful intelligence to educational settings. He describes a series of research studies on instruction and triarchic intelligences; Sternberg and his colleagues (2006, p. 94) found that students “placed in instructional conditions that better matched their pattern of abilities outperformed students who were mismatched. In other words, when students are taught in a way that fits how they think, they do better in school…. [Combining analytic, creative, and practical learning has greater benefits than just emphasizing memory or critical thinking. In several studies] students in the analytical, creative, practical condition outperformed the other students.”

Prior to this investigation Teacher Q had not extensively studied the theories of Gardner and Sternberg. As a result of this study she realized that both theories were helpful in terms of understanding and teaching her students. She discovered that she liked both of the theories, but enjoyed Gardner’s theory slightly more because his theory inspired her “creative and practical” self to think of ways to teach to students who are “naturalists” or strong in “logical-mathematical” thinking.

The professor (adult R) is a psychologist and as a psychologist agrees with Sternberg’s (2007, p. 31) recent criticism of Gardner’s book Five minds for the future that he provides “no real empirical evidence” to support his ideas. She
prefers Sternberg’s theories, but the professor thinks that Gardner’s theories are, in fact, more intriguing and delightful than Sternberg’s are.

The nine and ten year old gifted students in this exploratory study liked Gardner’s ideas more than Sternberg’s. They were very interested in the Multiple Intelligences Profiles. They often recognized themselves on the profile, and in some cases began reflecting more deeply about their strengths. For example student I was surprised and interested in his strength in musical intelligence and student M was surprised that naturalist was “first place” for her. The athletes enjoyed discovering that they possess high bodily-kinesthetic intelligence.

Sternberg’s triarchic intelligences are abstractions, but Gardner’s descriptions of the eight intelligences provided concrete and rich examples of abilities that the children could recognize. After one girl was complemented on her contribution to a class discussion, she exclaimed, “Well I am, after all, a naturalist.”

In conclusion, although only 16 gifted fourth grade students were involved in this exploratory study, much was learned. We encourage other researchers to study the application of multifaceted theories of intelligence to the education of gifted students. Educators will want to consider the theories of Gardner and Sternberg when they assess and instruct their gifted students. As a result of understanding their own strengths and the strengths of their individual students, educators can successfully teach and guide gifted students to realize their potential abilities.
References


analyzing theories
Peter Ehlen

April 13, 2010

**The Integration of Children with Down Syndrome into the Normal Classroom**

An ongoing debate about the inclusion of children with Down Syndrome into the normal classroom has raged among educators and parents since the early 1970s when the idea was first introduced. In 1975, the Education for All Handicapped Children Act gave all children the right to free public education regardless of handicap severity (Rynders, 2005). But after 35 years of research and experimentation, the question still remains: Is it better for the child to be integrated into the normal classroom, or to be educated in a special education setting? There are pros and cons to both sides, and the question is made more complex by the numerous factors that can vary from situation to situation, from the presence or absence of paraeducators to the modification of materials. All these years of experimentation have led to the current model, which offers a limited type of mainstreaming to some individuals, usually with significant support. Many improvements still need to be made to this model. I propose two new educational models, each of which may be able to preserve the advantages of the current mainstreaming practice and address many of its limitations. By incorporating aspects of these programs into existing programs, we will be able to make more progress toward optimal education for all students, especially those with Down Syndrome.

What are the goals and hopes that, when met, would mean that the integration of the child with Down Syndrome has been successful? First, both the disabled and nondisabled children should benefit academically from the experience. To ensure that all children excel, they should be taught with academic materials that are appropriate for their level and that will help them learn to the fullest extent of their ability. Second, all students should also benefit socially. This means that they have sufficient time and opportunity to interact with each other, that they have appropriate peer models to learn from, and that there will be extra support available for the children’s safety and learning if certain skills are
lacking. Finally, for the ideal program to be workable, it must also be financially feasible. When all of these requirements are met, both children with learning disabilities and normally developing children will have the optimal chance to prepare to be happy and successful adults.

The special education classes that are now in place in many school districts have some great advantages. Some more practical lessons are taught to the children there, such as personal care and vocational skills. Children with Down Syndrome particularly benefit from group speech and occupational therapy conducted by visiting therapists (Ehlen, personal interview, 2010). The learning sessions are more closely guided than other classes, helping the disabled children better understand what their task is. These classes also allow for more individualized instruction at the child’s understanding level. Perhaps most importantly from an administrator’s point of view, special education classes are much cheaper than having individual aids and therapists for every child, as might be required if they were to be in a normal classroom setting.

Nevertheless, research has clearly shown that even though special education classes have their advantages, integration has a much greater benefit for everyone, and most especially for children with Down Syndrome (Rynders, 2005 and Wolpert, 2001). Completely unlike children with autism, for example, children with Down Syndrome are usually outgoing, sensitive to others’ emotions, interested in communicating, responsive to praise and approval, and very attuned to the behavior of others. They generally exhibit the ability to learn and recognize what is correct socially. By being included with children who inherently understand social norms, they learn what is appropriate and what is not. Rynders (2005) says that if the goal is to help the children become independent, the disabled child must be able to successfully interact with others. Every successful interaction at school is in preparation for when they must interact without any guidance from teachers or parents (p.6). Emily Ehlen, my sister, is a 14-year-old girl with Down Syndrome who has been in normal classrooms her whole life. Her nerve
endings above the upper lip never fully developed and she does not sense anything there. Her nose would often be runny, but she never understood why she should wipe it when it did not bother her. However, when all her classmates told her how gross it was, she quickly learned how much it bothered others and changed her habits. This is what Myers (2010, p.682) calls, “normative social influence.” We are all sensitive to social norms because we want to be accepted by others around us, and so we will change those habits that make people want to avoid us. Integration can have a strong, positive influence on a child with Down Syndrome.

While there are benefits to integration, there are also some legitimate concerns presented by parents, teachers, and other school administrators. Parents of non-disabled children ask how the integration will affect their child’s development (whether it will hold them back from their own potential) and are concerned about their child’s personal safety as well (Bricker, 2000). Parents with a disabled child may be worried about how he or she will be treated by their peers and whether they can keep up with everyone else. Teachers do not always know how to deal with the children when they misbehave and have received little or no training to deal with the situation. They also want to challenge the non-disabled children, also worry whether the disabled child keep up with the pace. Administrators have strong concerns about the cost of integration. A full-time aid and multiple inclusion and behavioral specialists who visit the classroom once a week to observe and report progress, are generally required for each fully-included disabled student. (This cost also influences administrators when making decisions about grade placement, such as whether to allow children with Down Syndrome to be held back a year if too little progress has been made.) Eric and Vicki Ehlen discovered that it was an “unwritten rule” that if a parent with a non-disabled child wished to hold them back a year, it was no problem, but if a parent with a disabled child wanted the same thing, it was out of the question (Ehlen, personal interview, 2010).
Are the concerns of the parents of normally-developing students legitimate? Would inclusion be a
detriment to their non-disabled child? Quite the opposite is true. After 12 years of research, Rynders
(2005) found that the children involved in the program had grown in self-confidence because of their
involvement with children with disabilities. They also had higher regard for people with disabilities and
greater appreciation of their own self worth. When a disabled child is extremely aggressive and may be
a threat to others, safety comes first, of course. Inclusion may need to start in small doses (i.e. an hour a
day) until the children grow accustomed to the change, and then longer periods of time can be spent in
the classroom (Rynders, 2005, p.8). Aksoy and Yildrim (2008) also found that those personally familiar
with someone with a disability are more accepting of others with similar problems (p.776). This would
be valuable a any child to be able to understand.

Despite all of the great benefits that be had thanks to the two different programs already in place in
most of the country, there are serious drawbacks to each of them.

For the parents of the disabled child, the unknowns may be frightening. One of the largest concerns
is the child being taken advantage of sexually. Rynders (2005) says that while it is good for peers to help
the child learn, they should never help or teach them to brush teeth, change undergarments, apply
deodorant, and other similar tasks. If that principle is followed, the risk is greatly reduced. It would also
help if children were made more aware of the difficulties the disabled children face so that they can have
more sympathy towards them. Close observation by the trained teacher is required so that possible
problems are noticed and dealt with before they develop. Another pressing concern of the parents of
the disabled children is that without the more individualized instruction of the special education
classrooms, their children will fall hopelessly behind their peers academically. In the early years of
education, the gap may not be very wide, but it continues to grow until there is no possibility for the
child to catch up. This very legitimate concern is not addressed by the current inclusion model, and is
very often the reason that full inclusion is abandoned by the time students with Down Syndrome reach the high school level. We need to make some changes to fix this.

Finances are always a concern in school districts where budgets are limited. If there is leftover money in a certain department, it can be used for something else, which makes the administration far less willing to spend it on one child. One set of parents said that every administrator was completely against their daughter’s inclusion, despite state and district policies that recommended the “least restrictive environment”—ie, inclusion if at all possible. They were quick to point out how wonderful the special education teachers were, how large the regular classrooms were, etc., but the defining problem was actually how expensive it would be to fully support a child in a regular classroom that was several grades higher both academically and emotionally than her current developmental level. They were told by school board members that they would “rather fund programs than individuals” (Ehlen, Personal Interview, 2010.) There is no good remedy for this problem with the programs that are now in place.

Although special education classrooms are clearly more cost effective than mainstreaming, there are many reasons they may not give the optimal education to individual students. First, these classrooms are for all children with disabilities. In one class, you may have someone with muscular dystrophy, a child with Autism, a child with Down Syndrome, and a child who is deaf These are four very different disabilities, with unique challenges associated with each one. If it is hard for a teacher to deal with one child with challenges in a normal classroom, it is that much harder to teach 8 to 20 children, all with very different problems and disabilities. Another great disadvantage of the special education setting is the lack of social skills present in that environment. If they have been isolated from normal children since age 4, then virtually none of children know how to behave normally. Furthermore, all of the children in a special education classroom are challenged academically. They have poor study skills, poor organizational skills, and limited ability to participate in an academic discussion or oral presentation.
If there are no correct examples to follow, how can anyone form proper social or academic habits? We need a new solution.

We may be able to discover some new ideas by looking at an innovative program in the Torrance, California area called LAUNCH Preschool. Specially trained teachers and therapists are put in charge of each class, which is for children with disabilities, including those with Down Syndrome. The key is that only a portion of the students are disabled. Normally developing children are invited to attend the school to be models for the disabled students. The peers are very carefully selected so as to insure that they are good examples in every way for the disabled children to learn from. All children range from age 3 to 5 and work closely together to learn new skills. Class sizes are small and allow all the children to interact with one another. So, does this make a difference? Diane Bricker, one of leading experts in the field of Inclusion, referred to her early research of integration with normal functioning children: “We observed that including children without disabilities offered the children with disabilities relevant and appropriate models for learning new skills and information” (2000, p.15). This LAUNCH program demonstrates exactly what Bricker says. All the disabled children learn many new and valuable skills, and are well prepared to enter normal schooling. Not only is that idea important, but another focus in the school introduces novelty and teamwork into the classroom. The children are given new tasks, challenges, and projects which keeps them thinking creatively. This idea that novelty encourages learning is also supported by Rietveld (1988, p.8). And, importantly, the normally developing children have the benefit of an incredible program, designed to stimulate thinking, physical coordination, and cooperation, all supervised by extraordinary teachers and therapists.

It would be wonderful if all children with Down Syndrome had positive experiences when integrated, but sadly, that is not always the case. Because of all the above mentioned problems, some fully mainstreamed students find themselves virtually friendless in a class of students that are so much more
mature... ignored by teachers who have no idea how to include them in a conversation (Ehlen, Personal Interview, 2010). All researchers agree that it is best for the child to be integrated, but Gawne and Brothers Keith (1995) remind us that circumstances change and the only way for integration to be successful is by constantly evaluating and making changes to fit the needs of the individual (p.5).

Every year all of the children with disabilities take an array of tests to measure how much progress has been made in the last year. Reading, oral language, math proficiency, Piaget’s psychology test (Rietveld, 1988), and many tests are administered. With all the information that is gathered from the examinations and by comparing the scores with normal children, the administrators can say that someone is at a 5.1 year old level in reading, and yet their math comprehension is that of a 7.2 year old. If someone is in the normal classes and their scores are low in one area, the paraeducator may try to help them, but that child is still expected to normally advance to the next grade despite possibly having fallen behind in one or more subjects. Now imagine for a moment that you have a son in third grade, but then the teachers think he should advance to the seventh grade level of English. Despite having a paraeducator, their maturity and understanding are not yet at that age level, and no amount of help will change that fact.

Here is a new and different approach: We should not hold back the children, but rather place them in the grades where they place on their tests. If their age is that of a 6th grader and they keep up in reading and social studies, but math in only at a 3rd grade level, they should be allowed to attend the 3rd grade math class so that they will learn something. Evaluations will need to be done constantly to ensure that everything is going according to plan, but this would mean that the child with Down Syndrome would be able to keep up in comprehending and completing the activities. There will still be a difference in expectations, as was so in the case study by Gawne and Brothers Keith (2008). There was a young girl with Down Syndrome, who was placed into a normal school and graduated with full honors as
a very capable adult. The committee which met to discuss her progress on a regular basis realized that the priorities were different for her and set unique goals that they felt were obtainable and would push her to still learn.

Another important aspect to this plan is that there will be no need to have a full time aid present. If the child can understand as readily as their slightly younger peers, then there will be no reason for someone to explain every task to them again and keep them from getting bored when they cannot follow a class discussion. This would save lots of money in the long run. There would still be some other specialists, but the number of people involved with each child would be significantly less, therefore saving time and money for the schools.

Of course, there would have to be limitations to how far this plan is taken. An 18-year-old individual would probably not be placed with second grade children if that was the entire extent of the math that they were capable of doing. It might still be necessary to have some special classes for unique cases. This new regimen should at least be tested to determine if it is a real solution. Through IEP meetings and observation of the child's development, we can determine if such a plan would be appropriate for the child of interest.

Even if this new theory does not work, there are many aspects in the current education systems that need to be modified in order to make the integration easier for everyone. In one study, Wolpert (2001) found that 55 percent of the 230 teachers who had a Down Syndrome child in the class had never received any training or preparation from the school district on how to make inclusion successful and only 63 percent of them had ever received any special education training. It is no wonder that so many attempts at integration are not successful! One way we can change this low statistic is to introduce new classes at universities required for all students with a teaching major. Classes and seminars also need to be organized for all the teachers currently working with students so that they can receive advice and give
input on current technique effectiveness. Rietveld (1988) wholeheartedly supports this idea (p.7) and also suggests that the student’s peers are educated about the child’s condition so that they can better understand why the child is different. In her studies she observed that many problems arose because the children did not know how to properly respond to babbling or incoherent noises, which were actually attempts to communicate. Children could solve that issue by responding with verbal statements instead of ignoring or making fun of them (p.8). Also organizing a committee (IEP, if there is not already one) involving the parents, teachers, and other faculty would greatly help to identify what the priorities for the child should be.

Despite the many advantages with the current educational programs, by implementing and testing the new program, the Inclusion of children with Down Syndrome would be very beneficial to everyone. Both children, with and without disabilities, would benefit from the experiences: disabled children would learn social skills and excel in the learning environment, being able to keep up with their peers and giving input in class discussions. Financial costs would be greatly reduced and all other goals for successful inclusion can be obtained. The new measures that would apply no matter what ensure that the experiences with integration will be much more positive than before and may also inspire others with other ideas of how to best integrate the children with Down Syndrome. Helen Keller once said, “Life is full of suffering, but it is full also of the overcoming of it.” Let us give these children a chance to overcome their challenges and maybe we will overcome some of our own.


Ehlen, Eric and Vicki, Personal Interview, 2010


Education is one of the fundamental factors of economic development. According to Ilhan Ozturk (2001), “No country can achieve sustainable economic development without substantial investment in human capital.” All countries must realize that better education leads not only to higher individual income but is also a precondition for long-term economic growth (International Institute for Applied Systems, 2008). According to Dr. Jose Enrique Vallarta Rodriguez (2007), the people of Mexico believe that their educational system is expensive, dysfunctional and corrupt. However, the faith in the value of education remains strong in Mexico.

Research indicates that Mexico lags behind what many other countries have already achieved in education. Instituto Nacional para la Evaluacion (INEE), (2003) revealed that sixth graders in urban primary schools achieved 45 percent satisfactory or above in reading and 15 percent satisfactory or above in mathematics. Results in rural and indigenous primary schools were even lower (RAND Corporation, 2005).

While Mexican President Felipe Calderon has proposed ambitious reforms in the educational system of Mexico and many of those concerned about education believe that things are changing for the better, the problems created when education intersects with bureaucracy, politics and organized unions are complex and multifaceted (Wall, 2008). According to the RAND Corporation documented briefing series (2005), some of the key issues in Mexican education at
the national and state levels that must be addressed include teacher training and a lack of research and evaluation that can inform school improvements efforts.

Teachers in Mexico are being trained to teach according to the frontal model, to prioritize information and memorize facts (Schmelkes, 2008). The structure of the frontal model or transmission model is rigid and hinders the creativity of the teacher. There is very little room for the teacher to improvise because this method follows a step-by-step procedure. Students do not actively participate in the learning process, they simply sit and listen. Students do not work in teams and they are not taught to think, to solve, to explore or to do research (Schmelkes, 2008).

Based on current research of best practices, students need to learn by observing, imitating, exploring, reading and doing research, talking to others, experimenting, discovering, working together, discussing, reflecting, solving problems and helping others.

According to Schmelkes (2008), the transmission model of teaching utilized throughout Mexico must be discarded. The object of education can no longer be the transmission of knowledge. It should be replaced by “a model that prioritizes the development of competencies” (Schmelkes, 2008, p. 108). The transformation of the teacher’s view of teaching and learning is without a doubt the most important factor for insuring quality education for the future.

**Mexico Teacher Project**

The *Mexico Teacher Research Project*, a collaborative research partnership between the University of the Incarnate Word’s Dreeben School of Education and a private school, the Instituto Migul Angel do Occidente in Mexico, was designed to create and disseminate new and promising teaching strategies to K-6 grade teachers in Mexico.

Mr. Alejandro Junco, funder for the Mexico Teacher Research Project, is the publisher of several newspapers in Mexico. Two of the most prestigious papers are *Reforma* in Mexico City.
and *El Norte* in Monterrey. His interest in having educational research conducted in Mexico stems from his view that Mexico is being destroyed by drug cartels. He believes that by improving the economic and social situation, the country will be in a better position to get rid of the cartels. His focus has been on improving the country's educational and judicial system.

The project’s vision is to contribute to the transformation of the educational system of Mexico by training a new generation of teachers to increase the academic achievement of students. The research initiative was designed to provide data that contributes to the literature on Mexico’s educational system. The research goals of the project are: (1) To design a research project that would lead to a transformation of how teachers in Mexico view the teaching and learning of literacy and apply the new skills to the classroom, (2) To conduct a needs assessment with school personnel, teachers, parents and students, (3) To collect baseline data for the project and (4) To design a training program. The execution initiatives are designed to increase the academic achievement of students in Mexico in literacy through teacher training in teaching methodology and literacy content. The execution goals are: (1) To develop a series of literacy workshops designed to improve the teaching skills of teachers in Mexico, (2) To increase the number of teachers who utilize a variety of teaching models, (3) To develop and implement a model of training for teacher leaders, (4) To develop a transferable model and duplicate the activities of the project in a second school; and (5) To disseminate project information through the project web page and established process of scholarship to contribute to the literature on Mexico’s educational system.

While this international project began in the summer of 2009, the Dreeben School of Education at the University of the Incarnate Word has worked with the teachers at the Instituto
Migul Angel do Occidente in Mexico since 2007. A strong, collaborative relationship and rapport was developed between the partners prior to initiating the project.

As an initial step in the research project, a meeting between the dean of the Dreeben School of Education, the coordinator of funding for the project and the principal and coordinators of the Instituto Migul Angel do Occidente was held in Guadalajara. The three year research project was discussed, designed, revised and finalized. A formal partnership agreement was signed in July, 2009.

It was determined that the paper based, English version of the Scholastic Reading Inventory would be used as the instrument for assessing the improvement of student’s reading skills in grades kindergarten through grade six at the Instituto Migul Angel do Occidente. This inventory was administered to approximately 633 students during the first semester of the project.

**Literacy Workshops in Mexico**

Faculty in the Dreeben School of Education in conjunction with the coordinators from the Instituto Migul Angel do Occidente developed a series of literacy workshops. These workshops were tailored to meet the needs of the school. Topics for these workshops included reading strategies, running records, performance-based assessments, task-based instruction, learning centers, writing process, classroom management, Inductive Thinking Teaching Model, Picture-Word Induction Model, Think-Pair-Share, Jigsaw II Cooperative Learning Model and the Concept Attainment Model. In August, 2009 and 2010, faculty from the Dreeben School of Education conducted two day literacy workshops (10 hours a day) at the school in Mexico for twenty three teachers. In January, 2010 faculty traveled to Guadalajara to conduct additional two day literacy workshops.

**Follow-up and Feedback**
About two months after the workshops, faculty traveled once again to Guadalajara to do observations in the teachers’ classrooms to ensure that the pedagogy taught in the workshops was being implemented. After the observations, faculty provided performance feedback individually to the teachers. Based on the individual observations, additional strategies for implementing the new approaches to teaching were shared with the teachers.

**Mexico Teachers at University of the Incarnate Word**

The twenty three teachers from Instituto Migul Angel do Occidente in Guadalajara traveled to the University of the Incarnate Word for a week in April to visit the schools in the San Antonio area and to attend workshops conducted by faculty at UIW. The teachers’ schedule for the visit included four days of visiting classrooms in the morning and attending literacy workshops in the afternoon.

**Future Plans for the Mexico Teacher Research Project**

Unfortunately about a year after the education project began, Mr. Junco, who funded the project, decided he wanted to further focus on the judicial system of Mexico and how it was impacting ordinary Mexicans. So he decided to concentrate his resources in that area. Since the Mexico Teacher Research Project was completely funded by Mr. Junco, funds were not available to continue the project.

When Sor Gloria Eugenia Orez Villalon, principal of Instituto Migul Angel do Occidente, was told that the project could not continue, she was very disappointed. She is convinced that the project and the training of the teachers are making a difference in the student achievement in the school. Because of the school’s commitment to the project, Sor Gloria offered to provide funding for the project for an additional year. The Mexico Teacher Research Project will
continue in an abbreviated form for the second year. However, the future of the project is uncertain.
References


Implementation of the mathematics curriculum in Taiwan: A case study of one elementary school teacher

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In Taiwan, elementary mathematics curriculum reform has been a continuous process for the last 20 years and it has primarily focused on restructuring the written curriculum. But we know very little about how Taiwan teachers implement the reformed curriculum in their classrooms. In the past, most curriculum research has focused on textbook content analysis and comparisons of Taiwan textbooks with textbooks from other countries. Because of these research focuses, this study was conducted to develop an understanding of the mathematics curriculum implementation of an experienced elementary school teacher in her classroom, and to explore factors which influenced her curriculum implementation. Case study methodology was used to study a sixth-grade teacher with more than 10 years teaching experience. The study gave specific attention to how the teacher chose tasks to present to students and how these tasks were enacted in the classroom. The primary data sources were classroom observations, teacher interviews and problem solving records of students, all collected during the second semester of the 2008-09 school year. Analyses of study data indicated that 54% of the mathematics tasks the teacher used were from the textbook, the others were teacher-designed or extended from the textbook. Sixty-eight percent of tasks she used were classified as high cognitive demand tasks that emphasized the meaningful connections among different content representations. The main structure associated with task implementation (78% of tasks) was small group oriented and consisted of the following activities: problem posing, problem solving, presentation and explanation, and discussion. In implementing high cognitive demand tasks she regularly employed multiple representations as part of exploring the tasks, and she provided many opportunities for students to discuss and explain their thinking as they worked on and completed the tasks. Most of time, she used open-ended questions when interacting with students.

The driving force behind the teacher’s curriculum implementation and the associated decision making process was composed of the following interrelated factors: beliefs about mathematics teaching and learning, support and reflection from the professional teaching group she attended, and students’ reactions in classroom. In the beginning, the teacher often doubted whether her implementation could really improve students’ learning performance. She also initially expressed concern that if she
allowed time for students to communicate and to share their solving processes and results, then she
would not have enough time to finish teaching other required topics. But with strong support from
her professional teaching group and self-reflection about her mathematics teaching and her students’
good performance in the classroom, she confidently continued during remainder of the school year to
employ small group discussion, present high cognitive demand tasks, provide opportunities for students
to communicate their thinking and their problem solving processes, and focus on meaning connections
among representations. The teacher was a special case and her curriculum implementation may not
represent all other teachers in Taiwan, but it does demonstrate that with a support group and
opportunities for self reflection, teachers can change their instructional practices in ways that reflect
recommended teaching methods in recent curriculum reform documents.

Keywords: Curriculum implementation, Elementary school teacher, Mathematics curriculum
Businesses and Business Schools – Bed fellows or Estranged Partners?

Introduction

Although showing a soaring increase in student enrolment numbers, business schools face relentless criticism (Pfeffer and Fong 2002; Quinn Trank and Rynes 2003). In the middle of last century business schools were criticized for being too similar to vocational trade schools and offering lowly programs. This censure resulted in an influx of academically bent faculty and the embracement of a scientific model to mimic other established disciplines such as the sciences and economics. However towards the end of the last millennium, several authors began to criticise business schools again: this time as being too academic, focused solely on research and a business education less and less relevant to practitioners (Armstrong 1995; Bennis and O'Toole 2005; Clinebell and Clinebell 2008). Pundits advocate striking the right balance in curriculum design and delivery (Friga, Bettis et al. 2003; Quinn Trank and Rynes 2003; Bennis and O'Toole 2005) which Clinebell and Clinebell (2008) liken it to “walking a tightrope between the academic side of business and the practitioner side”. Indeed this is a salient and pressing issue as for example the Australian Learning and Teaching Council (ALTC) investigates the equilibrium between professional and liberal education ideals in the business realms of tourism and hospitality management (Australian Learning & Teaching Council 2009).

Research shows a low correlation between an MBA degree or lofty academic grades earned in businesses courses and career success (Pfeffer and Fong 2002; Raskin 2002). This low correlation bucks the premise of academic credentials being the raison d’etre for business education. Furthermore business schools’ chequered past in relation to its philosophical and pedagogic modus operandi does not bode well for their future. Even management guru Drucker predicted extinction of academic institutions in the field of business school education in the near future (Lenzner and Johnson 1997). 13 years later, however, that prediction might have been somewhat off base because business schools still continue to flourish and are omnipresent. The once much lauded MBA is commonplace, and indeed disparagingly banal albeit beneficial to those successfully undertaken them by increasing managerial skills, self-confidence and career development (Baruch and Lemming 2001) and remuneration (Connoly 2003). Nonetheless, the value of the formerly prestigious MBA has been tarnished (Raskin 2002).

Some authors question the claimed strong link between business schools and businesses in general because discussing models and theories in training differs from the application of skills in the workplace. Businesses prefer an applied shortcut to success to engaging in an abstract academic discussion about generalizable models with a penchant for prescriptive solutions. Thus, possible interactions between both might have to be limited to mere consultancy services.
(Fowler 2005). This highlights the dichotomy between theory and practice and stresses the need to revisit the relationship between the two in the context of business education.

The remainder of this paper discusses requirements of a business school education in the 21st century and proposes a model for a revised curriculum that embraces a holistic and balanced perspective to reconcile the interdependent yet tenuously independent relationship between business schools and their audiences.

**Literature Review**

Students enrol into a business school course with different backgrounds and for various reasons. Depending on the expected outcome of higher degree studies, a degree program should have the right mixture of academic rigour and applied skills but also cater for different learning preferences.

Whereas most doctoral degree students aim to learn research skills for academia, a bachelor student has less interest in academic rigor and more interest in professionalism and employability (Star and Hammer 2008). This is reflected in educational frameworks such as the Australian Qualifications Framework (AQF) requiring schools to map their programs against the expected degree outcome. The AQF describes a PhD degree having a strong theoretical focus, Master and Bachelor degrees have a lower theoretical but higher applied focus (Australian Qualifications Framework Advisory Board 2007). For example at the undergraduate hospitality management level, Ogle and Berwick (2010) found that practitioners’ recommendation to educators for improving curricula was to address practical knowledge and competency training while not neglecting theories.

Another consideration is students’ learning preferences (Lashley 1999). For example, hospitality management students have a low inclination towards theorising or reflection (Lashley 1999) thereby validating the argument that business education should be more didactic and applied to suit the expectations of industry. The modern manager is a reflective practitioner: a professional who thinks carefully about his/her actions while he/she does it (Schön 1987). Tribe (2002) extends this premise further by introducing the concept of the philosophic practitioner. This concept relates to the curriculum necessary to produce graduates who deliver efficient and effective services while simultaneously providing stewardship for the business progression of enterprise (Tribe 2002). The integration and fine balance between discreet curricular forces is illustrated in the following diagram.
Generic, specific and research skills

To cater for different learning preferences and degree outcomes a modular approach of generic and specific skills, and academic rigor should drive modern business education (Friga, Bettis et al. 2003). Having a focus on employability, bachelor degree students should learn skills to be successful in the workplace. However a graduate’s workplace and its influencing environmental factors have changed significantly within the last years. A global, interdependent economy results in a higher complexity and uncertainty in today’s marketplace compared to last century’s trade schools providing a “good enough education” for local marketplaces. Factors such as having to take demands of different cultures into account, an increased pace of economy through modern ICT technology and volatile business environments require different skills (Friga, Bettis et al. 2003).

To improve employability and professionalism in a knowledge society and globalised world, a modern curriculum should discuss multidisciplinary, practical and ethical questions. Students must learn generic skills such as communication, problem-solving, critical thinking, teamwork, and technology and information literacy. Furthermore intercultural competency and understanding the need of continuous learning are important (Barrie 2005; Bennis and O’Toole 2005; Star and Hammer 2008). These generic skills can be applied to a variety of industries.

For students already aiming to enter certain industries, a curriculum could include specific skills. This tailored curriculum might be a business schools’ competitive advantage. Yet to sustain organisational efficiency, a school should focus on global industries of significant economic importance such as hospitality and tourism (World Tourism Organization 2010) or at least industries of local dominance.
Furthermore depending on research interests and requirements of a later career in academia or market research, building on generic problem-solving skills more sophisticated research skills build a third module in a revised business curriculum.

**Staffing**

Similar to disciplines such as medicine and law disciplines, business schools arguably must adopt a more professional instead of a pure scientific model to avoid extinction and survive (Bennis and O'Toole 2005). One way could be hiring executive professors, business professionals with academic ambitions such as executives planning to pursue an academic career (Clinebell and Clinebell 2008). Whereas these “hybrid” professors might be perfect to build a bridge between academia and business reality at first, hybrid solutions have downsides. Executive professors might lack necessary pedagogical and teaching skills (Clinebell and Clinebell 2008), thereby limiting learning effectiveness. Furthermore after a certain time in academia, the strong business link might weaken as their former business networks evolve and hence there is a strong possibility of getting unconnected which undermines the rationale of poaching industry practitioners. A mix of executives bringing industry views inside the classroom and faculty focusing on academic rigor and teaching support might be a viable model.

**The Right Mix of all Elements - A Model for a Future Curriculum**

A viable curriculum should follow the proposed modular approach of teaching generic, industry specific applied and research skills whilst catering for different student demands. Figure 2 shows a model for two Bachelor degrees – a generic ‘Bachelor of Business’ and a more applied ‘Bachelor of Business in Hotel Management’.
Core units are common in both programs, major units provide an industry flavour or advanced knowledge in a subject. Feedback from industry and students showed that both courses need the discussed mix of operational concepts in which to put the theoretical framework into context but also flexibility. Electives allow students to follow individual interests and both Bachelor degrees offer students flexibility to change between courses due to the communality of the curriculum. For students who have identified vocational opportunities, there are two exit points – Diploma and Associate Degree – after the first and second year of the Bachelor course program.

Internships follow the argument of applying knowledge and employability. Two double-weighted Internships in semester six give students the opportunity to apply knowledge and skills gained in the classroom and get industry experience. An Internship coordinator assures critical reflection of student’s workplace experience.

Both courses have adopted the same structure, and have been developed along the lines of a traditional undergraduate business degree - with students taking four units of study in each semester over three years fulltime.

Conclusion

Both degrees, Bachelor of Business and Bachelor of Business in Hotel Management, have been designed to offer students an industry relevant higher education qualification. It is a qualification that will provide them with practical and theoretical skills to become highly respected
professionals in their discipline. Whereas this should be the right combination having a focus on employability and industry relevance, a Master degree and especially a doctorate degree need a higher degree of theoretical but generalisable knowledge and academic research skills. As a veteran hospitality educator aptly puts it, "the recipe for a successful career in this industry is a dash of inspiration, a healthy measure of aptitude, a large dose of positive attitude, a dollop of passion and a sprinkle of sweat" (Capriano 2010), thereby infusing a highly technical area of expertise with the requisite soft skills highly vaulted in industry.
References


The Accidental Profession: Career Paths of Academic Library Development Officers

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The Accidental Profession: Career Paths of Academic Library Development Officers

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ABSTRACT. Libraries in higher education are increasingly seeking to expand their fund raising efforts to address declining financial support from their institutions of higher education. Development officers who specialize in raising money for academic libraries have proven to be an important aspect for success in library fund raising. This paper examines how individuals in academic library development positions find themselves in these positions in the first place. The results of a qualitative study are presented which demonstrates that most academic library development officers do not set out to seek their current jobs and instead they arrive in the positions by happenstance and accident. The paper also looks at implications of this finding and offer suggestions for better recruitment and training of academic library development officers.

KEYWORDS library development officers, fund raising, academic libraries, career paths, philanthropy, higher education

Introduction

Higher education is an important but expensive endeavor. The costs to attend and operate colleges and universities continue to rise at the same time that governmental support for these institutions has waned (Gladieux & King, 1999). Clark and Brandon (2006) argued that the majority of the states (43 of 50) deserved F’s in college affordability because they have chosen as a matter of public policy to place much of the financial burden for a college education on families through higher tuition and other expenses thus making degrees less affordable. As a result of the decline in public support and increasing costs, many institutions of higher education are seeking increased private funding. Turning to private money to supplement other sources of income is a reasonable strategy for higher education as state governments cannot be relied upon to fund at the same levels they did in the past. Evidence indicates that there is private funding to be found. According to Summers (2006), "By several measures, well over $100-trillion will exchange hands in the next decades as baby-boomer wealth passes to the next generation" (p. 22). Thus, institutions of higher education in the
United States of America are seeking supplementary new sources of revenue from private donors just as one of the largest transfers of wealth is about to occur between generations.

This need to fund raise has not gone unnoticed by librarians. Clearly, "academic libraries have become active players in the fund-raising game" (Hoffman, Smith, & DiBona, 2002, p. 540). Latour (2003) found that while 96% of academic libraries were involved in fund raising efforts, only 61.3% of them were successful. The literature suggests that raising funds for a library is closely tied to marketing a library. Donors are unlikely to give to a library if they are unaware of it or if they do not think highly of it. Past experience strongly suggests that it is not enough for potential donors to simply “like” libraries. A general knowledge and appreciation of libraries often does not make libraries a high priority for donors. How can donors be made aware that a library is a worthwhile beneficiary of a gift? Part of the problem is simple competition. Weingand (1998) noted, "The library's present and potential customers have increasing numbers of choices and competitors for their time and support. Simple 'goodness' will no longer suffice" (p. 132). In the last two decades, higher education has lost substantial public funding as both state and federal governments have had to struggle with budget deficits (Legon, 2005). This has caused library administrators to look for ways to raise funds to support the library including new approaches such as targeting alumni of distance education programs (Casey & Lorenzen, 2010).

This need for fund raising for the academic library has required that libraries employ development officers. Surprisingly, very little research has been conducted on this group. This paucity of literature relating to library development efforts makes it difficult to know much about library development officers (Wedgeworth, 2000). This study helps fill in a need in learning how academic library development officers enter this career. This should help in the better recruitment and training of academic library development officers in the future.

Library Development Officers

Although the literature calls upon library leaders to personally learn fund raising skills (Browar & Streit, 2003; Dewey 2006), because of the demands upon leaders’ time it is likely that this solution to the problem will not prove particularly successful. An alternative response to the problem of having a lack of fund raising know how is to employ development officers in the library. Development officers in higher education work to raise funds for an institution. Most major academic units in a large university will have their own development officers who work to raise funds for a particular area of campus as well as the larger institution. Several authors (Dewey 2006; Miller 2002; Ruggerio & Zimmerman 2004) have called for academic
libraries to hire development officers. Many academic libraries have employed a development officer with experience in fund raising. Other libraries have chosen to train library staff in development skills (Eaton, 1971). There is a belief that it is easier to train library staff in development skills than it is to teach development staff library skills (Welch, 1985).

Some library development officers have been successful in helping to lead academic libraries in productive fund raising endeavors. This includes key development functions such as cultivating donors and encouraging them to give (Greenfield, 1999), collaborating with both internal and external teams (Miller, 2002), working with library staff to identify potential donors (Lerud & Dunn, 2001), and highlighting the success rather than needs of a library (Lowenstein, 2001). Library development officers have also been successful in connecting library fund raising to college athletics. Neal (1997) found, "affiliation with a central academic agency like the campus library can help to restore credibility and to legitimize the heavy investments in sports programs" (p. 59).

A variety of administrative structures exists for library development officers (Martin, 2000). The development officer may report to the library director (decentralized) or to the campus development office (centralized) or may work in some hybrid of these two systems. Martin warned that the centralized approach could be dangerous to libraries. “Development officers tend to focus on the sexier academic programs unless the university administration has made the library a specific high priority - a rather unusual circumstance" (p. 5). Nevertheless, Martin believed that the relationship of a library with the development office on campus was central to its success and that a library not supported by the development office would be hampered in fund raising efforts.

Downes (1984) argued that an organizational approach between centralized and decentralized was best. He believed that a library development officer should report directly to the library director and also be a part of the library administration. However, he also felt the library development officer should have an adjunct appointment in the central campus development office to represent the needs of the library to the larger development unit.

Regardless of the reporting relationship between library development officer and library director, fund raising is still ultimately the responsibility of the library director and the library management team. Mulhare (1991) stated, "It is the library's key leaders who raise funds by working in cooperation with the development officer...Asking for money is only one stage in a far more complex process involving prospect research, cultivation, solicitation, and recognition" (p. 117). The role of the library director remains central in the fund raising process regardless of
where the development officer reports in the campus hierarchy. It would seem then that the relationship that a library director has with the library development officer is equally important to the success of the process.

Not all academic libraries can afford to hire a full-time development officer. Some alternatives to this include giving development duties to a public relations officer or hiring an outside consultant to create a development plan and then having library staff implement it (Clark, 1986). Part-time development officers are also an option for libraries (Welch, 1985). Another staffing consideration involves assigning a library development officer a clerical assistant to help keep track of donors (Eaton, 1971). Regardless of how a library staffs a library development office, those libraries which have a larger development unit are more successful than those with fewer staff (Brittingham & Pezzullo, 1990). However, those libraries with larger development staffs also tend to be bigger and have more prestigious reputations which may account for some of the success.

**Methodology**

This qualitative study used a phenomenological approach based upon interviews with library development officers from academic institutions. Participants were identified by using the list of Association of Research Libraries (ARL) members. ARL is an association of 123 of the largest research libraries in the United States and Canada. Participants were identified via an e-mail sent to all ARL library development officers in academic libraries asking them to suggest the best development programs within ARL. Out of 123 ARL libraries, 80 were selected to receive the e-mail. The remaining 43 were not included as they were not academic libraries (being special or public libraries) or because it was impossible from their websites to determine who their development officer was at all or even if they had a development office. In addition, several institutions had vacancies in the development position resulting in their exclusion from the study.

A small number of programs frequently selected by ARL library development officers had their library development officer invited to participate in this study. Selected participants were contacted by e-mail with consent forms faxed to them in advance of interview dates. Nine were selected to participate. One individual declined due to a family emergency. Eight agreed to participate and they returned the signed forms via fax. The participants were interviewed over the phone. Conversations were recorded and notes maintained during the interview.
Later, the data from the interviews was transcribed into Microsoft Word files. These files were then entered into NVIVO 7, a qualitative research software, for analysis.

Participants were scheduled for one hour interviews. Creswell (1998) noted that after a period of time, participants will begin to repeat themselves. Thus, a small workable number of participants and a reasonable number of questions can still provide meaningful data for analysis.

Purposeful sampling is an overall sampling strategy that can be used in a qualitative study. In it, individuals are selected that provide the information needed to address the purpose of the study (Patton, 1990). LeCompte, Priessle, and Tesch (1993) argued that the overall sampling strategy used in qualitative research was criterion based selection because inclusion criteria to select individuals are developed by the researcher. Purposeful samples study people, organizations, communities, cultures, and events that are information-rich (Johnson & Christensen, 2004). The participants included in this study of academic library development officers were selected from a purposeful sample of information rich individuals who provided the information needed to address the research questions of this study. The researcher was able to determine what experiences these individuals have had as they provided in-depth descriptions of their perceptions of these experiences as is what is important in phenomenological research.

An individual, over the phone, in-depth interview was the main mode of data collection for this study. Lincoln and Guba (1985) suggested that the researcher is the best instrument "because it would be virtually impossible to devise a priori a nonhuman instrument with sufficient adaptability to encompass and adjust to the variety of realities that will be encountered" (p. 39).

Data Collection Procedures

Each participant was called at a mutually agreed upon time. The participants were reminded that participation was voluntary, that there were no adverse consequences for refusing to participate, and that his/her identity would remain confidential. The researcher requested permission to tape record the interview to ensure the participants' responses were accurately recorded for later analysis. A speaker phone was used to better facilitate the recording of the interviews.

A semi-structured interview protocol guided the conversation. It is important to recognize in the interview process not to constrain the participant's responses to
predetermined framework (Lancy, 1993). As such, participants in the study were allowed to stray from guiding questions although they were also asked all questions on the list. Patton (1992) wrote that truly open ended questions allow participants to respond on their own terms as the questions do "not presuppose which dimensions of feeling or thought will be salient for the interviewee" (p. 354). The questions for the interviews were all open ended and allowed the participants to answer in whatever manner they wished.

The study participants were asked a total of eleven questions relating to their perceptions of fund raising for academic libraries. Most of these did not deal with their prior training or their career paths. The responses to those questions are not considered in this paper but can be found in Lorenzen (2009). One relevant question was, “Describe for me your career path on your way to your current position.” Several probes relating to this were, “Have you always worked in higher education?,” “Did you specifically aspire to this position?,” and “What positions did you have that prepared you for this current position?” Participants were also asked what training they had had in the context of defining their roles as library development officers.

In addition to tape recording the interviews, the researcher kept field notes during the interview process. By necessity, this was selective as not everything could be written down. Schwandt (1997) wrote about inscription as "a particular kind of practice whereby data are generated, undertaken in the midst of other activity" (pp. 71-72). The written notes were used to record key points made by the participants in the study and used later to help in the transcription process.

Data Analysis

Data analysis is a process that transforms interview and document data into the interpretation of the findings. The analysis of the data collected began as the researcher recorded insights during the interviews. In addition, key points were marked and summarized immediately after each interview was concluded. An assistant was hired to transcribe the interviews and place the data in Microsoft Word documents. After each transcript was finished, the researcher checked for accuracy by listening to the tapes while reading the transcript (Patton, 2002). Transcripts were sent back to each participant for a member check to make sure that the transcripts were accurate as well.
After the transcription process was completed, the transcripts were uploaded into the NVIVO7 qualitative data program for coding and analysis which also allowed for easy organization and access to the data. On computer-assisted data analysis, Scwandt (1997) wrote:

Software tools are used for recording, storing, indexing, cross-indexing, coding, sorting and so on. They facilitate the management of large volumes of data and enable the analyst to locate, label (categorize or code), cross-reference, and compile various combinations of segments of textual data. (pp. 17-18)

Reading the transcripts, the researcher looked for recurring statements and coded them in the smallest interpretable units that relate to the research questions being studied (Lincoln & Guba, 1985; Merriam, 1998; Patton, 2002). As a result, the data were coded in sentences or paragraphs, with some sections being coded multiple times. As the initial themes emerged, they were compared and contrasted in the same interview and across different interviews (Merriam, 1998). This allowed for the process of horizontalization where the data were laid out, clustered in themes, and had irrelevant data removed leaving only the "horizons...of the phenomenon" (Moustakas, 1994, p. 97). A phenomenological reduction of the data was allowed for using the horizontalization method as the researcher was involved in reflecting on the data to understand "how the experience of the phenomenon came to be what it was" (Moustakas, p. 98).

The researcher looked for internal homogeneity to confirm that “the data that belong in a certain category hold together . . . in a meaningful way” (Patton, 2002, p. 465). In addition, the researcher was also was concerned about external heterogeneity to make sure that the “differences among categories . . . were clear” (Patton, 2002, p. 465). The data was also worked with "to affirm the meaningfulness and accuracy of the themes until the interview data were analyzed exhaustedly" (Chen, 2006, p. 62).

The coding and grouping were created by inductive inferences (Schwandt, 1997). Inductive coding is used when codes are developed from the text of interviews rather than in advance. Inductive inference is a process of exploring and identifying themes based on the raw data. Deductive inference involves testing and confirming the appropriateness and inclusiveness of the coding system (Patton, 2002). Deductive inferences were used after the coding was developed from an inductive process. The themes that developed to represent the data allowed for broader conceptual dimensions which then allowed for them to be incorporated into multiple themes. In the end, this allowed the researcher to make some meaningful conclusions.
The researcher sought to enter the contextual world of the participants in the study to better understand the phenomenon of academic library development officers’ perceptions of fund raising. To not allow personal biases to interfere, the coding schema was not developed until after all the interviews had been completed. The researcher read the transcripts and developed a coding schema based on the responses of the study participants.

Findings

It became quickly apparent that for the majority of participants in this study that becoming a library development officer was an accidental career decision. While many had training in development, only one participant had any training in library work. For a number of differing reasons, and from a variety of backgrounds, the study participants found themselves raising money for an academic library.

This lack of training was noted even when the preliminary e-mail survey results were examined. Many of the survey takers reported that they were new to library fund raising and were not sure how to successfully fund raise yet. A total of seven of the 25 respondents to the e-mail survey made notes in their responses that they were new to the field. It is probable that many of the ARL library development officers who did not participate in the e-mail survey may have felt the same way prompting them to decline the opportunity to respond.

Of the eight participants who were interviewed, only one had training as a librarian and had worked in libraries before taking up library fund raising. The other study participants had worked as a teacher, a community educator, a buyer for a retail chain, a small business owner, and in development work. Further, participant responses indicated that most of them had not planned to work in fund raising for academic libraries.

As one participant noted:

So no library experience and all fundraising experience. I also got an MBA, so I did an executive MBA while I was at one of my jobs. But I was not at all aspiring honestly. To do it in libraries, it just happened to be that way.

Another participant described in detail how she got into development work in a library:

There are several executive search firms here that focus on non-for-profits, and I was recruited by them to come talk to the library. And to be real honest with you, I didn’t
know why these people were calling me. They called several times over several months and I said I wouldn’t know how to raise money for a library. I don’t know anything about a library. I know about the university because I grew up on the south side of the city but I wasn’t really excited. Then I finally said okay I’ll go meet with the university librarian. Then the information he gave me about the library, I got so jazzed within twenty minutes I thought this is something I should probably pursue.

Although many of the study participants had experience in development work, many of them had not. For four of the eight study participants, their job in the library was their first job in fund raising. One participant, when asked if she had planned on working in higher education, retorted “never.” Other participants claimed they had been clueless about fund raising before getting their current position.

As one study participant related:

I said that I was new in town, that I was available part time or temporary and they hired me to be a reference librarian. It was just around the time that the dean of the library, wanted to raise money for the library. So he asked me if I was interested in the position. I didn’t know anything about fund raising, but he really wanted a librarian to do the fund raising for the library. He hired me and I started doing library development there.

Another participant noted:

I had no training in working in a library or raising money. I really learned on the job. I found my colleagues to be invaluable in learning what I needed to do. I also have learned a lot by going to conferences. I just figured this job out as I went.

In addition, not a single participant in this survey had aspired to work in library development. Several participants had goals to work in development and one had been a librarian prior to moving into library development work. Yet, not a single participant had anticipated or sought a job in library development. Working in library development was not a calculated career move but instead an accident of opportunity. One of the study participants even questioned the wisdom of the library when she interviewed for the library development position as she assumed she had no transferable skills.

Finally, even after getting a job in library development, formal training in development work was not always forthcoming. Five of the eight participants who were interviewed had little to no formal training in development work. Several of the participants said their only training
was done “on the job.” Even the participant who had worked fifteen years in library development stated he had no formal training and that he learned the job by doing it.

As noted by several authors (Martin, 1998; Winston & Dunkley, 2002), fund raising skills are not taught in library schools. Hence, it is not a surprise that librarians lacked the education and skills needed to successfully perform development work. However, it does seem surprising that many of the study participants lacked experience and education in both development and libraries. If libraries were seeking outsiders to manage the development process for them, why were they hiring individuals for these positions who have no better development background than members of the library staff? At least if a library insider was hired for the job, he would understand libraries. This seems puzzling. However, because the role is constructed with the emphasis on development, rather than libraries, it is probably more critical to have the people skills for relationships and fund raising. These skills likely develop better in a business school than a library.

Despite often not having a library background, the library development officers in the study did see mentoring library staff as part of their role. This was particularly true of the library director. Many of the study participants felt they needed to train library staff in development work if they themselves were going to be successful. The library staff did not appear to have sufficient skills in development of their own.

Two authors (Eaton, 1971; Welch, 1985) wrote articles arguing for the training of library staff in development practices and many of the study participants were actively engaged in it. Several of the study participants noted their role as a team captain for the library staff in fund raising and that library staff were often very good at it. However, it was also noted by participants that some library staff were suspicious of fund raising efforts.

Closely related to a lack of library staff development training was a concern about turnovers among the library staff that library development had to deal with. Many librarians were retiring and some of the participants felt this was starting to hinder their fund raising ability. One participant said, “You know a lot of our key librarians have been in place for 30 years, boards and our big donors have really developed a strong relationship. They really have not groomed any really strong people to follow them It’ll be a stranger coming in and that scares me.” Efforts are going to need to be made to train and educate library staff on fund raising to replace the knowledge being lost by retirements in the library.
The library development officers who participated in this study appeared to be successful in exercising leadership skills and in maintaining good donor relationships. However, the lack of training of themselves and library staff is still evident from their background stories and from their descriptions of many of the realities of their positions. Better training for both library development officers and for library staff could well make both more effective and allow for academic libraries to raise even larger sums of money. However, it may be difficult to identify who is best suited to doing this training.

Implications for Practice

There are several areas where the evidence from this study suggests implications for practice for academic library development officers. One of the stated purposes of this study was to help those working in the library development field find ways to be more successful in fund raising. All of the recommendations in this section are intended to accomplish this goal.

Library development officers would benefit greatly from increased professional development. The participants in this study as a whole had little experience in development work before starting in their current positions. They had even less experience in libraries. Professional development or training in both areas would help. It is a question to who should provide this training. While learning on the job is inevitable, this learning would probably be smoother if new library development officers were given frequent and early exposure to professional development training in development practices. Further, as knowledge of many principles of library science (especially collection development) are important for success, library development officers should be given more exposure to the relevant aspects of running a library as soon as they start in their positions. In addition, professional development training in both areas should continue throughout the career of the library development officer to keep individuals in these positions up-to-date on new trends in both fields.

Further, potential library directors looking to go into these positions in higher education should be carefully vetted for a knowledge of and interest in fund raising. If this is important to an institution, it should be a major criterion for evaluating candidates for library director positions. Library development officers need an interested and knowledgeable fund raiser in the library director’s position to be successful long term. Library director candidates lacking substantial knowledge in this area, but who are otherwise qualified, should only be hired if they
are willing to commit to professional development training in development work early in their tenure at an institution.

Also, library staff need better training in development practices as well. These individuals are the front line when donors visit a library and their knowledge is often key in getting donors committed to a project. Yet, they often lack even basic knowledge of good development practices. Not all library staff should be targeted for this. It makes no sense to train most catalogers or circulation clerks for example. However, librarians engaged in management or collection development should be trained in the basics on how to deal with and cultivate a potential donor who comes unexpectedly through the door. They should also be comfortable long-term in helping the library development officer to close deals if it impacts areas they work with directly.

One possible training solution would be to provide future librarians a course on fund raising in library school. If this became a mandated part of the curriculum for graduate schools of library and information science, eventually all library directors and a large number of library staff members would have exposure and basic training in fund raising skills. The American Library Association (ALA) is the accrediting body for library and information science programs in the United State and Canada. If ALA became convinced that this form of education was necessary, this could become a valuable part of the education of new librarians.

Conclusion

Libraries in higher education are increasingly seeking to expand their fund raising efforts to address declining financial support from their institutions of higher education. This will not be changing any time in the foreseeable future. The need for development officers who specialize in raising money for academic libraries will continue. The results of a qualitative study demonstrate that most academic library development officers do not set out to seek their current jobs and instead they arrive in the positions by happenstance and accident. This should be a cause for concern for those in library administration. Why are we not better preparing those in the fields of librarianship or fund raising to work in development work for academic libraries? In addition, since it is clear that most library staff (in addition to academic library development officers) are also lacking needed fund raising skills, remedial instruction in these areas should be implemented when it is possible in order to allow for increased fund raising success.
References


Gladieux, L. E. & King, J. E. (1999). The federal government and higher education. In P. G. Altbach, R. O. Berdahl, & P. J. Gumport (Eds.), *American higher education in the twenty-


Title: Globalization and the spread of English around the world

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Abstract

The status of English as the fastest growing language in the world is uncontested. In today’s global economy English is used widely and almost exclusively as the language of international trade, economy and politics (Edwards, 2004). Non-English speaking countries which have not had a previous anglo affiliation (e.g., Brazil, Japan, Egypt, Italy) are now facing the growing hegemony of the English language. In response to this global phenomenon, countries have a difficult choice: try to preserve their own language, culture and history and not participate in the growing impact of English or become involved in the spread of English as the lingua franca of the economic world. 25% of the world’s population uses English for some purposes (Kachru & Smith, 2008) and this percentage is increasing. English has gained the status of the language of ‘global communication’ (de Swann, 2001) and the ‘language of the world market’ or ‘commercial lingua franca’ (Brutt-Griffler, 2002). This paper examines the growing impact of English in one of these countries i.e., Italy and the Italian education system. The analysis focuses on issues of educational policy and practice and addresses discrepancies that exist across these areas with regards to English proficiency and use. The first part of the paper examines the education system in Italy and foreign language policy initiatives that impact language policy and practice in Italy. The second part of the paper reports on findings of a survey completed by twenty nine high school teachers and professors of English on their perceptions on the role of English in the Italian
education system and the society at large. While this study focuses on the situation in Italy, there are overlapping themes and complexities with other non English-speaking countries that will be discussed.


The role of the European inspections in the European educational space—echoes from Portugal regarding the assessment of schools

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ABSTRACT

This paper is an approach to the construction of a European educational space (Nóvoa & Lawn, 2002), which is due to new modes of regulation in education, that is, different government perspectives that support the development of educational policies in the European Union (EU). The policy under consideration is the external evaluation of public schools (both basic and secondary schools) carried out since 2005 by the Portuguese General Inspectorate of Education (IGE) - a branch of the Ministry of Education. Our aim is to explore, more specifically, how concepts and policies get ‘contaminated’ by the European models (Barroso, 2003c, 2006a, 2006b). We are also interested in understanding how the regulation is outlined by the Inspectorate of Education in some European countries, including Ireland, England, Wales, Scotland, France, the Netherlands and Belgium, referenced as a sample. This paper owes to the phenomena associated to “travelling policies” (Alexiadou & Jones, 2001), to “policy transfer” (Dolowitz, Hulme, Nellis & O’Neill, 2000; Stone, 2001), and to “policy borrowing” (Halpin & Troyna, 1995; Whitty & Edwards, 1998; Walford, 2001; Phillips & Ochs, 2003, 2004; Steiner-Khamsi, 2004).

We must stress that our perspective on the flows and the influences of the international movement of policies is free from simplistic and deterministic logics (see Lingard & Rizvi, 2000). From our point of view, the internationalization of ideas comes along with national reflections on how these ideas are materialized (see Popkewitz, 1996: 47). At the local and regional levels, the regulation of educational systems can be characterized as a growing "multi-regulation" - that comes from a growing number of sources, an increasing variety of tools and resources (such as assessment, monitoring and sharing best practices) - which mingle with modes that exist in a more traditional, bureaucratic regulation (see Afonso & Costa, 2010, in press). Thus, each country has its own overview about the structures and effects of globalization, which do not occur simultaneously, nor in the same way in different 'nation states' (see Lingard & Rizvi, 2000: 210).

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1. The importance of evaluation in the context of the European Union

Since the last decades of the twentieth century assessment has become, globally, an institutional obligation in most developed countries. The Anglo-Saxon countries were the first to apply instruments for measuring the efficiency and quality, and were rapidly followed by large international organizations. Nowadays, the State is questioned about its traditional role, since the emergence of the Anglo-Saxon accountability, whose benchmarking and best practices permanently transform the concepts related to educational administration and increasingly influence management and governance.

On the 1\textsuperscript{st} Conference on the Quality of Public Administrations in the EU, held during the Portuguese Presidency, in Lisbon, in 2000, a set of proposals were presented for the action program known as the "Lisbon Strategy". At that time, the European Council had the objective that the education and training system of the EU would become a global reference by 2010. The Lisbon Summit (2000) has characterized the Open Method of Coordination (OMC) as a means of disseminating best practices and of acquiring a greater convergence. Opposite to the classic process of European decision, the OMC consists in the establishment of guidelines for the EU Member States. It is based on a decentralized process of political construction among national governments, municipalities and civil society. It undertakes to set short-term objectives. The established policy is evaluated based on indicators and compared among the Member States. The process leads, in theory, to an emulation among Member States and it aims to develop good governance practices.

The modernization and improvement in public services has been an issue expressed at different institutional levels and the object of recommendations emanated from the Parliament and the European Council. The objective is to modify and streamline public management systems, so that the quality of services is reflected socially in the form of a society oriented to a knowledge-based economy and, accordingly, demanding a larger commitment from educational systems and subsystems. We have entered the field of principles of quality improvement, prospecting education and training as priorities for the competitiveness of economies. At the summit in 2001 were issued recommendations that strengthen the fact that the "quality of school education must be assured at all levels an in all areas of education, regardless of any differences in educational objectives, methods and needs, and regardless of school excellence and rankings where they exist" (n\textsuperscript{e} 2 e 3). It’s emphasized the need:

"to develop external evaluation in order to provide methodological support for school self-evaluation and to provide an outside view of the school encouraging a process of continuous improvement and taking care that this is not restricted to purely administrative checks" (1.f.) and "encouraging and supporting, where appropriate, the involvement of school stakeholders, including teachers, pupils, management, parents and experts, in the process of external and self-evaluation in schools in order to promote shared responsibility for the improvement of schools" (European Parliament and Council, 2001).
These supranational procedures require forms of integration, incorporation and adaptation, focused “on the mediating actors who move between centre and locality” (Nóvoa & Lawn, 2002: 4), stressing the existence of several levels of regulation in what educational politics are concerned. Those levels are supranational, national and local and involve different institutions, actors and sources of regulation (Barroso, 2003, 2005, 2006b, 2009).

The governance of Europe can be “conceptualized as a multilevel system of governance” (Nóvoa & Lawn, 2002: 5), stimulating European cooperation and the exchange of transnational experiences to identify and disseminate effective methods of quality assessment (n.° 10). In most European countries, educational policies have focused on the problem of change in education, either global, institutional reforms, or according to a logic of promotion of innovation by identifying and disseminating best practices. With the phenomenon of globalization (and Europeanization), the production of global frameworks for interpreting the world tends to escape the national State, the borders and constraints of governments. We may call it "transnational regulation", while the national regulation will be a 'low intensity globalization' (Barroso, 2003). João Barroso (2003, 2005) refers to hybrid modes of institutional regulation and the crisis of the "State - educator", passed over by the State - market. This is clear in the proliferation of devices for evaluation and in the transfer of a control based on standards/rules for monitoring based on the results. The crisis of the State - Welfare is revealed and it is replaced by a State - evaluator, which expresses itself in particular in promoting a competitive ethos through external evaluation (see Afonso, 2001).

2. Repercussions in the Portuguese context

The influence of the EU on the orientation and the legitimization of specific policy measures in the Member States allows us to capture a set of modifications, transnational influences and interdependencies and, ultimately, contributes to the progressive structuring of a common European area of education.

In Portugal, the pressure of the external evaluation is propagated indirectly and subtly, through this new soft way of governance of the EU. This is visible in the restoration of national exams for secondary school conclusion and the creation of national benchmarking tests in the last year of each cycle of basic education (4th, 6th and 9th grades). However, since the academic year of 2004/2005, for the 9th grade, aferition tests were replaced by national tests for Portuguese Language and Mathematics. This focus on the evaluation of school performance led to the creation of the Educational Evaluation Office (GAVE), a central bureau of the Ministry of Education with functions of planning, coordination, preparation and control instruments for external assessment of learning as well as supervision of the accurateness of the tests. We also highlight a device for social control of the school, since it has been assumed as a resource increasingly used for the preparation and publishing of ordered lists of schools, based on the results obtained by their students in national exams - the rankings. Moreover, the pressure of the external evaluation is also expressed through international programs of assessment of student performance, such as the Program for International Student Achievement (PISA), conducted by the Organization for Economic Co-operation and Development (OCDE). The disclosure of the results into a logic of hierarchy of the participating countries feeds a media
debate about “quality education”, usually developed in a logic of “common sense” and not related to the education professionals’ “know how”, or even with expressed disdain for such “know how” (see Afonso & Costa, 2007; Costa & Afonso, 2009, Afonso & Costa, 2009 and Carvalho, Afonso & Costa, 2009).

3. The policy of external evaluation of schools in Portugal: the normative framework

From the normative point of view, this new paradigm is reflected in the Law 31/2002, article 3rd, which aims:

“the improvement of the quality of the educational system, its organization and its levels of efficiency and effectiveness, to support the formulation and development of policies for education and training and ensure the availability of that management information system that (paragraph a), article 3rd, Decree-Law 31/2002).

Through self-evaluation processes and external evaluation procedures, the external evaluation is seen as “a central instrument of policy education” (art. 3rd), and the relation among the micro, meso and macro levels of the educational systems is underlined. Article 9th presents the first indicators for the evaluation of the parameters of schools to take into account. In Articles 14th and 15th general and specific objectives of the evaluation are set, as weel as the dissemination of its results (Article 16th).

The logic that rules is that of for monitoring and steering. Its focus is on the production of relevant information about the quality of performances (see Afonso, 1999). According to Ball (2004: 1116), this makes “the monitoring role of the state” easier, because it governs in a distant way – ‘governing without government […] and the work with the educational institutions’ knowledge (knowledge-work) becomes ‘results’, ‘performance levels’, ‘quality forms’”.

4. The external assessment of schools in Portugal: European influences

“Post-bureaucratic” instruments, such as the assessment of schools, increasingly focus on self-evaluation and autonomy for best practices to be adopted, while rule compliance instruments tend to lose their traditional prominence as key elements in policy making. This is built up through scientific knowledge, selected mainly from school effectiveness and school improvement literature, as well as from the inspectors’, principals’ and teachers’ professional know-how. There is the option for exterior knowledge, of an international nature (OECD, European Education Inspections, the Permanent International Conference of General and National Inspections of Education, etc). It is clear, in this process, the selection of certain kinds of products that insist on ‘quality’, ‘accountability’, ‘benchmarking’ and ‘good practices’ and its common reference to the new conceptions of the public administration (new public management), “educational modernization”. The references and sources of inspiration are clearly outlined with reference to models used in the Education Inspections of European countries.
IGE’s participation in SICI, and the models used in European countries (e.g. Scotland and Northern Ireland), as well as the investigation coming from different countries, are quite relevant. We come to examine those contributions.

4.1 Contributions from European inspections

It is not strange in Europe the change of the modes of regulation of public policies regarding education. Due to social, political and economic modernization, in the last two decades, the States felt the need to create and/or strengthen inspection systems that would enable them to monitor the practices of the units that comprise them. Mainly from the nineties onward, there was an increase of the inspecting action in several European countries in what the public sector is concerned.

The investigation that has been developed within the public policies at the level of the Inspectorate of Education allows us to recognize, on the one hand, that the international debate on evaluation of schools has become central; and, on the other hand, either due to managing reasons, or to increase autonomy and decentralization, many EU countries seek to implement a system of self-evaluation of schools. This has to do with the accountability, with the consequent restructuring of the external inspection (see Meuret & Morlaix, 2003; Devos & Verhoeven, 2003; McNamara & O’Hara, 2006; Perryman, 2006; Plowright, 2007; Wolf & Janssens, 2007).

There seems to be a growing consensus: some forms of assessment can play a significant role in the efforts made to improve schools, as well as providing a reasonable level of public accountability, that prevails in democratic societies. Questions remain about how the balance can be achieved between these objectives. The framework provided by several authors illustrates convergent ideas, doubts and questions more or less common, based on the experience that the implementation of new policies has been offering. McNamara e O’Hara (2006) state that Ireland has been trying to develop an assessment of schools; this has been done by balancing internal autonomy and accountability with external monitoring and inspection. The investigators refer to the progress that two evaluation projects provided, as well as their outcomes and consequences. The first, entitled Whole School Evaluation (WSE) was put into practice in the late nineties in 35 schools and it was completed in 1999. In 2003, comes the publication of a new framework for assessing schools, based on the WSE, and a second project called Looking at Our School (LAOS). The first evaluation of schools within this framework took place in 2004 and it highlights the emergence of an evaluative framework in a complex educational environment, in which teachers are highly resistant to what they consider to be interference to their professional autonomy.

The evolution from the WSE to LAOS shows, however, a clear progression from an external monitoring to a self-evaluation (McNamara & O’Hara, 2006: 569). The school managers who participated in the projects stated that any form of external assessment was, by its nature, superficial and that it underestimated the achievements of schools in non-academic aspects. This raised many concerns among teachers who, by contrast, considered self-
evaluation without external monitoring a great success⁴ (see McNamara & O’Hara, 2006: 570). However, the authors point out drawbacks of this process: many aspects are not taken into account by the school, because the project does not provide guidelines regarding the criteria and research methods, and schools aren't used to collecting and analyzing data in order to gather evidence on which to base their opinions; the concept of self-evaluation wasn't assimilated yet and there is no development plan for the school based on the results. Among the schools surveyed, there is also a profound skepticism regarding the intervention by the Department of Education and Science (DES) in cases where the assessment has indicated problems.

Thus, on the one hand, it would be useful that self-evaluation would be accompanied by more guidelines; on the other hand, it will take some time for a new structure to be assimilated. Finally, there are tools to be developed to improve the practices of schools whose self-assessment is not good. Plowright (2007) also wonders about the process of self-assessment of schools. The self-management of schools led to a greater pressure to take more responsibility for their development, progress, monitoring and review of educational provision. Aware of this fact in England, he questions the development of a school culture. One of his central questions is whether the school is developing an organizational culture of learning when it gets prepared for an external inspection through self-evaluation. Other questions that concern the author have to do with the inspection process, i.e., whether it contributes positively to school improvement, something also shared by Wolf and Janssens (2007). He also reflects on whether inspections can actually help schools to improve their ability to carry out self-evaluation; whether schools have the capacity to get involved in identifying their own problems honestly and rigorously. This last question meets Perryman (2006). Using the metaphor of the "panoptic gaze" to characterize the role of the Inspectorate in England and Wales, he launches a new question: the assessment the inspection makes is based on the self-assessment of schools, so, are the changes really assimilated by the school? (Perryman, 2007: 159).

Ehren and Visscher (2006) focus on a theory of school improvement, through the Inspectorate, in the Netherlands. They describe two types of inspections according to two different scenarios. Schools with a weak innovation capacity and few external impulses should be helped by a more directive approach in which the inspector clearly points out the strengths and weaknesses of the school, the causes of this underperformance and potential ways of improvement, pressuring it in order to commit formally to develop an improvement plan. Instead, a school with high innovation capacity and strong external impulses should have a more reserved approach and inspectors would only stress their strengths and weaknesses.

Wolf and Janssens (2007) say that, in the Netherlands, new forms of accountability to improve school performance were introduced. These reforms were accompanied with discussions on the advantages and disadvantages of different mechanisms of external control in education, as well as an attempt to balance the different systems (379).

Meuret and Morlaix (2003) state that schools in France are encouraged to develop an "evaluation culture". Although schools are given indicators that assist them in this process, these tools are used by only about 5% of schools. Teachers say this happens because they

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⁴ The replacement of the term "assessment criteria" for "topics for self-evaluation" made the process more acceptable in schools. The experience was rated as very positive, increasing cohesion among teachers, and the work of inspection teams was ranked favorably.
lack the time and expertise to develop any kind of evaluation. Self-assessment is not popular, although there is a greater receptivity to this process than the external assessment itself. Although the investigators consider that there isn’t evidence enough that self-evaluation can increase efficiency and improve the school, it seems to be useful. However, it is more praised by politicians than effectively used (54).

Devos e Verhoeven (2003) report that, in Belgium, policy makers feared that a greater autonomy would lead to a deterioration of the quality of schools, hence the need for the verification of compliance with the objectives outlined. Inspectors seek to convince the school that the quality is not only reached by an external monitoring, but also through self-evaluation, and try to promote a culture of self-evaluation that the authors compare to that of the Ofsted (id.: 403).

The need to follow European trends is common to the Member States in general and to Portugal in particular. Indeed, the schools’ self-assessment has come to occupy the political agenda in different countries. There’s the belief that it may contribute to a significant improvement in schools’ provision, assuming more responsibility in the identification and resolution of their issues. Investigation indicates that this is an ongoing process and there are positive and negative indicators. Equally striking is some resistance of the schools, in implementing self-assessment, in spite of, as we have seen, in the cases of Ireland and France, useful tools for the schools to monitor in this process having been provided. This resistance appears to be associated with the reluctance to change itself, although self-assessment has been better received than the external assessment alone. For some investigators, it is clearer that self-evaluation can help to improve the performance of schools, but doubts remain about the role of the Inspectorate in this process.

4.2. Regarding the main sources and references: The Scottish and Irish influences

In 2006, in Portugal, the 17th Government launched a new experimental external assessment of schools Programme, coordinated by a School Evaluation Working Group, created under the Bureau of the Ministry of Education. The “School evaluation working group” (GTAE) was created within the Ministries of Finances and Public Administration and the Ministry of Education, for a year work. The main objective was to launch a national evaluation programme of non-higher education teaching establishments, with the aim to improve the quality of education and to create conditions to intensify schools autonomy. The work of this group, which was concluded in December 2006, conducted to the ministerial decision to proceed with the External Evaluation of Schools and to hand over the responsibility for its accomplishment to the IGE (see Barroso et al., 2007, December).

Several different sources of information inspired the Portuguese policy of external evaluation. There are two models worth mentioning that are used in the UK. The Scottish model is a special case of transfer of explicit knowledge among the various member states, including Portugal:
“because of the enormous popularity it enjoys in Europe and the educative dynamic that has promoted by giving schools the responsibility and the tools to question their own quality” (idem, ib: 9).

The handbook of self-assessment of the Scottish Inspection - “How good is our school” (2002, 2005) – is essential due to the clarity of the concepts and the formative nature of the model and the description of the evaluation criteria. “Exploring Excellence” is a more elaborate document and it introduces elements that were adapted to the Portuguese context, by making easier the internal benchmarking and by bringing a larger demand in the processes of comparability.

Secondly, we also stress the Northern Ireland evaluation model, whose self-evaluation model is noteworthy because it is part:

“of a national strategy to improve education, which includes the evaluation of schools, assessment and improvement of the curriculum and educational services at the different educational levels, improvement of the quality of initial and continuous teacher training and an overhaul of the inspection methods so as to help guarantee quality.”(idem, ib.)

Finally, we underline the project ESSE (Effective School Self-Evaluation) created by SICI, which aimed to evaluate the consistency of self-assessment of schools and was also adopted in Portugal.

4.2.1 IGE’s participation in SICI

IGE’s participation in the activities of the Standing International Conference of Inspectorates of Education (SICI) is an example of institutional and international cooperation. This organisation was established in 1995 and brings together inspection services from a large number of European countries, and its activities are focused on the exchange of experiences, development of partnership projects and the organisation of scientific and professional events for the discussion of inspection methodologies and the continuous training of inspectors. The importance of this institutional relationship is reinforced by the General-Inspector in the introduction to the Activities Plan for 2007, emphasising the International Conference of Lisbon to be held in November, in the context of the Portuguese Presidency of the European Union, as well as the organisation of the workshop “Inspecting for Equality in Early Childhood Services” promoted by OFSTED. The aims of this activity were based on their importance in terms of knowledge circulation: to participate in the activities of SICI as a way of exchanging information, models and perspectives that may benefit the configuration and performance of IGE; to gather information that will contribute towards the improvement of the profile of the inspectors, in relation to the new challenges they face (Barroso, Carvalho, Fontoura, Afonso, & Costa, 2007).

As a corollary of perspectives provided by SICI members, we stress the following items that influenced the Portuguese context: the revision of the inspecting mission; the redefinition of the role of inspectors; the monitoring and methodological support for self-assessment of schools and the increasing of schools autonomy (see Lume, 2004: 61).
SICI has contributed to the debate of education in Europe and the awareness that education is evolving rapidly, leading to new demands and expectations regarding the evaluation of its quality. There have been developments in educational systems, namely the trend to emphasize self-assessment of schools crossed with external evaluation, arising out of the propensity, at the European level, to increase school autonomy, leaving up to them the decision of their own modus operandi. There is also the need to take into account the individual characteristics and ambitions of the school organization and the learning that takes place outside the formal curriculum. Students, politicians and the public need assurance regarding the quality and the performance of schools. Technology is also changing the world quite rapidly, including the ways people learn, communicate and share information. Therefore there should be an effort to modernize the tools of inspection, because the traditional fail to achieve the new goals. In its technical and scientific discourse, SICI also stresses that, in the European context, members of the EU set ambitious goals for their economies, societies and education systems to improve the quality and efficiency of education and facilitate access for all to lifelong learning, opening up education systems worldwide.

In short, despite the differences that separate education systems in Europe, it seems there is a trend towards convergence in European education policies emerging in the last twenty years, resulting in a growing autonomy of schools, even if controlled by several methods such as assessment and monitoring practices; a trend towards decentralization of educational systems; the growth of the external evaluation at the level of education authorities and intermediate level schools through external evaluation and self-evaluation; and legitimization and promotion at different stages of a larger school choice by parents. These changes in modes of regulation seem to be due to political and economic factors, such as changing economic contexts that conduct the school system to a raise of the level of skills, to be more efficient and to adapt education to the needs of the labor market; the policy demands for spending on education are more effective and efficient, with a reduction of financial resources in some countries, cultural change in favor of a greater individualization of education; and finally, globalization and international comparison of school systems have a greater influence on national and local policies through the dissemination of 'governance models', as well as management or educational models.

Conclusion

The transnational policies emanated from European institutions are 'itinerant policies', or 'vernacular for globalisation' (van Zanten, 2000). Local understanding of possible educational futures (Vongalis & Seddon, 2001: 1), influence policy and national and local educational practices, creating an environment of 'performativity' in school assessment (see Lyotard, 1984, p.xxiv and Ball, 2004). Along with accountability, that assumes a central role rooted in the culture and practices of the public sector. Thus, we refer to a 'performance culture' related to the economic power, which is associated with the development of the comparisons of results, construction of standards and quality indicators.

In terms of schools assessment, the change in the new modes of regulation of education is caused by progressive focusing on audit programs and external evaluation rather than on
devices of a compulsory nature. Here, it must be stressed the importance of the integration of IGE in SICI, and the redefinition of its mission in the late '90s, both in the organization's structure and its programs and projects (see Lume, 2004: 61). The institution that conducts external assessment in Portugal - IGE - has followed the evolution of new modes of regulation. Policies of external assessment also come from a recycling process of the inspection itself. Moreover, there was a key role played by a former General-Inspector, who had the knowledge about school assessment and came to influence indirectly the model of external assessment in Portugal.

As stated, in the European education area there is a clear trend of an evolution of "hard" modes of regulation for a 'soft', more persuasive regulation. In Portugal, the political-educational setting, in what the evaluation of non-higher education institutions is concerned, is based on the weakening of logical rules of inquisition and bets on the voluntary membership of actors, their involvement and collaborative work. Legal traditional penalties of the classical instruments (hard regulation) give rise to indirect modes of regulation, based on social sanctions and the socialization processes that are used as powerful mechanisms of compliance. It is a transnational nature of regulation that contributes to the gradual framing of a European educational space, which is under construction and that is based on instruments that seek ideational power (see Marcussen, 2004).

References

AA.VV. (2006). The Role of Knowledge in the Construction and Regulation of Health and Education Policy in Europe: Convergences and specificities among nations and sectors – KNOWandPOL (Documento policopiado).


Pons, Xavier & Zanten, Agnès van (2007). Knowledge circulation, regulation and governance. In KnowandPol project literature review, pp. 103-152. Available online at URL: [http://www.knowandpol.eu/fileadmin/KaP/content/Scientific_reports/Literature_review/Pons_van_Zanten_EN.pdf](http://www.knowandpol.eu/fileadmin/KaP/content/Scientific_reports/Literature_review/Pons_van_Zanten_EN.pdf) [Accessed April 2009]


The External Assessment of Schools in the framework of the evolution of the types of regulation of educational politics in Portugal

Ana Márcia Pires

ABSTRACT

Part of this paper was presented as a report at the end of a training year in the Portuguese General Inspectorate of Education - Inspecção-Geral da Educação (IGE). Our objective is to provide an overview of how IGE’s activity “External Assessment of Schools” (EAS) is structured, and the relevance that this educational inspection activity has in the framework of the evolution of the regulation forms in this public institution.

Our initial process is to design a theoretical framework in which we discuss the importance of regulation and modes of regulation in public policies. Then we explain what aims IGE’s programmes and activities have. Afterwards, we bring out the assessment of schools: a diachronic perspective, the framework of EAS and how it is developed. Finally, we give a critical perspective on how this activity is structured.

We believe this work may offer a contribution for a deeper reflection on the EAS, as well as of the evolution of IGE’s mission.

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1. Theoretical framework

“There can be little human activity that is not regulated in some way, by laws, norms, or simply by the action of others. (...) changes in modes of regulation are taking place at the same time as a paradigm shift in the social sciences themselves” (AA.VV, Orientation 3: specifications, 2007: 1).

In this first instance, our purpose is to discuss, in the theoretical field of public policy analysis, relevant concepts both for the construction of this report, and also to the study of the relationship between knowledge, policy making and public action in education, mirrored in IGE’s activity, External Assessment of Schools.

1.1 Public policies – the emergence of new concepts

In a game in which science influences social events and they influence science, enabling transformations, the dynamics of phenomena opens up new horizons over reality, so that the perspective modifies itself, evolves and therefore allows us to look at through with a different lens. So, we look at public policies (intervention of an authority over a sector of society) from a different angle, emphasizing new concepts in the translation of reality. By giving visibility to local (public and private) actors, in a complex interdependence of different levels, and not restricting public policy to the State, the linear and hierarchical vision breaks up, and is transformed into a horizontal and circular one.

The concept “public action” reflects the complexity of this process\(^2\). Lascoumes and Le Galès (2007: 13) propose a pentagonal observation of public policies where actors, referentials, institutions, processes and outcomes are included and, through this analysis we watch a rupture with the State and a shift from a political to a social regulation. The actor, individually or collectively, takes part in decision making, covering up two dimensions: one that has to do with the actor’s contribution in the political process; and another related to the impact the contribution has over the outcome (Grossman, 2004: 23). Actors confront themselves according to their interests, mobilizing their own representations and therefore emerging another concept – the referential.

States need to change their regulation processes, so that their policies become more effective. On the one hand, they have to develop new competences and, on the other hand, they search for ways of legitimation of their action.

In this process, knowledge - understood as scientific knowledge - has a central role (Pons e Van Zanten, 2007). The educational research has demonstrated that knowledge has become a key resource for States, since it allows a better regulation.

\(^2\) “The approaches all seek to avoid limiting public policy to merely the moment when the decision is taken or to the State (...). In order to reflect the complexities involved, one branch of French-speaking literature has coined the term public action, thus indicating a break with the traditional public policy approaches” (Delvaux, 2007: 60).
1.2 The concept of regulation in the process of reconfiguration of the State

The study and analysis of public policies has pointed out the relevance of the concept of regulation in the processes of redefining the role of the State and, consequently, in changing their ways of intervening in government, which implies changes in the forms of guidance, coordination and monitoring of educational systems (Dutercq e Van Zanten, 2001: 5; Mangez, 2001: 81; Vandenberghe, 2001: 111; Barroso, 2006a: 11; Maroy, 2006). This happens because, on the one hand, the State tries to hold a central role in the definition, management and implementation of public policies and, on the other hand, the State knows that role has to be shared with other agencies and actors (Barroso, 2006a: 11). Thus, we have been witnessing a replacement of the idea of an omniscient State3, that is able of enforcing a legitimate global order, for a more complex conception of public action, in which one understands the existence of limits on the role of the State over the multitude of actors and agencies (Muller, 2000).

In this context, regulation means, not only the production of rules of guidance and conduction of actors, but also the ownership of those rules and their transformation by the actors themselves (Maroy and Dupriez 2000; Muller, 2000; Reynaud, 1993 and 2003). In the first case, it is a normative, institutional and control regulation; while in the second case, it’s a situational, active and independent regulation (Barroso, 2006a: 12-13; Dutercq and Van Zanten, 2001: 6).

In this process of recomposition of the role of the State, school-based management is accompanied by assessment and/or external regulation, through which the State develops tools for remote control, sometimes based on the results achieved by schools and students (Vandenberghe, 2001: 113). The creation of contracts between the State and the schools at the level of school based management, and the development of evaluation through results, is therefore a possible alternative to regulation in the classical hierarchical sense.

From what we've seen, regulation is always an expression of power, through which an actor seeks to structure other actors' behavior. The resistence to regulation may be collective and organized, coming from associations, trade unions and lobbies, conducting to negotiation in different stages of the political process, involving changes in politics’ content, in the regulation instruments and in their ways of implementation, as well as results.

Opposed to a top-down, vertical regulation model, the evolution of modes of regulation suggests a bottom-up, horizontal perspective, in which policies encroach contexts where they mingle with previous policies, structures, traditions and habits, and consequently, lead to several forms of hybridization. Hence policies can create different practices in different national and local contexts.

Rather than the application of knowledge, we believe that regulation has to do with the processing and production of knowledge, consisting of a process in which perception and practices of both the regulator and the regulated are developed through negotiation and

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3 "Tout au long du XXe siècle, le mode de régulation scolaire le plus répandu a été celui alliant, sur le plan formel, financement et production par l'État sur le modèle hiérarchique ou bureaucratique (…). Sur le plan plus informel, ce mode de régulation était en outre largement soutenu par (…) un principe d'autorité, soit un principe d'obéissance dans un cadre hiérarchisé dont chacun – celui qui ordonne et celui qui obéit – reconnait a priori la justice et la légitimité" (Vandenberghe, 2001: 112).
confrontation which can produce unexpected results, because it is linked to different contexts and systems of action. Thus, new interfaces between the processes of social construction of knowledge and policies are being created, emerging a kaleidoscopic, hybrid regulation according to the principles, actors, functions and procedures that it aggregates.

A reason for this mutation seems to be globalization, that, in a sense, limits the ability of the States (Dutercq e Van Zanten, 2001: 7); because they do not define their choices independently (Giddens, 1999).

1.3 Modes of regulation

The reflection on the vital role of globalization brings us to the different modes of regulation: transnational, national and microregulation.

As it suggests, transnational regulation involves the alliance of the national overview with an international one. Barroso (2006) defines it as “the set of rules, discourses and instruments (...) that are produced and circulate in the forums of international consultation and decision, in education, which are taken by politicians, officials and national experts as ‘obligation’ or ‘legitimacy’ to propose or adopt decisions for the functioning of the education system” (45).

Thus, reliance on foreign policy seems to have the function, on the one hand, to justify and legitimize political decisions internal to a country; on the other hand, such loans may lead to policy measures intended to change modes of regulation of public education, serving as criteria for modernization, bureaucracy and a way of fighting the inefficiency of the State.

Barroso (2006) defines national regulation, comparing the concept to the institutional regulation: “how public authorities (...) carry on coordination, control and influence over the education system, directing, through rules, injunctions and constraints the context of the action of different actors and their results” (50). However, through political and social changes, the emergence of a transnational regulation, and new modes of regulation, led to a shift in the modes of State regulation.

The local microregulation "refers to a complex set of strategies, negotiations and actions of various actors, whereby the rules, injunctions and constraints of national regulation are (re)adjusted locally, often unintentionally" and they can be specified as the process of coordinating the actions of actors on the basis that results from the confrontation, interaction, negotiation or compromise of different interests, logics, rationales and strategies" (Barroso, 2006: 56-57).

Metaregulation is a coordination of coordinations that the State can continue to ensure, not being the only holder of the legitimacy of political justification. Thus the concept of regulation arises, a space, context or territory where they meet and illustrate the various modes of regulation, which also includes several actors of mediation, crossing several regulatory streams, a sort of "knots of the network".

So stated, the concepts discussed appear to be central in the analysis on the IGE's activity External Assessment of Schools we intend to discuss.
2. IGE’s programmes, activities and their aims

IGE is a public inspectorate organization that belongs to the Ministry of Education and that controls the preschool, basic and secondary education in Portugal. It works to ensure quality, equity and justice in education. Inspectors monitor, control, evaluate and audit public and private schools, in order to guarantee social reliance on education, and to inform policy makers as well as the public opinion. IGE develops different programmes and activities, with distinct aims:

<table>
<thead>
<tr>
<th>Program</th>
<th>Activities</th>
<th>Aims</th>
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<tbody>
<tr>
<td>Monitoring</td>
<td>▪ Curricular Management on Preschool and Basic Education</td>
<td>To observe the educational activities developed by schools in order to obtain a better understanding of the processes of implementation of educational policy measures. It is intended that these activities will be inducers of best practices of schools and thus improve the learning and the students’ engagement.</td>
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<tr>
<td></td>
<td>▪ School Outcomes and Improvement Strategies in Basic Education</td>
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<td></td>
<td>▪ Self-Evaluation of Schools</td>
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<tr>
<td>Evaluation</td>
<td>▪ External Assessment of Schools</td>
<td>To contribute to the development of schools and to improve the quality of student learning within a reflective perspective and continuous improvement.</td>
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<tr>
<td>Control</td>
<td>▪ School Year Organization</td>
<td>To check the legal compliance of the functioning of organizational units or segments of the education system and to identify factors affecting the efficiency and effectiveness, considering the available resources and services.</td>
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<td></td>
<td>▪ National Tests of the Basic Education and National Exams of the Basic and Secondary Education</td>
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<td></td>
<td>▪ Pedagogical Autonomy and Parallelism in the Private Education Sector</td>
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<td></td>
<td>▪ Students’ timetables in secondary education</td>
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<tr>
<td>Audit</td>
<td>▪ Schools’ Financial Management – School’s Social Action</td>
<td>To examine the acts of management practiced by schools and educational institutions in a given period of time, according to compliance, effectiveness, efficiency, relevance and coherence criteria. This analysis is by reference to legislation, rules or regulations of organizations and contracts with public entities.</td>
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<tr>
<td></td>
<td>▪ Internal Control System - Schools and Education Administration Services</td>
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<td></td>
<td>▪ Financing Contracts of Private and Cooperative Education Institutions</td>
<td></td>
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<tr>
<td>Ombudsman ship and</td>
<td>▪ Disciplinary proceedings</td>
<td>To protect and promote the rights and legitimate interests of citizens and the justice of the Educational System. It’s reflected in the analysis and processing of complaints from users and agents of the educational system, sometimes progressing to a disciplinary procedure in the form of investigation or disciplinary proceedings.</td>
</tr>
<tr>
<td>disciplinary action</td>
<td>▪ Administrative litigation</td>
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<td></td>
<td>▪ Judicial advising</td>
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</tbody>
</table>
3. Schools' assessment. Concepts, functions and references

“All assessment is a perpetual work in progress.”
Linda Suske

In the last two decades, due to social, political and economic reasons, the States felt the need to create and/or strengthen their inspection systems, so that they could monitor the public sector. There seems to be a growing consensus: some forms of assessment may have a significant role in what schools’ improvement is concerned and may provide a fair level of accountability as well. Scientific investigation has assigned relevance to school inspection, assessment, quality and self evaluation, essential in the current educational decisions.

The school assessment refers to a process of determining the merit and value of a school through collecting and analyzing information and so it’s a monitoring mechanism of actions to check the levels of quality of schools.

Law No 31/2002, 20th December, Article 4th, No 1, calls for an evaluation design that aims, from a diagnostic analysis, to provide the creation of terms of reference for higher levels of requirement; and to identify best organizational practices, which are examples of recognition, appreciation, encouragement and promotion of education.

Thus, through accountability, external assessment provides information to policy makers and the public about the state of the art of the educational system, as well as on the quality of schools and education that they offer. On the other hand, governments and inspections see external assessment as a contribution to the improvement of schools, particularly through the assessment reports that provide information about the strenghts and weaknesses of schools and how the development of their self-evaluation is promoted.

3.1 Schools’ assessment in Portugal: a diachronic perspective

As there is a need for improvement of education and of the quality of schools, the importance of adequate evaluation mechanisms is also recognized.

National experience in terms of school assessment is already substantial and it has been conducted, over the past sixteen years, through projects led by the Ministry of Education, or to which schools have joined willingly. Among the projects of schools evaluated under IGE’s responsibility, which brought gains to the system, are included the Assessment of Global Functioniong of Schools (1993-1995); Pedagogical Auditing (1997); Secondary Schools Assessment (1998-1999); Integrated Assessment of Schools (1999-2002); and Benchmarking of Self-Evaluation Effectiveness (2004-2006).

Such projects, inserted into the mission of control and support to the development of quality education, triggered the implementation of new guidelines on the development of the inspection activity, coming from a re-estabilishment of the educational politics. They were also a device for measuring the performance of school organizations, whose aims were focused on an
assessment of the quality of service of education and in the development of schools, a culture of self-assessment and reflection on teaching practices.

3.2 Legal framework of the activity

Law No 31/2002, 2th of December, approves the assessment system of schools and defines the general guidance for self-evaluation and for external assessment of schools. On article No 3, the assessment system is seen as a central instrument for definition of the educative policies. The aims are also expressed, based on the promotion of the improvement of the quality of the education system, its organization and its levels of efficiency and effectiveness; the relevance of a framework on the functioning of the educational system; the stimulus for the processes of quality improvement, schools’ organization and results; the awareness of various community members to participate actively in the educational process and the enhancement of their role, ensuring the credibility of the performance of educational establishments and education. All these actions aim to ensure the educational success, by promoting a culture of quality and responsibility in schools.

Article No 5 of the same Law establishes the assessment framework, which integrates self-evaluation and external evaluation. Article No 8, No 1, points out that external evaluation is based on (...) the measurement of compliance of normative conformity in teaching and administration and management, as well as their efficiency and effectiveness. It also assigns IGE this checking.

The XVII Programme of the Government chapter II, item I, “More and Better Education”, underlines the relevance of an accountability culture, performance and results evaluation (43), which comes related with a bigger responsibility and schools’ autonomy (44). It is also clear its purpose is to launch a national assessment programme of basic and secondary schools.

The Regulamentar Decree No 81-B/2007, 31st of July, (IGE’s Organic Law), establishes as IGE’s competence the participation in schools’ assessment and the support in activities related to the organization.

EAS regulation, including its aims and procedures is, therefore, clearly established.

4. External Assessment of Schools’s framework (2006-2010)

Designed to assess the quality of education in our country, i.e., to identify the strengths and weaknesses of schools, suggesting improvement areas, the ultimate objective of the EAS process is to improve the provision of school and the students’ achievements. EAS objectives clearly stress the need for improvement: (1) the systematization of indicators on schools’ quality, leading to the development of an action plan; (2) the need of developing self-evaluation and autonomy; (3) the construction of a “picture” of the schools in the country, getting to know examples of good practices and subsequently spread them to the different education actors.
EAS’s more detailed aims:
1. To encourage a systematic questioning within schools about their own achievements and the quality of their practices
2. To relate the external assessment feedback with the schools’ self-evaluation culture and procedures
3. To strengthen the schools’ ability to develop their own autonomy
4. To contribute to the regulation of the educational system
5. To contribute to a better knowledge of the public education service, promoting a deeper social participation in the schools’ daily life

The report of each EAS is structured according to 5 established domains. Each one of them has several key factors of evaluation:

<table>
<thead>
<tr>
<th>1. Results:</th>
<th>4. Leadership:</th>
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<tbody>
<tr>
<td>‣ Academic success</td>
<td>‣ Management of material and financial resources</td>
</tr>
<tr>
<td>‣ Participation and civic development</td>
<td>‣ Participation of parents and the school community</td>
</tr>
<tr>
<td>‣ Behaviour and discipline</td>
<td>‣ Equity and justice</td>
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<td>‣ Value and impact of learning</td>
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<tr>
<th>2. Educational provision:</th>
<th>5. Self-regulation and school improvement:</th>
</tr>
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<tbody>
<tr>
<td>‣ Articulation and sequentiality</td>
<td>‣ Self-evaluation</td>
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<td>‣ Teaching monitoring in classes</td>
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<tr>
<td>‣ Differentiation and support</td>
<td>‣ Sustentability and progress</td>
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<tr>
<td>‣ Scope of the curriculum and enhancement of knowledge and learning</td>
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<th>3. School organization and management:</th>
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<tbody>
<tr>
<td>‣ Designing, planning and developing the activity</td>
<td></td>
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<tr>
<td>‣ Human resources management</td>
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</table>

The assessment team is formed by two IGE’s inspectors and an external evaluator, who can be a university professor, a researcher or even a retired professor. The school visit is developed in two days in Secondary schools, and in three days in clusters of schools. It starts with IGE’s presentation of this activity; followed by a school introduction by the school Director (Headteacher); and then a visit around the school. The methodology also includes group interviews, preceded by some document analysis. The output is a report that is sent afterwards
to the school, which may contradict it. Schools’ report stresses their strengths and weaknesses, as well as opportunities for development and constraints. All the reports and schools’ contradictories are published on IGE’s website. The aim is to feed thinking and use it as a tool for further discussion, encouraging schools to develop their own self-evaluation processes. All the public schools are evaluated in a four-year cycle.

We will focus now on the structure of EAS procedures.

4.1 Step 1 – Preparation

First of all, we have to mention two aspects that contribute for a better reception of this activity in schools. The first one has to do with the participation of external evaluators in the teams. This avoids the expression “inspection team”, that might be seen negatively. This represents increased resources, but, more importantly, we must stress the diversity of experiences that enrich the work. The second aspect has to do with the fact that there is a great amount of information available in IGE’s site which is extremely useful for schools in the preparation of this activity.

In the first stage of this activity, the members of the assessment team analyse the “School’s profile”, a document made by IGE based on the data given by MISI (a department of the Ministry of Education), the school autonomy documents (Educative Project, Curricular Project, Annual Activity Plan, Internal Regulation and Self-Evaluation Reports) and also the “School Presentation Document”. These documents are sent by the school’s board and they are relevant because they reflect the image the school has of itself, enabling the assessment team to prepare for the field work.

The text with the school’s characterization may be written according to the structure suggested in IGE’s site (“Topics for the school’s presentation). This may also function as a tool for the improvement of self-evaluation processes of schools.

A meeting takes place with the team members and the documents are discussed, information is selected and the data that needs validation is identified. The school is asked to point out the different actors for the panel interviews. At this time, the team contacts the school in order to avoid the presence of the participants in more than a panel, and to be sure there is representativity.

During the preparation, the team may elaborate a summary of the students’ results. This procedure is relevant for (1) a comparison of the profile’s data and the information given by the school’s board; (2) the preparation of the interviews, bearing in mind that information. For what has been said, this step is important for it prepares the work developed during the intervention.

4.2. Step 2 – Intervention

The methodology of this Activity includes (1) the documental analysis previously illustrated, (2) the intervention, which includes the presentation of the activity by the assessment team,
the presentation of the school by the board, (4) the visit to the school, (5) the interviews with the different actors; (6) the elaboration of the report with the possibility of a contradictory and, at last, (7) the national report.

4.2.1 The visit’s agenda

The intervention begins with a presentation meeting in which the community is invited to attend. First, IGE’s activity is presented. Though the PowerPoint document, the activity’s aims, the domains and factors evaluated, the evaluation rate and the methodology are explained. This method is fruitful because it allows: (1) to do a first approach of the activity, clarifying the memorandum previously sent by the Regional Delegation and exploring the tasks the assessment team will develop; the documents that are analyzed and the explanation of the report that will be sent by IGE after the intervention; (2) to answer eventual doubts, that may be asked the team after the presentation; (3) to create an interpersonal atmosphere of trust, that will have benefits on the work that follows.

Then, the school’s board presents the school, normally using also a PowerPoint presentation. This allows the gathering of information and the registration of evidences that complement the documents previously sent by the school’s board. This is also effective because it creates a solid basis for the preparation of the interviews.

The schools’ visit, in the first and second day of intervention, includes the direct observation of the different buildings, classrooms. The team pays attention to the quality and diversity of equipments, the facilities’s preservation, the functioning of the several services, which contributes to a larger vision of realities and a better grounding of the judgements about the different domains and factors.

Then, during the next two/three days, there are panel interviews.

4.2.2 Panel interviews

The data gathered through the documental analysis and direct observation is complemented by the informations gained through interviews to a large number of actors internal and external to the school, where all the structures are represented. This methodology allows a gathering of information about the school organization and leadership according to multiple perspectives, and to understand the participation of the different actors in the school activities.

The field work that we did in this activity led us to the conclusion that panel interviews are a hard task, in which we have to pay attention to a varied amount of aspects apparently obvious but that have a significant bearing. This is a complex process in which there is a constant encoding and decoding of questions and answers by the interviewer(s) and respondent(s), given the objectives, assumptions and knowledge of both. Thus, the interview panels are, in our opinion, a key aspect of the activity. This allows all education stakeholders to have a voice, (1) provide a more varied collection of data, and triangulating the information gathered by analyzing
documents allows the reasoning behind their judgments about the different areas; (2) those are moments not only for questioning, but also of reflection by all participants, which has contributed to a self-evaluation of their teaching practices and for the possible need for change. We underline the importance of conducting the interviews by asking intentional questions about the subjects where there are less effective practices, in order to induce the development of measures to improve. The atmosphere of trust contributes to the fact that the interviewEAS point out both positive and negative aspects in their practices.

4.3 Step 3 – Report

As the product of the intervention, the report is a valuable feedback not only to the school, but for the whole community. It must be seen as a powerful instrument that is the most visible image of IGE’s work. Therefore, the team members have a personal and institutional responsibility.

Based on the experience we have been provided, we believe that the report will have as much quality as: (1) it respects the model of the EEA framework; (2) it focus on the specific reality of school; (3) does not speculate; (4) it bans advice and recommendations, but induce improvement. The style of the report should be based on clear language, economic, with short sentences and direct, coherent, non-redundant, and language appropriate to different recipients, ie, diluting adjectives, acronyms without decoding, inaccurate descriptions and value judgments. In positive evaluations, assertions should come first, followed by evidence to justify them; in less positive ratings the evidence should appear first, and then the conclusions derived from it, for the preparation of the readers to the conclusions.

The external assessment reports should also be crucial in their return to school, and this is one way of enhancing the effectiveness of the work: is a catalyst for the efforts of professionals and a management tool that serves to motivate, guide and define the work and give a sense of responsibility. In the school organization, this feedback would be relayed in terms of processes, ie, as the work unfolds, and in terms of results.

We believe that the EAS reports are well organized, being sent to schools with the possibility of being presented a contradictory. This procedure, coupled with the fact that these documents are disseminated by publishing them on IGE’s website on the Internet, makes the process transparent, while allowing the preparation of schools for the activity.

The national report of EAS, published annually, is a source of information and conclusions about the whole process are priceless.

5. External Assessment of Schools – critical perspective

The assessment model adopted and the ongoing process that embodies it result of the working group established by the Joint Order of the Ministries of Finance and Public Administration and Education No 370/2006, 3rd of May. This group organized the frame of
reference for external assessment, conducted a pilot trial and released in 2007, the second evaluation phase, already under the responsibility of IGE, which has been conducting this work.

At this point, we want to reflect on some practices, choosing to examine critically the model to operationalize the process and its results.

5.1. Structure and methodology

One of the objectives of this activity is to identify strengths and weaknesses, so that schools can improve the quality of education they provide, and increase the educational standards achieved by pupils. In this process feedback and reports referring to the strategy of planning and improvement through a rigorous external assessment, by identifying key points for action is critical. The analysis of the reports produced during the years 2006/2009 on different regional delegations by different assessment teams, suggest that the production process of writing is one of the more complex tasks of EAS. This is a job that consumes a lot of time and energy, generating questions about its relevance to each school.

4.51.2 External Assessment of Schools’ framework

A system that combines external and internal assessment in a coherent and systematic way hasn’t yet been implemented. We wonder if our schools are developing the ability to perform a reflective and reliable self-evaluation. Not all of them are at the same level of development, so they may be unable to do so due to lack of a culture or knowledge. Ideally, in the future, the schools will be able to sign an accountability system that allows them to develop a rigorous self-evaluation, in this being included a greater autonomy. So that the school truly improves, it should be (1) flexible, in that it accepts that there is no single way to achieve the objectives and adapts to the context that has, by managing the difficulties that present themselves as challenges that will have to be overcomed; (2) the commitment and effort should be constant and persistent; (3) should be empowered to deal with the unpredictable; and (4) should be a joint construction envisaging the development of a culture that mobilizes all actors who can contribute to that improvement. In this vein, EAS should consider that, for the improvement of school quality can not be inhibiting innovation, promoting a culture of diversity and not uniformity.

5.2. Challenges

EAS is a picture of a school at a certain point in time and not a detailed long term study from which solid conclusions could be drawn and recommendations sustained. This way, schools are being labeled through the ratings that are assigned, as obtaining answers to their problems or failing in identifying them.

To supply the school with a simple external diagnosis of their problems does not seem to exploit the potential of this evaluation. The element of sustainability of this process towards
improvement seems to be the belief in the feasibility of process and personal and professional advantages of all these actors participative in their investment. The need for monitoring and ongoing support to schools in terms of self-assessment and response to external assessment became evident. For schools evaluated less positively, IGE has developed a work-based rehabilitation activity. So, in order to monitorize the process of improving the quality of school, a new activity was created in 2010: Self-Evaluation of Schools (SES). Through monitoring activities, articulated and intentionally scheduled with EAS, IGE will provide technical support preceding the visit of EAS, encouraging the professionals' reflection, and therefore leading to an improvement of skills and performance.

6. Conclusion

IGE's EAS has a gigantic dimension not only as an activity, but also and above all, in national and international panorama. It is therefore an activity which, besides having to be carried out with a huge responsibility, in our opinion, has to bear a deep reflection, analysis and systematic comparison of the reports, accessible to all actors who are more or less directly involved in education. This leads to the production of basic knowledge in various spheres because at a local and regional level, the regulation of school systems is a growing multiregulation, i.e., a regulation which comes from a large number of sources and a variety of tools and resources such as assessment, monitoring and sharing best practices, along with more traditional-bureaucratic instruments. Pressured to follow European trends, wrapped in a growing transnational regulation, the political agenda has thus been occupied by internal and external assessment of schools, believing that these mechanisms may contribute to a significant improvement in the provision of educational services, assuming more responsibilities in identifying and addressing their needs. In this process, there are items to be worked out: (1) schools have no practice of collecting and analyzing data to build knowledge on which to construct their choices; (2) it hasn't been assimilated the concept of self-assessment, with some notable resistance from schools in this implementation, although they have been given useful tools in monitoring this process, a reluctance associated, in our view, to change itself.

References


LEARNING OF ALGORITHMS ON MOBILE DEVICES
THROUGH BLUETOOTH, SMS AND MMS TECHNOLOGY

Abstract: Teaching Institutions are up against challenges of an advanced technology of learning with the objective of improving the efficiency of the teaching-learning process. Joining the students’ learning style to the technologies is important to improve the educational process. This work presents the advantages of using mobile devices, associated with the students’ learning styles. The learning which is carried out with the use of mobile devices makes it possible for users to learn at anytime and anywhere.

Keywords: algorithms, mobile devices, mobile education

1. Introduction

The use of ICTs in the teaching of algorithms was made possible through the supervision of the teaching-learning process of this subject at Instituto Federal Fluminense, in Campos dos Goytacazes, when it was able to verify the huge difficulty experienced by the students. The creation of environments which support this learning is of great interest, since the knowledge construction process necessary to the production of algorithms for programming constitutes an arduous task to the student, as BERCHT (2005) emphasizes.

There is consensus, among the teachers of the area, that it is not enough to present an algorithm in an explanatory way on the board in order to be able for the student to comprehend it completely, and to create similar or derived algorithms from that, neither to become capable of resolving problems with these instruments (BARCELOS, 2009). This work presents the use of mobile devices to the teaching-learning process of algorithms.

The use of mobile devices as an educational resource is not trivial because the features of the pieces of equipment differ substantially from the ones which are normally used at home and in labs at schools, chiefly by the size of the presentation area of the visual pieces of information. Another factor to consider is the process of transference of the educational content in a thrifter way, because the cost of access to the Internet, via cell phone network, is still very high in Brazil. In this work, it is related an experience in
which it was explored another way to transfer learning material to students’ mobile
device, using the wireless technology called Bluetooth and SMS.

Caudill (2007) states that *mlearning* can be defined as learning through the use of
devices and the wireless technology. According to Boyinbode (2008), this learning
through mobile devices (*Mobile learning*) is observed due to the fact it is without the
permanent physical presence within the educational process.

To make explicit mobile learning is to define the use and possibilities about the way
how the mobile technologies will be inserted into the educational process. Valentim
(2009) points to the potential that these technologies enable in terms of learning
strategies such as constructivism, interaction, curiosity, complexity, collaboration,
challenge.

In a learning context for *mobile learning*, even if the mobility is one of the pillars,
various other factors must be considered like: i) learning along the time; ii) the
informality and iii) the appropriation of knowledge by the student.

The use of mobile devices within the learning process has been performed as a support
to the presentational learning, though, the purpose of this work is to make observed the
formal learning of the school environment, that is, the students have got the possibility
to “download” the learning objects onto mobile devices for, from then on, these to be
accessed for learning at the moment when the users consider it to be more appropriate.

This work investigated the use of the *Bluetooth* connection that is faster, of easy access
for the student to share data among the various mobile devices, like: from cell phones to
cell phones, *laptop* to PDAs, *laptop* to cell phones, *laptop* to smartphones. The SMS
technology was also used, which is the transmission of text messages – maximum of
160 characters for the sending of solution of problems, incentive messages, notices of
tasks already performed. The MMS technology makes it possible the sending of
educational objects with formats besides texts and videos.

According to Sharples (2007), the future educational applications and services will need
resources to make it easier its use, like: to download materials in different types of
format, text, voice and video, to “run” without the use of adaptations, as well as to make
feasible the reduction of the cost of access to the Internet because the characteristics of
the functionality of the devices differ from manufacturers.
Figure 1 - The convergence Technology and Education

Figure 1 shows the investigations of this work, which embody the programming subjects, in particular in the learning of algorithm, the learning styles, in particular the students’ ways of learning, as well as the mobile devices technology, besides the insertion of the mobile technologies for the learning refinement. The intersection of these areas is investigated in the teaching of algorithm and corresponds to the way how the students learn by using technologies.

The learning of algorithm has been presenting at IFF one of the largest indexes of failing. A survey carried out by the author, at IFF-Campos-RJ, in the technical course and higher education courses, points out the presented results in Graphic 1, encompassing the four late semesters between the first semester of 2008-1 and the second semester of 2009-2.

Graphic 1 - Failed ones in Algorithms

Graphic 1 shows, in the semesters 2008-1 to 2009-2, the percentages of failing in the Computer Science Technical Course, from 2008-1 to 2009-2, the average of 34% of the failing of algorithm students. This has become a motivation for an investigation work aiming at the improvement in students’ learning. This work investigated the use of new
technologies in groups of this universe for the improvement of the teaching-learning process.

The reasons for this high level of lack of success are not specific ones of the area. In general, Barcelos (2009) and Jenkins (2002) observe that the students do not present self-assurance in the organization of reasoning, elaboration of strategies for solving problems, attention, concentration, stimulus to the process of mental calculation. Thereby, the skills involved in this process, such as trying, observing, conjecturing, deducing, and that constitute what we call logical reasoning, not being appropriately developed, they interfere in the learning of practically all cognitive areas, but, especially, they affect this area of knowledge.

On the other hand, the students show a unique self-assurance concerning the use of technological resources. To nullify this difficulty, taking advantage of the students’ motivation and vocation for the use of technology, new strategies have been investigated regarding the use of computer science resources in education, in order to enhance skills which aim at the development of the reasoning, according to (GRABE, 2001).

2. Objective

The objective of this work is to make it available, through the Bluetooth technology, the pedagogic materials of algorithms to the mobile devices. In parallel, the students are registered by their cell phone number so that they receive short texts and messages through the SMS. Texts are sent to absent students from presential classes, informing them about the topics taught in presential lesson and assignments to be developed. Also it was used the sending of educational objects by MMS.

The use of this learning way is considered, in this work, as being a support to the classroom lesson. According to Azubel (2002), this resource is indicated to the improvement of learning in two moments essentially different: (1) right after the initial learning, when part of the forgetting of the content can occur, in order to consolidate the content learned in a more efficient way and, also, to originate the learning of gradations and subtle implications, not learned in the first presentation; (2) after a certain time, when a considerable forgetting can occur, making it possible for the student an opportunity to take advantage of (to avoid posterior presentations) his/her own
awareness of negative factors (such as ambiguity or confusion with similar ideas) responsible for the possible forgetting.

Various peculiarities are important in the learning process of algorithms as it follows: i) coherence with the fundamental objectives of algorithms and that the teacher must build in the operationalization of this learning for the students: i.1) to express in an objective way the ideas, the concepts and the techniques to the students because if the teacher presents the algorithms in a confusing way (confusing ones) in the presentational class or by using transparencies, the students do not understand the resolution of problems involving this learning and the expected results of the proposed algorithms are not clear in students’ responses; i.2) to highlight the importance of the theoretical results and show formal rigor in the situations, even in the simpler ones; and i.3) to valorize the use of techniques in the resolution of problems; ii) to highlight the critical thinking, a care to be observed, because the students own little experience in the resolution of problems involving mathematics and tend to believe any demonstration. This kind of behavior must not be stimulated. It is essential that the students have critical thinking on any resolution of problems and are stimulated to obtain new solutions for the same problem. It will be from healthful doubts and of a new resolution and perception that the importance of the theoretical work will be presented. Still in that sense, a valuable resource is the set of exercises which make it possible for the students to identify argumentation failures, errors in algorithms or algorithms that would be made better; iii) the theory put into practice. The experience shows that the students, in general, do not feel themselves motivated as they consider the learning of algorithms to be extremely abstract, then, it is believed that it is important to use real examples as a didactic resource.

That group of factors is the one that makes it possible the improvement or the lack of success of the learning. First of all, it is essential to comprehend what an algorithm is. Its definition becomes, thus, important to have a perfect comprehension of these peculiarities, because the algorithm is a sequence of instructions in order, without ambiguities, presented in a logical way for the resolution of a determined task or problem. The algorithm is a mathematics formulation, a piece of code, and finds itself located between the input and output to transform the first into the second. It is the way for the solution of a problem and, in general, through these ways several solutions can be obtained.
3. Characterizing the target public

Initially, it was investigated the students’ age of two Computer Science Technical Course class groups Level 1 – Morning and Level 2 – Afternoon at Instituto Federal Fluminense. The students’ age, according to Graphic 2, presents four eighteen-year-old students, six students of the 16-17 age group and three of the 28-29 age group. In this case, there is a heterogeneity with regard to the group of students, because whereas the 15-19 age group can be regarded as being digital natives, the 45-50 age group, according to Prensky (2001), is characterized as digital immigrants.

![Algorithm students’ age Level 1 Daytime](image1)

**Graphic 2 - Algorithm students’ age Level 1 Daytime**

In Graphic 3, with the Level 2 students, this discrepancy of age does not take place, because all students can be characterized as digital natives since the age is between sixteen and eighteen years old.

![Algorithm students’ age Level 2 Daytime](image2)

**Graphic 3 - Algorithm students’ age Level 2 Daytime**

4. Methodology

Using MLE, Bluetooth and SMS – In stage 1, the construction of a quiz (questions) about algorithms with images and sounds using the MLE (Mobile Learning Engine) was
the solution presented in this work. This system is *open source* (code free font); free of charge and with capacity of personalization, and the access to MLE by cell phone is done through *Bluetooth* technology. The MLE is available in two languages, German and English and offers various tools, as it is shown by following the items: i) Didactic Material: It constitutes of a set of pages, ending with a question with answer alternatives. ii) *Quiz*: It is a multiple choice test, true or false, and questions of short answers. Each attempt is automatically checked and the teacher can choose by which way the interaction with the student will occur, i.e. the answers will be sent, or to present the right responses to the immediate student’s correction.

Through the MLE, a special learning object is constructed called *Mobile Learning Objects* (MLOs) that can be stored into the cell phone and subsequently used, without any connection to the Internet. This way is considered as *off-line*. The learning through the MLOs implements all the MLE functionalities, including: interactivity among instantaneous questions with automatic correction, answer to *quizzes*, simple and multiple choice questionnaires.

Learning objects – shaped like videos – were sent and made available to the students with the following topics and time duration: i) introduction, time – a minute and six seconds; ii) types of data, time – two minutes and thirty-six seconds; iii) sequence, time – two minutes and fifty seconds; iv) repetition, time – two minutes and sixteen seconds; v) decision or selection, time – three minutes and six seconds; vi) refinement, time – two minutes.

The use of SMS technology in this project was used in various categories. Three categories of themes to send SMS messages by cell phone were selected.

1. Administrative Messages: They are content messages specifically about the operational and administrative part of the course. For instance, messages informing the availability of the contents, activity hand-in deadline, and the contents taught at the presental lesson etc. Example of messages sent: i) Two days left to hand in the assignment about If…Then…Otherwise; ii) The content of the August 04th presental activity was the construction If…Then…Otherwise; iii) Today, August 11th, we are starting the If…Then…Otherwise.
2. Pedagogic Messages: Content messages related to the subject of the course. For example, tip about sites with related content, reading suggestions etc. Example of messages: i) Send a message to a classmate about which questions of the assignment you have already done; ii) Ask another classmate which questions of the assignment he/she has done; iii) Do you have any difficulty about the problems to be solved?

3. Motivational Messages: They are messages that enable the motivation for the learning and the resolution of proposed problems and the individual objectives: i) messages which rouse students’ interest in the learning of algorithm. ii) messages that are usually out of the context of the course like, for instance, “have a good holiday” or “U had a good performance in the activities grade 8,5” iii) Are you going to solve problems this holiday?; iv) When you are to solve problem 5, try If…Then; i) Have a good weekend!; Enjoy the holiday!.

The work had as a return text messages sent by SMS, by phone-call or by e-mail. Example of messages of replies sent by students: i) Thanks for the Information; ii) Nice holiday! 4U2.

The learning object constructed to be used on mobile devices demanded a series of observations like: size of characters, colors, sounds, among others. The sequence of Figures 2, 3, 4, 5 presents the contents on the mobile device.

![Figure 2 - Representation of data types](image-url)
Besides this technique of videos with contents of algorithms, demonstrative videos of functioning were produced using one of the techniques called Table Test, presented by Szwarcfiter (1994) and Medeiros et al. (2002), that consists of following instructions of the algorithm in a sequential and accurate way, storing the possible values of the variables to verify the procedures used in the designing of the algorithm.
Figures 5 and 6 show the construction sequence of the table test. This test makes it possible to compare the results to the objective of the algorithm and the possible errors during the execution. The teachers also use them in learning environments through the web. It is a technique which prioritizes the visual perception.

5. Difficulties and Discussion

As soon as the students were informed about the cell phone use as an educational device, the reaction was very reticent because they do not “believe” and also do not understand how the cellular could be used in educational activities. In so far as they acquired knowledge about the methodology to be used, it was observed that the learning with the use of technological resources and the attitude changed.

The results appeared from individual interviews with the students, taking into consideration punctual questions like the use of the student’s cell phone (access, didactic-pedagogical perspectives, interface, cooperation, synchronous and asynchronous tools, adequacy and usability. It was observed that only one of the
students did not have a cell phone with the Bluetooth function. Initially, the students were apprehensive with regard to learning by using the mobile devices for the learning and also how the pieces of information about this content, that is, how to learn using these devices, not only with theory, but also to resolve problems. Miscellaneous students’ accounts were important in this work: Student F1: “I did not have a hard time using my cellular, but how are we going to learn?”. Student M1: “The activity was very interesting, because the classes are always the same”. Student M2: “I was convicted of not having a flowchart of algorithm in the cell phone”.

The results obtained showed that students own a developed technological view, and the relations of them with the videos were the best ones because they manifested the desire to access and watch the video related to the content to be taught in the presentational lesson of the day.

We can state that the students identified themselves with the format of the objects, mainly when they had entire knowledge of their learning styles. Thus, they requested the materials that would better provide them with learning; however they also accessed other format of objects.

Under the aspect of the used technology, the students presented difficulty in the transmission of videos notebook/cell phone. In this methodology, they pointed out the delay to “download” the files into the devices. In the execution of the system, problems appeared due to the low memory of the cell phones regarding the size of the file to be sent.

Some of the difficulties in the construction of the educational objects are related as it follows: i) the diversity of cell phone models. In relation to the materials to be consulted by the students, there was the necessity of installing the software Java in two cell phones – program required for the mobile devices, as they did not contain the necessary “plugins” to run the materials, that is, the devices which do not ‘run’ files with .doc, .pdf. format. The solution found was to convert the files with .txt extension (in text format), though, in a short way, because in this format they do not contain the illustrations of the original material, serving just as fast consultation about the concepts over specific subject.
Another difficulty reported by students was the cost, in the case of the sending of SMS to other students and teachers, impairing the interactivity. Concerning the educational difficulties, the students “would like to have more consultation material during the learning out of the classroom”, more didactic material, i.e. videos with other contents of algorithms.

In a general way, the students understood that the use of this technology for the learning was of great importance and they expect that its use converts itself into positive results in their performances in the learning. The fifteen students answered the questions on a Saturday and Sunday and on their way work/school and, mainly, when they did not have access to the computer.

6. Results

With regard to the male students’ learning styles, only one with visual and kinesthetic learning style as well as male student with preference to the auditory learning style did not obtain approval.

Concerning the female students’ learning styles, only one with visual and kinesthetic learning style as well as male student with preference to the auditory learning style did not obtain any approval.

The failed students were interviewed and reported that the experience regarding the knowledge of their own learning styles was beneficial to the learning and attributed the weak performance to extra-class problems, because they missed the examination. Though, they even reported that would like to keep on in the process and be re-evaluated based on the support with educational objects.

Graphic 7 shows the result in the subject of Algorithms of the students of the Computer Science Course in the year 2010-1 that the performance was satisfactory, because in the year 2009-2 the index of failing was of (29%) and in the year 2010-1 this index was of 13%.
Through accounts, the students attributed to the satisfactory performance in this subject several factors, as it follows: i) the use of mobile devices making it available the access to the course content, what enhances the motivation and learning opportunity, as the performance shows. Practically by just one click, contents are found which permits students to learn wherever they are, despite the limitations of the home responsibilities, work hours, trips etc. Besides, since the students achieved the success and progress through exercises, they state that they have being motivated to learn more by the use of pieces of technology; ii) Another factor was the strategy of learning of algorithms in an individual way made possible by the convergence of information and communication technology with the strategy used; iii) the learning of algorithms through the opportunity of interaction among the students. The availability of the learning objects must include the opportunity for the students to interact with other students and with the teacher in order to report the difficulties and the solutions found in the resolution of the proposed problems. The students understand that the mobile devices are becoming integral part of the teaching.

7. Conclusion

The use of mobile learning in the teaching of algorithms led to a significant improvement on the students’ performance, because it made possible the collaboration, giving a good opportunity for the support of multimedia such as videos, graphics. The learning through the mobile devices in consonance with the students’ learning styles, as well as their motivation with the insertion of this technology made the teaching of algorithms more attractive and, consequently, made it possible to improve the learning.
Regarding the fifteen level 1 students, fourteen students participated actively of the assignments and thirteen obtained approval without need of a third exam to be retaken. It can be, therefore, stated that the experience contributed to the development of the logical thinking and made it easier the supervision of the academic trajectory. It was verified in these students the improvement of the abstraction, of the logical reasoning and of their learning performance, confirming a differential with regard to the ones who did not take part into the project, even though, evidently, other factors can also have interfered into the learning.

8. References


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2011 Conference Proceedings

We would like to thank all those who attended the 2011 Hawaii International Conference on Education. We look forward to seeing you at the 10th Annual Conference to be held in 2012. Please check the website this March for dates and further details.

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